
CAD/CAM Industry Service

Forecast Data Base

Dataquest

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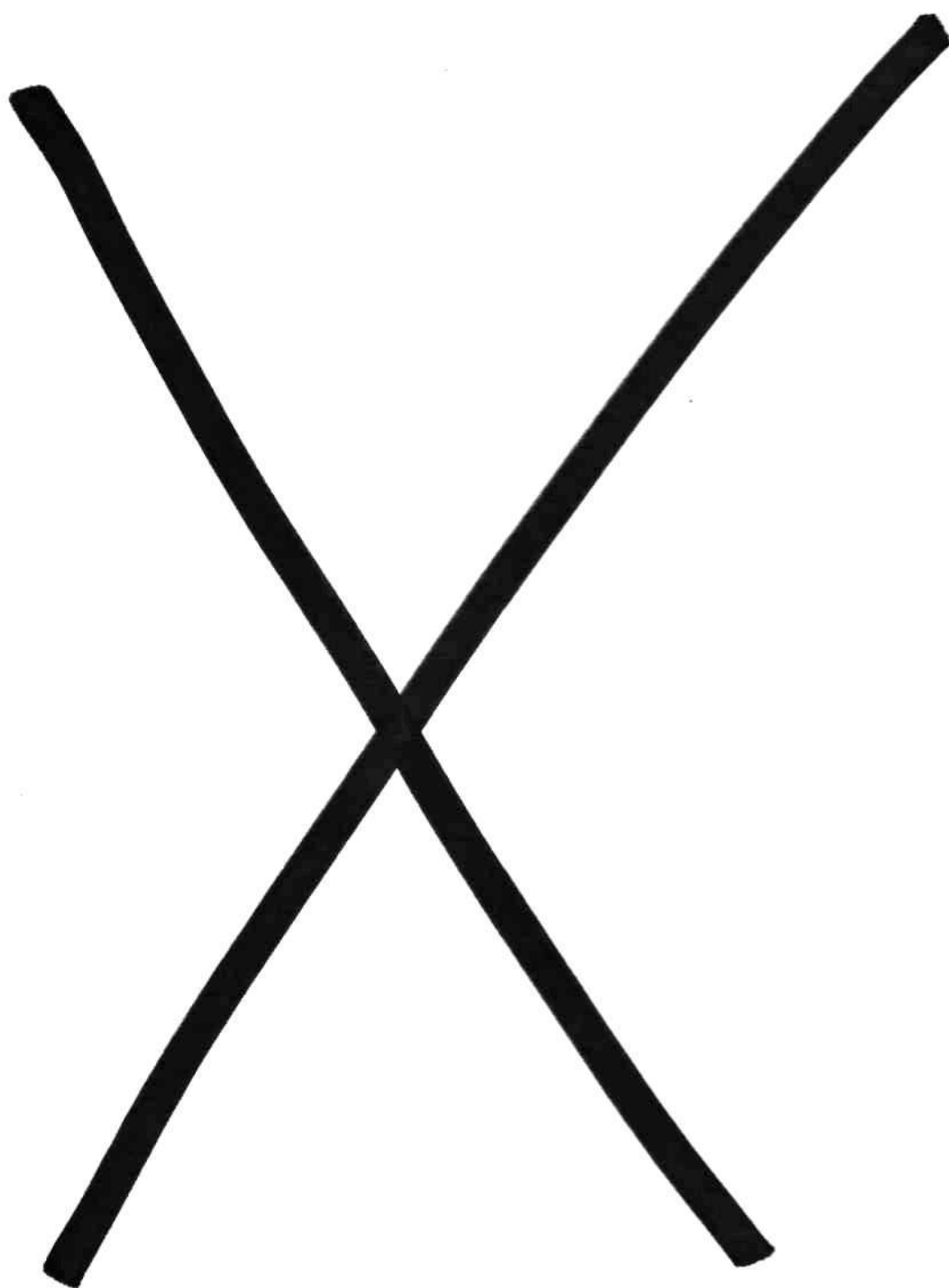
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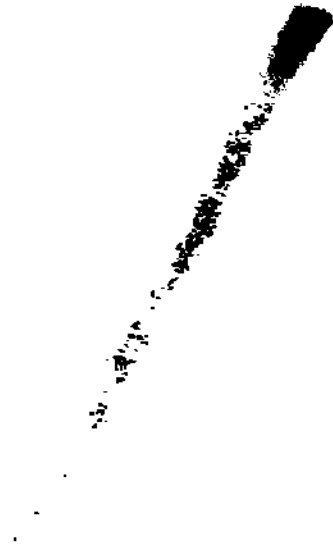
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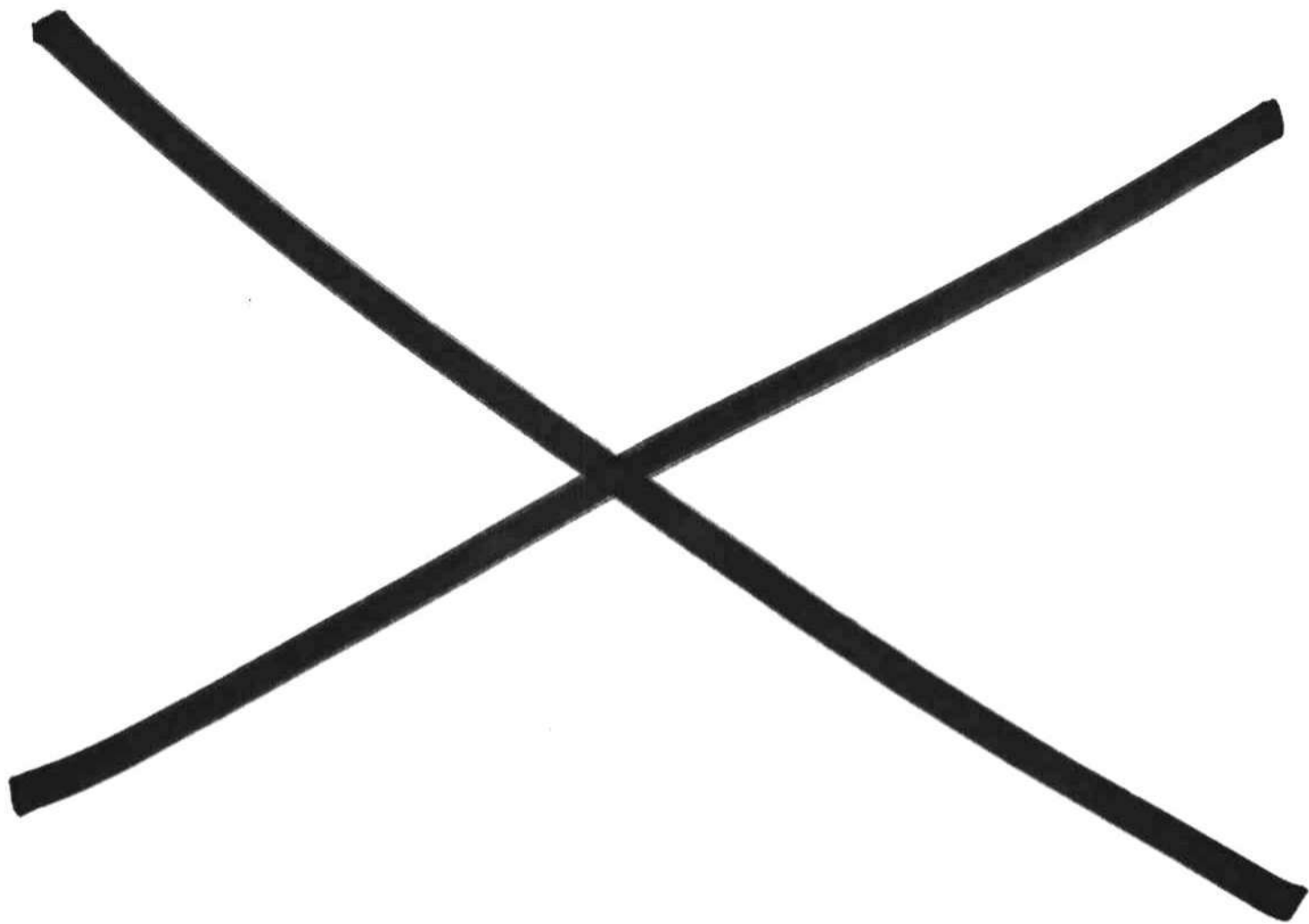
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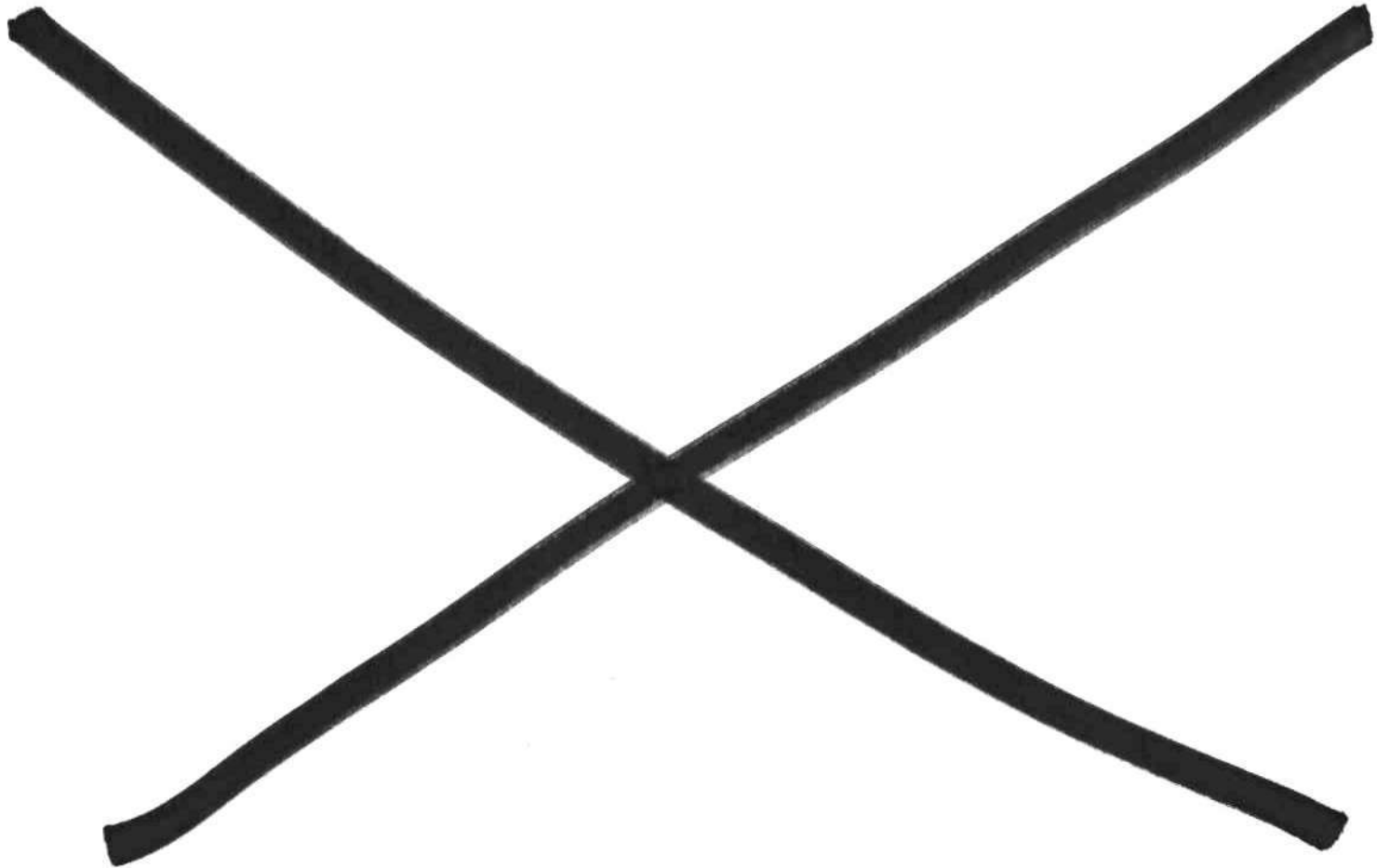
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A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.11
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Worldwide
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	325	585	898	11,051	15,466	16,977	20,774	25,352	30,933	37,096	163%	19%
Total Workstation Shipments	1,264	2,079	2,210	13,203	18,514	20,712	25,201	30,486	36,465	42,525	96%	18%
New Workstation Shipments	1,175	1,927	2,058	12,750	17,825	19,886	24,269	29,410	35,247	41,179	97%	18%
Add-On Workstation Shipments	89	153	152	453	697	826	932	1,075	1,218	1,345	67%	14%
CPU Installed Base	1,235	1,766	2,576	13,606	29,046	45,954	66,579	91,712	122,323	158,948	120%	40%
Workstation Installed Base	3,989	5,884	7,800	20,784	39,004	59,314	83,921	113,614	149,034	190,212	77%	37%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	188	220	253	286	317	343	NA	13%
Workstation Revenue	NA	NA	NA	NA	235	280	317	357	392	416	NA	12%
Software Revenue	NA	NA	NA	NA	162	183	236	306	395	506	NA	26%
Peripheral Revenue	NA	NA	NA	NA	67	100	132	174	227	297	NA	35%
Service Revenue	21	31	50	73	93	112	137	173	229	315	45%	27%
Total Revenue	144	201	283	554	746	896	1,075	1,296	1,559	1,876	51%	20%
Increase over prior year	NA	40%	41%	95%	35%	20%	20%	21%	20%	20%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.12
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: North America
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	246	480	692	7,517	9,208	9,901	12,146	15,164	19,028	23,201	147%	20%
Total Workstation Shipments	960	1,661	1,597	8,961	10,961	12,126	14,897	18,399	22,581	26,870	84%	20%
New Workstation Shipments	893	1,542	1,503	8,657	10,462	11,634	14,318	17,722	21,799	25,961	85%	20%
Add-On Workstation Shipments	67	119	94	304	499	492	579	678	782	909	65%	13%
CPU Installed Base	923	1,361	1,985	9,487	18,675	28,529	40,572	55,587	74,399	97,292	112%	39%
Workstation Installed Base	3,013	4,533	5,903	14,700	25,447	37,299	51,801	69,678	91,578	117,575	70%	36%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	110	137	157	178	198	215	NA	14%
Workstation Revenue	NA	NA	NA	NA	146	172	197	223	246	265	NA	13%
Software Revenue	NA	NA	NA	NA	103	117	149	192	247	316	NA	25%
Peripheral Revenue	NA	NA	NA	NA	44	66	85	111	143	184	NA	33%
Service Revenue	16	23	34	49	67	71	87	110	145	199	43%	24%
Total Revenue	113	161	199	372	469	563	675	814	979	1,178	43%	20%
Increase over prior year	NA	42%	24%	87%	26%	20%	20%	21%	20%	20%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.13
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Europe
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	126	1,845	4,475	4,067	4,834	5,670	6,679	7,769	ERR	12%
Total Workstation Shipments	0	0	396	2,238	5,063	4,776	5,734	6,744	7,791	8,702	ERR	11%
New Workstation Shipments	0	0	355	2,156	4,939	4,619	5,545	6,519	7,546	8,471	ERR	11%
Add-On Workstation Shipments	0	0	41	83	132	157	190	225	245	231	ERR	12%
CPU Installed Base	0	0	126	1,970	6,444	10,503	15,317	20,955	27,583	35,275	ERR	40%
Workstation Installed Base	0	0	396	2,624	7,662	12,390	18,042	24,665	32,285	40,757	ERR	40%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	35	44	50	57	63	68	NA	14%
Workstation Revenue	NA	NA	NA	NA	47	55	63	72	78	80	NA	11%
Software Revenue	NA	NA	NA	NA	32	36	45	59	76	99	NA	25%
Peripheral Revenue	NA	NA	NA	NA	11	18	23	31	41	57	NA	40%
Service Revenue	0	0	12	13	18	21	26	33	43	59	ERR	26%
Total Revenue	0	0	56	96	144	173	208	250	301	363	ERR	20%
Increase over prior year	NA	ERR	ERR	71%	50%	20%	20%	21%	20%	20%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.14
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Far East
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	69	1,359	1,403	2,579	3,248	3,811	4,323	5,003	ERR	29%
Total Workstation Shipments	0	0	170	1,644	1,995	3,242	3,845	4,425	4,958	5,598	ERR	23%
New Workstation Shipments	0	0	157	1,584	1,955	3,095	3,720	4,296	4,818	5,450	ERR	23%
Add-On Workstation Shipments	0	0	13	60	40	147	126	129	140	148	ERR	30%
CPU Installed Base	0	0	69	1,428	2,830	5,401	8,635	12,421	16,704	21,641	ERR	50%
Workstation Installed Base	0	0	170	1,810	3,789	6,992	10,771	15,100	19,928	25,355	ERR	46%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	38	33	37	42	46	49	NA	6%
Workstation Revenue	NA	NA	NA	NA	34	44	46	50	54	57	NA	11%
Software Revenue	NA	NA	NA	NA	22	25	35	46	59	75	NA	28%
Peripheral Revenue	NA	NA	NA	NA	10	12	20	27	36	47	NA	36%
Service Revenue	0	0	3	9	5	17	20	25	33	46	ERR	58%
Total Revenue	0	0	22	70	109	131	157	189	228	275	ERR	20%
Increase over prior year	NA	ERR	ERR	218%	56%	20%	20%	21%	20%	20%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.15
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Rest of World
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
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UNIT SHIPMENT DATA												
CPU Shipments	79	105	11	329	380	430	546	707	903	1,124	48%	24%
Total Workstation Shipments	304	418	47	360	495	569	724	918	1,136	1,355	13%	22%
New Workstation Shipments	282	385	43	353	469	539	687	874	1,084	1,298	14%	23%
Add-On Workstation Shipments	22	34	4	6	26	31	37	44	51	57	5%	17%
CPU Installed Base	312	405	396	721	1,098	1,520	2,055	2,750	3,637	4,740	37%	34%
Workstation Installed Base	976	1,351	1,331	1,651	2,106	2,632	3,308	4,171	5,243	6,524	21%	25%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	6	7	8	9	10	11	NA	15%
Workstation Revenue	NA	NA	NA	NA	8	9	11	12	13	14	NA	12%
Software Revenue	NA	NA	NA	NA	5	6	7	10	12	16	NA	26%
Peripheral Revenue	NA	NA	NA	NA	2	3	4	5	7	9	NA	34%
Service Revenue	5	8	1	2	4	4	5	6	8	11	-8%	25%
Total Revenue	31	40	6	16	24	29	35	42	51	61	-6%	20%
Increase over prior year	NA	29%	-84%	150%	51%	20%	20%	21%	20%	20%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.16
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Worldwide
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	167	245	102	253	432	2,153	3,276	3,661	4,083	4,527	27%	60%
Total Workstation Shipments	613	912	790	1,108	1,752	3,866	5,714	7,001	8,425	9,762	30%	41%
New Workstation Shipments	556	830	730	928	1,508	3,636	5,419	6,619	7,930	9,124	28%	43%
Add-On Workstation Shipments	57	82	60	179	300	230	296	383	496	637	51%	16%
CPU Installed Base	453	674	960	1,203	1,612	3,737	6,977	10,581	14,584	18,998	37%	64%
Workstation Installed Base	1,682	2,511	4,085	5,070	6,671	10,343	15,806	22,465	30,427	39,568	41%	43%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	49	63	77	90	99	102	NA	16%
Workstation Revenue	NA	NA	NA	NA	71	87	108	130	149	162	NA	18%
Software Revenue	NA	NA	NA	NA	48	73	103	143	193	256	NA	40%
Peripheral Revenue	NA	NA	NA	NA	17	20	27	35	44	54	NA	27%
Service Revenue	10	16	21	24	35	45	59	78	106	145	37%	33%
Total Revenue	73	109	91	151	220	288	375	476	590	720	32%	27%
Increase over prior year	NA	49%	-17%	66%	46%	31%	30%	27%	24%	22%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.17
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: North America
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	136	207	74	163	201	1,221	2,082	2,077	2,110	2,264	10%	62%
Total Workstation Shipments	486	756	622	784	1,135	2,369	3,751	4,468	5,336	6,263	24%	41%
New Workstation Shipments	438	688	584	654	906	2,215	3,549	4,194	4,968	5,776	20%	45%
Add-On Workstation Shipments	48	68	38	130	229	154	203	274	368	487	48%	16%
CPU Installed Base	351	540	587	745	931	2,134	4,193	6,236	8,297	10,494	28%	62%
Workstation Installed Base	1,286	1,979	2,503	3,212	4,251	6,494	10,081	14,324	19,352	25,195	35%	43%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	30	41	51	59	65	66	NA	17%
Workstation Revenue	NA	NA	NA	NA	47	58	72	88	102	111	NA	19%
Software Revenue	NA	NA	NA	NA	31	47	66	89	119	157	NA	38%
Peripheral Revenue	NA	NA	NA	NA	11	13	17	23	29	35	NA	26%
Service Revenue	8	13	15	17	25	30	40	53	74	103	33%	33%
Total Revenue	56	87	62	106	145	189	246	312	387	472	27%	27%
Increase over prior year	NA	55%	-29%	71%	36%	31%	30%	27%	24%	22%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.18
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Europe
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	9	35	182	767	864	970	1,170	1,341	ERR	49%
Total Workstation Shipments	0	0	75	168	372	1,097	1,351	1,632	1,986	2,251	ERR	43%
New Workstation Shipments	0	0	64	140	390	1,052	1,292	1,556	1,892	2,140	ERR	41%
Add-On Workstation Shipments	0	0	11	28	38	44	59	76	93	111	ERR	24%
CPU Installed Base	0	0	227	260	436	1,197	2,052	3,007	4,157	5,470	ERR	66%
Workstation Installed Base	0	0	984	1,123	1,460	2,517	3,815	5,375	7,264	9,387	ERR	45%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	10	13	17	19	21	22	NA	18%
Workstation Revenue	NA	NA	NA	NA	15	18	23	27	31	33	NA	16%
Software Revenue	NA	NA	NA	NA	12	17	23	32	45	60	NA	38%
Peripheral Revenue	NA	NA	NA	NA	3	4	6	8	10	12	NA	34%
Service Revenue	0	0	5	4	7	9	12	16	21	28	ERR	31%
Total Revenue	0	0	16	25	47	62	81	103	127	156	ERR	27%
Increase over prior year	NA	ERR	ERR	56%	90%	31%	30%	27%	24%	22%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.19
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Far East
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	15	50	37	79	206	445	593	701	ERR	80%
Total Workstation Shipments	0	0	73	135	162	234	373	573	681	750	ERR	36%
New Workstation Shipments	0	0	64	118	145	213	353	559	671	744	ERR	39%
Add-On Workstation Shipments	0	0	9	18	17	21	20	15	10	6	ERR	-19%
CPU Installed Base	0	0	15	65	102	180	383	825	1,411	2,100	ERR	83%
Workstation Installed Base	0	0	73	206	362	587	945	1,496	2,149	2,863	ERR	51%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	7	5	6	7	9	9	NA	6%
Workstation Revenue	NA	NA	NA	NA	5	7	9	9	10	10	NA	13%
Software Revenue	NA	NA	NA	NA	3	6	9	15	21	28	NA	57%
Peripheral Revenue	NA	NA	NA	NA	2	2	2	3	4	5	NA	22%
Service Revenue	0	0	1	3	1	4	5	5	6	7	ERR	44%
Total Revenue	0	0	10	17	18	24	31	40	49	60	ERR	27%
Increase over prior year	NA	ERR	ERR	70%	8%	31%	30%	27%	24%	22%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.20
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Rest of World
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	31	38	4	4	12	87	125	168	211	221	-22%	80%
Total Workstation Shipments	127	156	20	20	84	166	239	328	422	498	-10%	43%
New Workstation Shipments	118	142	18	17	68	155	225	310	398	464	-13%	47%
Add-On Workstation Shipments	9	14	2	3	16	11	14	18	24	34	16%	16%
CPU Installed Base	102	134	131	134	143	227	349	513	719	934	9%	46%
Workstation Installed Base	396	532	525	529	598	746	965	1,269	1,662	2,123	11%	29%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	2	3	4	4	4	4	NA	16%
Workstation Revenue	NA	NA	NA	NA	4	4	5	6	7	8	NA	16%
Software Revenue	NA	NA	NA	NA	2	3	5	6	9	11	NA	48%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	2	2	2	NA	22%
Service Revenue	2	3	0	0	2	2	3	4	5	7	-3%	32%
Total Revenue	17	22	3	3	10	13	17	22	27	33	-13%	27%
Increase over prior year	NA	29%	-86%	0%	232%	31%	30%	27%	24%	22%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.21
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Worldwide
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	3	277	1,282	5,682	14,036	18,705	22,785	27,767	34,287	42,873	727%	25%
Total Workstation Shipments	3	277	1,291	5,667	14,068	18,733	22,817	27,803	34,320	42,895	728%	25%
New Workstation Shipments	3	277	1,291	5,665	14,067	18,733	22,817	27,802	34,320	42,895	728%	25%
Add-On Workstation Shipments	0	0	0	3	0	0	0	0	0	0	ERR	-31%
CPU Installed Base	3	305	1,513	7,193	21,227	39,928	62,557	90,070	123,955	166,205	817%	51%
Workstation Installed Base	3	305	1,522	7,184	21,244	39,967	62,619	90,157	124,062	166,320	817%	51%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	106	127	148	170	185	189	NA	12%
Workstation Revenue	NA	NA	NA	NA	105	127	148	170	186	190	NA	13%
Software Revenue	NA	NA	NA	NA	212	252	315	403	512	642	NA	25%
Peripheral Revenue	NA	NA	NA	NA	71	82	98	122	150	184	NA	21%
Service Revenue	0	2	6	15	37	44	56	75	104	149	ERR	32%
Total Revenue	0	21	86	276	531	632	764	940	1,138	1,354	504%	21%
Increase over prior year	NA	5150%	310%	221%	92%	19%	21%	23%	21%	19%		

Source: Dataquest
 June 1986

A.1 Forecasts -- All Product Types

TABLE NUMBER: A-1.22
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: North America
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	3	240	1,003	4,390	10,692	13,131	15,957	19,255	23,581	29,219	673%	22%
Total Workstation Shipments	3	240	1,012	4,382	10,686	13,154	15,981	19,281	23,606	29,237	673%	22%
New Workstation Shipments	3	240	1,012	4,381	10,686	13,154	15,981	19,281	23,606	29,237	673%	22%
Add-On Workstation Shipments	0	0	0	1	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	3	243	1,234	5,621	16,311	29,439	45,287	64,369	87,681	116,487	759%	48%
Workstation Installed Base	3	243	1,243	5,620	16,299	29,444	45,309	64,410	87,737	116,552	759%	48%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	71	87	101	116	127	129	NA	13%
Workstation Revenue	NA	NA	NA	NA	71	87	102	117	128	130	NA	13%
Software Revenue	NA	NA	NA	NA	140	169	211	271	344	432	NA	25%
Peripheral Revenue	NA	NA	NA	NA	51	55	65	80	99	122	NA	19%
Service Revenue	0	2	5	11	25	29	37	49	69	99	ERR	32%
Total Revenue	0	19	68	205	358	426	515	633	766	912	447%	21%
Increase over prior year	NA	4650%	258%	202%	74%	19%	21%	23%	21%	19%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.23
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Europe
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	217	702	2,424	3,241	3,906	4,900	6,212	7,985	ERR	27%
Total Workstation Shipments	0	0	217	701	2,422	3,245	3,912	4,907	6,218	7,987	ERR	27%
New Workstation Shipments	0	0	217	700	2,422	3,245	3,912	4,907	6,218	7,987	ERR	27%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	-100%
CPU Installed Base	0	0	217	919	3,343	6,583	10,460	15,309	21,437	29,288	ERR	54%
Workstation Installed Base	0	0	217	918	3,340	6,584	10,466	15,321	21,453	29,304	ERR	54%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	20	24	28	32	34	35	NA	11%
Workstation Revenue	NA	NA	NA	NA	21	24	28	32	34	35	NA	11%
Software Revenue	NA	NA	NA	NA	45	51	64	82	104	130	NA	23%
Peripheral Revenue	NA	NA	NA	NA	11	17	21	27	33	40	NA	29%
Service Revenue	0	0	1	2	8	9	12	16	23	32	ERR	31%
Total Revenue	0	0	14	37	106	126	153	188	228	271	ERR	21%
Increase over prior year	NA	ERR	ERR	163%	188%	19%	21%	23%	21%	19%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.24
 TITLE: CAD/CAM History and forecast
 APPLICATION: Electronic Design Automation
 REGION: Far East
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	62	532	916	2,319	2,897	3,577	4,449	5,612	ERR	44%
Total Workstation Shipments	0	0	62	526	953	2,320	2,899	3,579	4,451	5,613	ERR	43%
New Workstation Shipments	0	0	62	526	953	2,320	2,899	3,579	4,451	5,613	ERR	43%
Add-On Workstation Shipments	0	0	0	1	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	62	594	1,510	3,829	6,709	10,256	14,657	20,193	ERR	68%
Workstation Installed Base	0	0	62	588	1,542	3,860	6,740	10,288	14,689	20,224	ERR	67%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	14	16	19	22	24	25	NA	12%
Workstation Revenue	NA	NA	NA	NA	13	16	19	22	24	25	NA	14%
Software Revenue	NA	NA	NA	NA	27	32	39	50	64	80	NA	24%
Peripheral Revenue	NA	NA	NA	NA	8	10	12	15	18	22	NA	22%
Service Revenue	0	0	0	2	4	5	7	9	13	18	ERR	37%
Total Revenue	0	0	4	32	66	79	95	117	142	169	ERR	21%
Increase over prior year	NA	ERR	ERR	696%	107%	19%	21%	23%	21%	19%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.25
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Rest of World
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	37	0	58	5	14	25	36	45	57	ERR	64%
Total Workstation Shipments	0	37	0	58	6	14	25	36	46	58	ERR	58%
New Workstation Shipments	0	37	0	58	6	14	25	36	46	58	ERR	58%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	62	0	58	63	77	101	136	181	238	ERR	30%
Workstation Installed Base	0	62	0	58	64	78	103	138	183	240	ERR	30%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	17%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	18%
Software Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	40%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	1%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	19%
Total Revenue	0	2	0	2	1	1	1	1	2	2	ERR	21%
Increase over prior year	NA	ERR	-100%	ERR	-62%	19%	20%	24%	21%	18%		

Source: Dataquest
 June 1986

A.1 Forecasts -- All Product Types

TABLE NUMBER: A-1.26
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Worldwide
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	158	176	209	638	1,196	1,753	2,723	4,164	6,121	8,903	66%	49%
Total Workstation Shipments	660	679	644	1,211	1,419	1,950	2,881	4,280	6,197	8,945	21%	45%
New Workstation Shipments	619	636	536	1,080	1,335	1,934	2,869	4,270	6,190	8,938	21%	46%
Add-On Workstation Shipments	41	43	106	132	84	16	12	10	8	6	20%	-41%
CPU Installed Base	759	904	1,069	1,686	2,864	4,590	7,254	11,335	17,334	26,059	39%	56%
Workstation Installed Base	2,607	3,181	3,619	4,723	6,019	7,833	10,543	14,624	20,584	29,236	23%	37%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	38	43	50	61	75	92	NA	19%
Workstation Revenue	NA	NA	NA	NA	42	45	52	62	77	92	NA	17%
Software Revenue	NA	NA	NA	NA	71	87	118	169	245	360	NA	38%
Peripheral Revenue	NA	NA	NA	NA	19	24	32	46	65	91	NA	36%
Service Revenue	11	12	12	21	28	32	40	54	81	128	26%	36%
Total Revenue	82	93	100	152	198	230	292	392	543	762	25%	31%
Increase over prior year	NA	13%	8%	51%	31%	16%	27%	35%	38%	40%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.27
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: North America
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	130	145	151	425	811	1,127	1,665	2,560	3,780	5,513	58%	47%
Total Workstation Shipments	540	545	433	800	898	1,239	1,770	2,639	3,832	5,540	14%	44%
New Workstation Shipments	506	510	388	714	838	1,230	1,762	2,633	3,827	5,536	13%	46%
Add-On Workstation Shipments	34	35	45	86	60	9	8	7	5	4	15%	-42%
CPU Installed Base	566	687	804	1,213	2,007	3,114	4,739	7,244	10,945	16,344	37%	52%
Workstation Installed Base	1,996	2,458	2,768	3,486	4,288	5,428	7,078	9,580	13,251	18,595	21%	34%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	22	26	31	38	47	57	NA	21%
Workstation Revenue	NA	NA	NA	NA	24	28	32	39	48	57	NA	19%
Software Revenue	NA	NA	NA	NA	45	55	73	105	152	223	NA	38%
Peripheral Revenue	NA	NA	NA	NA	13	15	20	28	40	56	NA	35%
Service Revenue	9	10	9	13	19	19	25	34	50	79	20%	33%
Total Revenue	68	75	71	101	123	143	181	243	337	473	16%	31%
Increase over prior year	NA	10%	-5%	43%	22%	16%	27%	34%	38%	40%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER:

TITLE:

APPLICATION:

REGION:

PRODUCT TYPE:

UNITS:

A-1.28
CAD/CAM History and Forecast
Integrated Circuit
Europe
All Product Types
Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
UNIT SHIPMENT DATA												
CPU Shipments	0	0	39	105	213	345	534	797	1,153	1,665	ERR	51%
Total Workstation Shipments	0	0	110	199	237	381	562	821	1,173	1,677	ERR	48%
New Workstation Shipments	0	0	99	178	217	378	560	819	1,171	1,675	ERR	51%
Add-On Workstation Shipments	0	0	10	22	20	3	2	2	2	2	ERR	-38%
CPU Installed Base	0	0	39	143	355	699	1,225	2,010	3,165	4,781	ERR	68%
Workstation Installed Base	0	0	110	306	536	909	1,456	2,256	3,401	5,039	ERR	57%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	6	8	9	11	14	17	NA	23%
Workstation Revenue	NA	NA	NA	NA	7	8	10	12	14	17	NA	19%
Software Revenue	NA	NA	NA	NA	14	16	22	32	46	67	NA	37%
Peripheral Revenue	NA	NA	NA	NA	4	4	6	8	12	17	NA	37%
Service Revenue	0	0	2	4	6	6	7	10	15	24	ERR	31%
Total Revenue	0	0	19	22	37	43	54	73	102	143	ERR	31%
Increase over prior year	NA	ERR	ERR	18%	65%	16%	27%	35%	39%	40%		

Source: Dataquest
June 1986

TABLE NUMBER: A-1.29
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Far East
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	19	102	158	251	478	738	1,085	1,579	ERR	59%
Total Workstation Shipments	0	0	98	192	267	298	502	750	1,091	1,583	ERR	43%
New Workstation Shipments	0	0	47	172	265	294	500	749	1,091	1,582	ERR	43%
Add-On Workstation Shipments	0	0	51	21	3	4	2	1	1	1	ERR	-28%
CPU Installed Base	0	0	19	121	277	526	997	1,724	2,792	4,342	ERR	73%
Workstation Installed Base	0	0	52	243	505	793	1,279	2,008	3,072	4,616	ERR	56%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	10	8	9	11	13	16	NA	11%
Workstation Revenue	NA	NA	NA	NA	9	8	9	11	13	16	NA	12%
Software Revenue	NA	NA	NA	NA	11	15	21	30	44	64	NA	42%
Peripheral Revenue	NA	NA	NA	NA	3	4	6	8	12	16	NA	41%
Service Revenue	0	0	1	3	2	6	7	9	14	22	ERR	59%
Total Revenue	0	0	10	25	35	41	51	69	96	135	ERR	31%
Increase over prior year	NA	ERR	ERR	149%	40%	16%	27%	35%	39%	40%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.30
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Rest of World
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	28	31	0	6	14	30	46	69	101	146	-15%	59%
Total Workstation Shipments	120	134	3	20	17	32	47	70	101	146	-38%	53%
New Workstation Shipments	113	126	2	16	16	32	47	70	101	146	-39%	56%
Add-On Workstation Shipments	7	8	0	3	1	0	0	0	0	0	-34%	-100%
CPU Installed Base	193	217	207	209	225	251	293	357	452	592	4%	21%
Workstation Installed Base	611	723	689	688	691	703	730	780	861	986	3%	7%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	17%
Workstation Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	16%
Software Revenue	NA	NA	NA	NA	1	1	2	3	4	6	NA	49%
Peripheral Revenue	NA	NA	NA	NA	0	0	1	1	1	1	NA	36%
Service Revenue	2	2	0	0	1	0	1	1	1	2	-23%	23%
Total Revenue	14	18	0	3	3	4	5	6	9	12	-31%	31%
Increase over prior year	NA	29%	-98%	662%	3%	16%	27%	34%	39%	40%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.31
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Worldwide
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	647	831	1,231	2,589	4,449	6,949	9,876	13,392	17,634	23,150	62%	39%
Total Workstation Shipments	1,485	1,854	2,430	3,927	5,668	8,221	10,975	14,294	18,367	23,663	40%	33%
New Workstation Shipments	1,391	1,712	2,253	3,428	5,382	8,043	10,827	14,170	18,256	23,570	40%	34%
Add-On Workstation Shipments	95	143	177	499	289	178	148	124	110	94	32%	-20%
CPU Installed Base	1,841	2,609	3,709	6,368	10,783	17,694	27,450	40,652	57,991	80,695	56%	50%
Workstation Installed Base	4,332	6,016	8,145	11,949	17,348	25,256	35,796	49,554	67,256	90,090	41%	39%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	113	122	132	141	146	145	NA	5%
Workstation Revenue	NA	NA	NA	NA	115	126	137	147	153	151	NA	6%
Software Revenue	NA	NA	NA	NA	141	163	209	258	309	366	NA	21%
Peripheral Revenue	NA	NA	NA	NA	46	66	87	111	136	161	NA	29%
Service Revenue	21	27	39	49	63	74	94	120	159	215	31%	28%
Total Revenue	174	231	271	355	477	552	659	778	902	1,038	29%	17%
Increase over prior year	NA	33%	17%	31%	34%	16%	19%	18%	16%	15%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.32
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: North America
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	290	362	593	1,599	2,293	3,295	4,596	6,158	8,102	10,586	68%	36%
Total Workstation Shipments	743	869	1,230	2,390	2,618	3,846	5,075	6,543	8,381	10,795	37%	33%
New Workstation Shipments	689	792	1,134	2,095	2,447	3,769	5,011	6,490	8,339	10,757	37%	34%
Add-On Workstation Shipments	53	77	96	295	171	77	65	53	42	38	34%	26%
CPU Installed Base	840	1,172	1,706	3,391	5,668	8,945	13,479	19,542	27,501	37,872	61%	46%
Workstation Installed Base	2,360	3,133	4,206	6,580	9,054	12,744	17,603	23,884	31,944	42,343	40%	36%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	45	56	61	65	67	67	NA	8%
Workstation Revenue	NA	NA	NA	NA	50	57	63	67	69	69	NA	6%
Software Revenue	NA	NA	NA	NA	66	76	96	119	142	167	NA	20%
Peripheral Revenue	NA	NA	NA	NA	24	31	40	52	63	75	NA	26%
Service Revenue	10	12	21	29	34	34	43	55	73	99	36%	24%
Total Revenue	85	108	145	211	219	254	303	357	414	476	27%	17%
Increase over prior year	NA	27%	34%	45%	4%	16%	19%	18%	16%	15%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.33
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Europe
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	507	536	1,146	1,819	2,420	3,167	4,165	5,532	ERR	37%
Total Workstation Shipments	0	0	903	785	1,271	2,149	2,765	3,502	4,461	5,743	ERR	35%
New Workstation Shipments	0	0	856	692	1,200	2,103	2,718	3,456	4,417	5,705	ERR	37%
Add-On Workstation Shipments	0	0	47	93	71	46	46	46	45	38	ERR	-12%
CPU Installed Base	0	0	507	1,041	2,185	4,001	6,397	9,525	13,628	19,065	ERR	54%
Workstation Installed Base	0	0	903	1,670	2,914	5,031	7,731	11,143	15,479	21,054	ERR	49%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	24	30	33	35	36	36	NA	8%
Workstation Revenue	NA	NA	NA	NA	26	31	35	38	39	38	NA	8%
Software Revenue	NA	NA	NA	NA	38	41	51	62	75	89	NA	19%
Peripheral Revenue	NA	NA	NA	NA	9	15	20	26	32	38	NA	32%
Service Revenue	0	0	13	11	19	18	22	29	39	53	ERR	23%
Total Revenue	0	0	91	79	116	135	161	190	220	254	ERR	17%
Increase over prior year	NA	ERR	ERR	-13%	46%	16%	20%	18%	16%	15%		

Source: Dataquest
 June 1986

A.1 Forecasts — All Product Types

TABLE NUMBER: A-1.34
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Far East
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	120	413	977	1,777	2,780	3,942	5,186	6,793	ERR	47%
Total Workstation Shipments	0	0	260	689	1,733	2,154	3,037	4,113	5,339	6,884	ERR	32%
New Workstation Shipments	0	0	231	586	1,693	2,101	3,003	4,090	5,316	6,868	ERR	32%
Add-On Workstation Shipments	0	0	29	103	43	53	35	24	23	17	ERR	-17%
CPU Installed Base	0	0	120	532	1,508	3,281	6,040	9,940	15,052	21,727	ERR	71%
Workstation Installed Base	0	0	260	943	2,659	4,767	7,729	11,737	16,933	23,627	ERR	55%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	43	35	37	40	42	41	NA	-1%
Workstation Revenue	NA	NA	NA	NA	37	36	38	41	43	42	NA	3%
Software Revenue	NA	NA	NA	NA	36	45	60	75	90	106	NA	24%
Peripheral Revenue	NA	NA	NA	NA	12	19	26	33	39	47	NA	31%
Service Revenue	0	0	4	9	9	22	27	34	45	61	ERR	46%
Total Revenue	0	0	31	59	136	158	189	223	259	298	ERR	17%
Increase over prior year	NA	ERR	ERR	91%	130%	16%	20%	18%	16%	15%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-1.35
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Rest of World
 PRODUCT TYPE: All Product Types
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	357	469	11	41	33	58	81	125	181	239	-45%	49%
Total Workstation Shipments	742	985	37	63	47	72	97	136	185	241	-50%	39%
New Workstation Shipments	702	920	32	55	42	70	95	135	185	241	-50%	42%
Add-On Workstation Shipments	42	66	5	8	4	2	2	2	1	0	-44%	-35%
CPU Installed Base	1,001	1,437	1,376	1,404	1,423	1,467	1,534	1,644	1,810	2,032	9%	7%
Workstation Installed Base	1,972	2,883	2,776	2,756	2,721	2,714	2,732	2,791	2,900	3,065	8%	2%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	8%
Workstation Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	3%
Software Revenue	NA	NA	NA	NA	1	2	2	2	3	4	NA	24%
Peripheral Revenue	NA	NA	NA	NA	0	1	1	1	1	2	NA	29%
Service Revenue	11	15	1	1	1	1	1	1	2	2	-49%	22%
Total Revenue	89	123	4	5	5	5	6	8	9	10	-52%	17%
Increase over prior year	NA	38%	-97%	35%	-14%	16%	20%	18%	16%	15%		

Source: Dataquest
 June 1986

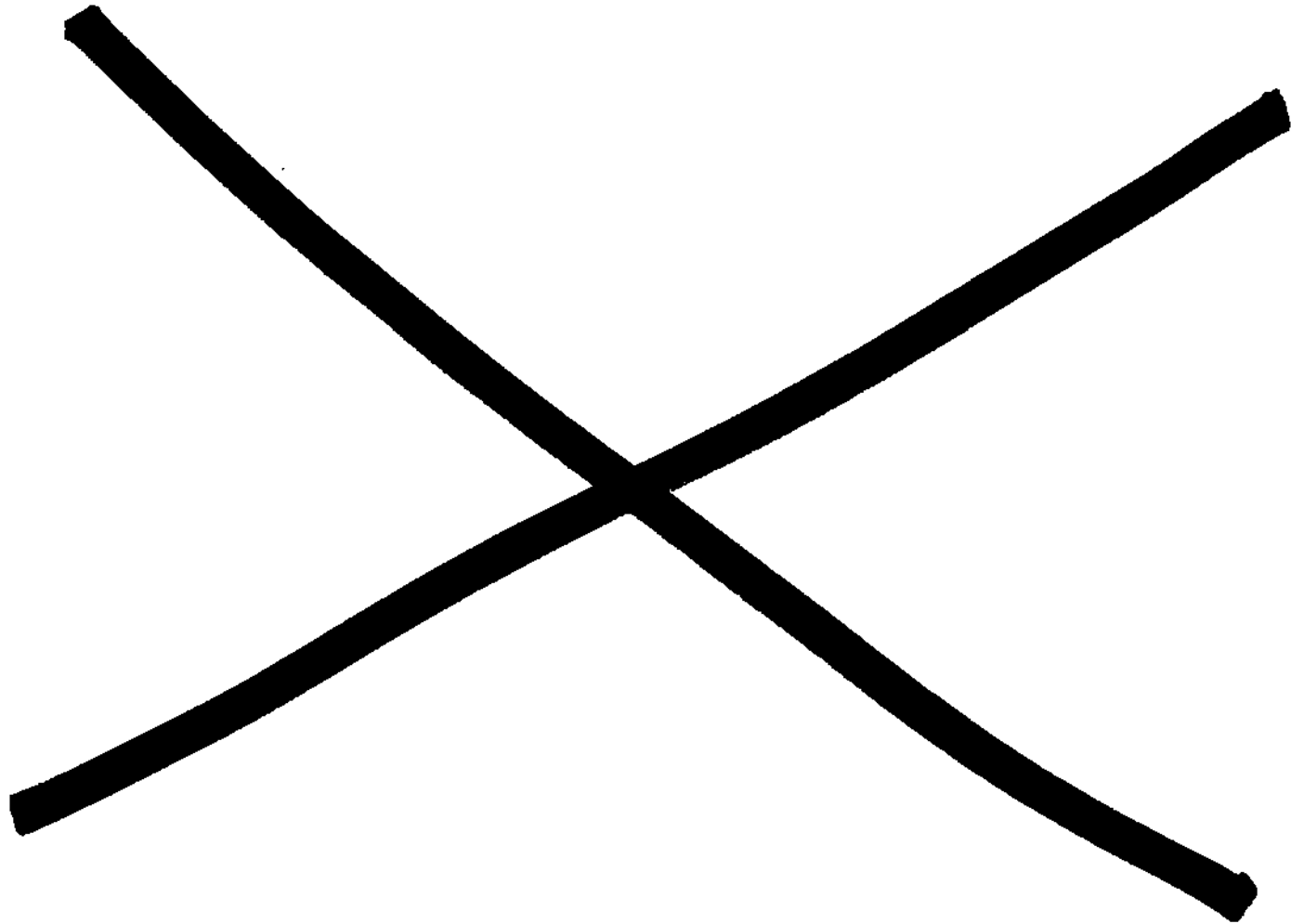


TABLE NUMBER: A-2.11
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Worldwide
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
UNIT SHIPMENT DATA												
CPU Shipments	0	0	510	955	1,674	2,881	5,065	8,277	12,911	19,456	ERR	63%
Total Workstation Shipments	0	0	510	955	1,674	2,881	5,065	8,277	12,911	19,456	ERR	63%
New Workstation Shipments	0	0	510	955	1,674	2,881	5,065	8,277	12,911	19,456	ERR	63%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	510	1,465	3,140	6,021	11,026	19,193	31,913	51,050	ERR	75%
Workstation Installed Base	0	0	510	1,465	3,140	6,021	11,026	19,193	31,913	51,050	ERR	75%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	35	55	86	124	168	217	NA	44%
Workstation Revenue	NA	NA	NA	NA	35	55	86	124	168	217	NA	44%
Software Revenue	NA	NA	NA	NA	49	68	110	168	249	364	NA	49%
Peripheral Revenue	NA	NA	NA	NA	25	52	83	124	179	254	NA	58%
Service Revenue	0	0	8	15	19	31	51	80	127	204	ERR	61%
Total Revenue	0	0	42	117	163	261	416	620	891	1,255	ERR	50%
Increase over prior year	NA	ERR	ERR	176%	40%	60%	59%	49%	44%	41%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.12
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: North America
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	428	735	1,219	2,109	3,369	5,324	8,083	11,873	ERR	58%
Total Workstation Shipments	0	0	428	735	1,219	2,109	3,369	5,324	8,083	11,873	ERR	58%
New Workstation Shipments	0	0	428	735	1,219	2,109	3,369	5,324	8,083	11,873	ERR	58%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	428	1,163	2,382	4,491	7,815	13,061	21,014	32,676	ERR	69%
Workstation Installed Base	0	0	428	1,163	2,382	4,491	7,815	13,061	21,014	32,676	ERR	69%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	26	41	57	80	105	132	NA	38%
Workstation Revenue	NA	NA	NA	NA	26	41	57	80	105	132	NA	38%
Software Revenue	NA	NA	NA	NA	36	49	73	108	156	222	NA	44%
Peripheral Revenue	NA	NA	NA	NA	20	38	55	80	112	155	NA	51%
Service Revenue	0	0	7	11	14	22	34	51	80	125	ERR	54%
Total Revenue	0	0	36	88	123	191	277	399	558	766	ERR	44%
Increase over prior year	NA	ERR	ERR	144%	40%	56%	45%	44%	40%	37%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.13
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Europe
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	48	91	352	476	783	1,337	2,281	3,770	ERR	61%
Total Workstation Shipments	0	0	48	91	352	476	783	1,337	2,281	3,770	ERR	61%
New Workstation Shipments	0	0	48	91	352	476	783	1,337	2,281	3,770	ERR	61%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	48	139	491	967	1,741	3,060	5,310	9,028	ERR	79%
Workstation Installed Base	0	0	48	139	491	967	1,741	3,060	5,310	9,028	ERR	79%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	6	9	13	20	30	42	NA	46%
Workstation Revenue	NA	NA	NA	NA	6	9	13	20	30	42	NA	46%
Software Revenue	NA	NA	NA	NA	9	11	17	27	44	70	NA	49%
Peripheral Revenue	NA	NA	NA	NA	4	9	13	20	32	49	NA	66%
Service Revenue	0	0	1	2	4	5	8	13	22	40	ERR	60%
Total Revenue	0	0	4	12	30	43	64	100	157	243	ERR	52%
Increase over prior year	NA	ERR	ERR	200%	148%	45%	49%	56%	57%	54%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.14
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Far East
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	33	68	61	216	783	1,392	2,180	3,237	ERR	121%
Total Workstation Shipments	0	0	33	68	61	216	783	1,392	2,180	3,237	ERR	121%
New Workstation Shipments	0	0	33	68	61	216	783	1,392	2,180	3,237	ERR	121%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	33	101	162	378	1,158	2,538	4,692	7,882	ERR	117%
Workstation Installed Base	0	0	33	101	162	378	1,158	2,538	4,692	7,882	ERR	117%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	4	13	21	28	36	NA	99%
Workstation Revenue	NA	NA	NA	NA	1	4	13	21	28	36	NA	99%
Software Revenue	NA	NA	NA	NA	2	5	17	28	42	61	NA	103%
Peripheral Revenue	NA	NA	NA	NA	1	4	13	21	30	42	NA	113%
Service Revenue	0	0	0	1	1	2	8	13	21	34	ERR	131%
Total Revenue	0	0	2	9	6	20	64	104	151	209	ERR	106%
Increase over prior year	NA	ERR	ERR	350%	-38%	250%	228%	62%	44%	39%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.15
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Rest of World
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	1	61	43	80	131	225	367	576	ERR	68%
Total Workstation Shipments	0	0	1	61	43	80	131	225	367	576	ERR	68%
New Workstation Shipments	0	0	1	61	43	80	131	225	367	576	ERR	68%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	1	62	104	184	313	535	896	1,463	ERR	70%
Workstation Installed Base	0	0	1	62	104	184	313	535	896	1,463	ERR	70%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	2	2	3	5	6	NA	43%
Workstation Revenue	NA	NA	NA	NA	1	2	2	3	5	6	NA	43%
Software Revenue	NA	NA	NA	NA	2	2	3	5	7	11	NA	48%
Peripheral Revenue	NA	NA	NA	NA	1	1	2	3	5	8	NA	62%
Service Revenue	0	0	0	1	1	1	1	2	4	6	ERR	56%
Total Revenue	0	0	0	8	5	7	11	17	25	37	ERR	49%
Increase over prior year	NA	ERR	ERR	1900%	-38%	46%	48%	57%	50%	47%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.16
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Worldwide
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	26	201	512	1,036	1,724	2,681	ERR	152%
Total Workstation Shipments	0	0	0	0	26	201	512	1,036	1,724	2,681	ERR	152%
New Workstation Shipments	0	0	0	0	26	201	512	1,036	1,724	2,681	ERR	152%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	26	227	737	1,765	3,471	6,118	ERR	197%
Workstation Installed Base	0	0	0	0	26	227	737	1,765	3,471	6,118	ERR	197%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	4	10	19	29	41	NA	153%
Workstation Revenue	NA	NA	NA	NA	0	4	10	19	29	41	NA	153%
Software Revenue	NA	NA	NA	NA	1	9	21	44	75	123	NA	170%
Peripheral Revenue	NA	NA	NA	NA	0	2	5	9	15	22	NA	152%
Service Revenue	0	0	0	0	0	2	4	9	16	29	ERR	176%
Total Revenue	0	0	0	0	2	20	50	99	164	256	ERR	161%
Increase over prior year	NA	ERR	ERR	ERR	ERR	851%	148%	99%	65%	56%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.17
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: North America
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	4	103	243	464	778	1,284	ERR	220%
Total Workstation Shipments	0	0	0	0	4	103	243	464	778	1,284	ERR	220%
New Workstation Shipments	0	0	0	0	4	103	243	464	778	1,284	ERR	220%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	4	107	349	809	1,579	2,847	ERR	275%
Workstation Installed Base	0	0	0	0	4	107	349	809	1,579	2,847	ERR	275%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	2	5	8	13	20	NA	194%
Workstation Revenue	NA	NA	NA	NA	0	2	5	8	13	20	NA	194%
Software Revenue	NA	NA	NA	NA	0	4	10	20	34	59	NA	177%
Peripheral Revenue	NA	NA	NA	NA	0	1	2	4	7	11	NA	166%
Service Revenue	0	0	0	0	0	1	2	4	7	14	ERR	180%
Total Revenue	0	0	0	0	1	10	24	44	74	123	ERR	179%
Increase over prior year	NA	ERR	ERR	ERR	ERR	1315%	130%	87%	66%	66%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.18
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Europe
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	21	89	154	280	474	749	ERR	105%
Total Workstation Shipments	0	0	0	0	21	89	154	280	474	749	ERR	105%
New Workstation Shipments	0	0	0	0	21	89	154	280	474	749	ERR	105%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	21	110	263	540	1,009	1,748	ERR	143%
Workstation Installed Base	0	0	0	0	21	110	263	540	1,009	1,748	ERR	143%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	2	3	5	8	12	NA	112%
Workstation Revenue	NA	NA	NA	NA	0	2	3	5	8	12	NA	112%
Software Revenue	NA	NA	NA	NA	0	4	6	12	21	34	NA	139%
Peripheral Revenue	NA	NA	NA	NA	0	1	1	2	4	6	NA	124%
Service Revenue	0	0	0	0	0	1	1	2	4	8	ERR	140%
Total Revenue	0	0	0	0	1	9	15	27	45	72	ERR	126%
Increase over prior year	NA	ERR	ERR	ERR	ERR	634%	68%	79%	68%	59%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.19
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Far East
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	1	2	96	257	414	569	ERR	230%
Total Workstation Shipments	0	0	0	0	1	2	96	257	414	569	ERR	230%
New Workstation Shipments	0	0	0	0	1	2	96	257	414	569	ERR	230%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	1	3	99	354	765	1,327	ERR	291%
Workstation Installed Base	0	0	0	0	1	3	99	354	765	1,327	ERR	291%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	2	5	7	9	NA	211%
Workstation Revenue	NA	NA	NA	NA	0	0	2	5	7	9	NA	211%
Software Revenue	NA	NA	NA	NA	0	0	4	11	18	26	NA	249%
Peripheral Revenue	NA	NA	NA	NA	0	0	1	2	4	5	NA	199%
Service Revenue	0	0	0	0	0	0	1	2	4	6	ERR	ERR
Total Revenue	0	0	0	0	0	0	9	25	39	54	ERR	234%
Increase over prior year	NA	ERR	ERR	ERR	ERR	31%	5406%	163%	60%	38%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.20
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Rest of World
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	0	7	19	35	58	78	ERR	237%
Total Workstation Shipments	0	0	0	0	0	7	19	35	58	78	ERR	237%
New Workstation Shipments	0	0	0	0	0	7	19	35	58	78	ERR	237%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	0	7	26	61	119	196	ERR	305%
Workstation Installed Base	0	0	0	0	0	7	26	61	119	196	ERR	305%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	161%
Workstation Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	161%
Software Revenue	NA	NA	NA	NA	0	0	1	2	3	4	NA	224%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	1	NA	130%
Service Revenue	0	0	0	0	0	0	0	0	1	1	ERR	ERR
Total Revenue	0	0	0	0	0	1	2	3	6	7	ERR	185%
Increase over prior year	NA	ERR	ERR	ERR	ERR	1650%	163%	85%	63%	35%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.21
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Worldwide
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	1,281	3,465	3,864	6,606	9,874	15,063	22,414	32,421	ERR	53%
Total Workstation Shipments	0	0	1,281	3,465	3,864	6,606	9,874	15,063	22,414	32,421	ERR	53%
New Workstation Shipments	0	0	1,281	3,465	3,864	6,606	9,874	15,063	22,414	32,421	ERR	53%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	1,281	4,746	8,610	15,216	24,938	39,751	61,767	93,571	ERR	61%
Workstation Installed Base	0	0	1,281	4,746	8,610	15,216	24,938	39,751	61,767	93,571	ERR	61%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	54	70	86	107	126	139	NA	21%
Workstation Revenue	NA	NA	NA	NA	54	70	86	107	126	139	NA	21%
Software Revenue	NA	NA	NA	NA	141	177	230	311	416	552	NA	31%
Peripheral Revenue	NA	NA	NA	NA	42	64	82	108	140	178	NA	34%
Service Revenue	0	0	6	13	27	35	47	66	95	141	ERR	39%
Total Revenue	0	0	85	219	317	416	532	698	902	1,149	ERR	29%
Increase over prior year	NA	ERR	ERR	158%	45%	31%	28%	31%	29%	27%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.22
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: North America
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	1,002	2,659	2,781	4,195	6,339	9,778	14,594	21,243	ERR	50%
Total Workstation Shipments	0	0	1,002	2,659	2,781	4,195	6,339	9,778	14,594	21,243	ERR	50%
New Workstation Shipments	0	0	1,002	2,659	2,781	4,195	6,339	9,778	14,594	21,243	ERR	50%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	1,002	3,661	6,442	10,638	16,870	26,480	40,809	61,644	ERR	57%
Workstation Installed Base	0	0	1,002	3,661	6,442	10,638	16,870	26,480	40,809	61,644	ERR	57%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	35	44	55	69	82	91	NA	21%
Workstation Revenue	NA	NA	NA	NA	35	44	55	69	82	91	NA	21%
Software Revenue	NA	NA	NA	NA	94	112	148	202	271	362	NA	31%
Peripheral Revenue	NA	NA	NA	NA	27	41	53	70	91	116	NA	34%
Service Revenue	0	0	5	10	18	22	30	43	62	92	ERR	39%
Total Revenue	0	0	67	164	208	264	341	453	587	753	ERR	29%
Increase over prior year	NA	ERR	ERR	145%	27%	27%	29%	33%	30%	28%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.23
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Europe
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA:												
CPU Shipments	0	0	217	440	710	1,505	2,243	3,371	5,007	7,194	ERR	59%
Total Workstation Shipments	0	0	217	440	710	1,505	2,243	3,371	5,007	7,194	ERR	59%
New Workstation Shipments	0	0	217	440	710	1,505	2,243	3,371	5,007	7,194	ERR	59%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	217	657	1,367	2,872	5,086	8,406	13,329	20,390	ERR	72%
Workstation Installed Base	0	0	217	657	1,367	2,872	5,086	8,406	13,329	20,390	ERR	72%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	12	16	20	24	28	31	NA	21%
Workstation Revenue	NA	NA	NA	NA	12	16	20	24	28	31	NA	21%
Software Revenue	NA	NA	NA	NA	30	40	52	70	93	123	NA	33%
Peripheral Revenue	NA	NA	NA	NA	9	15	19	24	31	39	NA	34%
Service Revenue	0	0	1	2	6	8	11	15	21	31	ERR	39%
Total Revenue	0	0	14	30	68	95	121	156	202	255	ERR	30%
Increase over prior year	NA	ERR	ERR	113%	128%	39%	28%	29%	29%	26%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.24
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Far East
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	62	352	370	900	1,283	1,899	2,788	3,939	ERR	61%
Total Workstation Shipments	0	0	62	352	370	900	1,283	1,899	2,788	3,939	ERR	61%
New Workstation Shipments	0	0	62	352	370	900	1,283	1,899	2,788	3,939	ERR	61%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	62	414	783	1,684	2,950	4,820	7,559	11,423	ERR	71%
Workstation Installed Base	0	0	62	414	783	1,684	2,950	4,820	7,559	11,423	ERR	71%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	7	10	11	13	16	17	NA	19%
Workstation Revenue	NA	NA	NA	NA	7	10	11	13	16	17	NA	19%
Software Revenue	NA	NA	NA	NA	17	24	30	39	52	67	NA	31%
Peripheral Revenue	NA	NA	NA	NA	6	9	11	14	17	22	NA	31%
Service Revenue	0	0	0	1	3	5	6	8	12	17	ERR	39%
Total Revenue	0	0	4	24	40	57	69	88	112	140	ERR	28%
Increase over prior year	NA	ERR	ERR	497%	68%	41%	22%	27%	28%	24%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.25
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Rest of World
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	15	3	6	8	14	25	45	ERR	72%
Total Workstation Shipments	0	0	0	15	3	6	8	14	25	45	ERR	72%
New Workstation Shipments	0	0	0	15	3	6	8	14	25	45	ERR	72%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	15	18	24	32	45	70	115	ERR	45%
Workstation Installed Base	0	0	0	15	18	24	32	45	70	115	ERR	45%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	38%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	38%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	1	NA	48%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	53%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	38%
Total Revenue	0	0	0	1	0	0	0	1	1	2	ERR	43%
Increase over prior year	NA	ERR	ERR	ERR	-73%	41%	18%	40%	62%	58%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.26
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Worldwide
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	34	389	917	1,364	2,344	3,742	5,672	8,416	ERR	56%
Total Workstation Shipments	0	0	35	389	917	1,364	2,344	3,742	5,672	8,416	ERR	56%
New Workstation Shipments	0	0	34	389	917	1,364	2,344	3,742	5,672	8,416	ERR	56%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	34	423	1,340	2,704	5,021	8,712	14,297	22,570	ERR	76%
Workstation Installed Base	0	0	34	423	1,340	2,704	5,021	8,712	14,297	22,570	ERR	76%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	16	23	36	52	70	89	NA	40%
Workstation Revenue	NA	NA	NA	NA	16	23	36	52	70	89	NA	40%
Software Revenue	NA	NA	NA	NA	41	58	97	153	233	350	NA	53%
Peripheral Revenue	NA	NA	NA	NA	12	17	28	43	62	90	NA	50%
Service Revenue	0	0	0	3	12	16	28	46	74	122	ERR	60%
Total Revenue	0	0	4	37	97	137	225	346	510	739	ERR	50%
Increase over prior year	NA	ERR	ERR	830%	161%	41%	64%	54%	48%	45%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.27
 TITLE: CAD/CAM History and forecast
 APPLICATION: Integrated Circuit
 REGION: North America
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	27	280	652	897	1,433	2,298	3,506	5,223	ERR	52%
Total Workstation Shipments	0	0	27	280	652	897	1,433	2,298	3,506	5,223	ERR	52%
New Workstation Shipments	0	0	27	280	652	897	1,433	2,298	3,506	5,223	ERR	52%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	27	307	960	1,856	3,270	5,535	8,986	14,119	ERR	71%
Workstation Installed Base	0	0	27	307	960	1,856	3,270	5,535	8,986	14,119	ERR	71%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	12	15	22	32	44	55	NA	37%
Workstation Revenue	NA	NA	NA	NA	12	15	22	32	44	55	NA	37%
Software Revenue	NA	NA	NA	NA	29	38	59	94	144	217	NA	49%
Peripheral Revenue	NA	NA	NA	NA	8	11	17	26	39	56	NA	47%
Service Revenue	0	0	0	2	9	11	17	28	46	76	ERR	54%
Total Revenue	0	0	3	26	69	90	138	212	315	459	ERR	46%
Increase over prior year	NA	ERR	ERR	769%	166%	30%	53%	54%	49%	45%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.28
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Europe
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	6	69	154	257	437	684	1,038	1,555	ERR	59%
Total Workstation Shipments	0	0	6	69	154	257	437	684	1,038	1,555	ERR	59%
New Workstation Shipments	0	0	6	69	154	257	437	684	1,038	1,555	ERR	59%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	6	75	229	485	917	1,592	2,614	4,143	ERR	79%
Workstation Installed Base	0	0	6	75	229	485	917	1,592	2,614	4,143	ERR	79%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	3	4	7	10	13	16	NA	40%
Workstation Revenue	NA	NA	NA	NA	3	4	7	10	13	16	NA	40%
Software Revenue	NA	NA	NA	NA	8	11	18	28	43	65	NA	53%
Peripheral Revenue	NA	NA	NA	NA	2	3	5	8	11	17	NA	48%
Service Revenue	0	0	0	1	2	3	5	8	14	23	ERR	60%
Total Revenue	0	0	1	7	18	26	42	63	93	137	ERR	50%
Increase over prior year	NA	ERR	ERR	602%	159%	42%	63%	51%	48%	46%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.29
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Far East
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	1	39	99	186	433	696	1,033	1,502	ERR	72%
Total Workstation Shipments	0	0	1	39	99	186	433	696	1,033	1,502	ERR	72%
New Workstation Shipments	0	0	1	39	99	186	433	696	1,033	1,502	ERR	72%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	1	40	140	325	755	1,443	2,462	3,939	ERR	95%
Workstation Installed Base	0	0	1	40	140	325	755	1,443	2,462	3,939	ERR	95%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	3	7	10	13	16	NA	63%
Workstation Revenue	NA	NA	NA	NA	1	3	7	10	13	16	NA	63%
Software Revenue	NA	NA	NA	NA	4	8	18	28	42	62	NA	74%
Peripheral Revenue	NA	NA	NA	NA	1	2	5	8	11	16	NA	77%
Service Revenue	0	0	0	0	1	2	5	8	14	22	ERR	109%
Total Revenue	0	0	0	4	8	19	42	64	93	132	ERR	74%
Increase over prior year	NA	ERR	ERR	ERR	103%	128%	123%	55%	45%	42%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.30
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Rest of World
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	1	11	25	42	64	94	136	ERR	66%
Total Workstation Shipments	0	0	1	1	11	25	42	64	94	136	ERR	66%
New Workstation Shipments	0	0	0	1	11	25	42	64	94	136	ERR	66%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	1	12	37	78	142	235	368	ERR	99%
Workstation Installed Base	0	0	0	1	12	37	78	142	235	368	ERR	99%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	1	1	1	1	NA	39%
Workstation Revenue	NA	NA	NA	NA	0	0	1	1	1	1	NA	39%
Software Revenue	NA	NA	NA	NA	0	1	2	3	4	6	NA	67%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	50%
Service Revenue	0	0	0	0	0	0	1	1	1	2	ERR	49%
Total Revenue	0	0	0	0	1	3	4	6	9	12	ERR	53%
Increase over prior year	NA	ERR	ERR	ERR	1330%	75%	60%	48%	43%	40%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.31
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Worldwide
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	713	1,218	1,823	3,762	6,610	10,415	15,075	20,929	ERR	63%
Total Workstation Shipments	0	0	713	1,218	1,823	3,762	6,610	10,415	15,075	20,929	ERR	63%
New Workstation Shipments	0	0	713	1,218	1,823	3,762	6,610	10,415	15,075	20,929	ERR	63%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	713	2,031	3,855	7,617	14,151	24,424	39,255	59,791	ERR	73%
Workstation Installed Base	0	0	713	2,031	3,855	7,617	14,151	24,424	39,255	59,791	ERR	73%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	37	54	81	106	123	131	NA	29%
Workstation Revenue	NA	NA	NA	NA	37	54	81	106	123	131	NA	29%
Software Revenue	NA	NA	NA	NA	67	91	143	201	261	326	NA	37%
Peripheral Revenue	NA	NA	NA	NA	24	47	72	100	127	155	NA	45%
Service Revenue	0	0	4	10	28	42	67	98	139	197	ERR	48%
Total Revenue	0	0	58	104	193	289	444	611	772	941	ERR	37%
Increase over prior year	NA	ERR	ERR	80%	85%	50%	54%	37%	26%	22%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.32
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: North America
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	328	834	1,146	1,791	3,090	4,878	7,122	9,750	ERR	53%
Total Workstation Shipments	0	0	328	834	1,146	1,791	3,090	4,878	7,122	9,750	ERR	53%
New Workstation Shipments	0	0	328	834	1,146	1,791	3,090	4,878	7,122	9,750	ERR	53%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	328	1,262	2,408	4,199	7,248	12,053	19,054	28,614	ERR	64%
Workstation Installed Base	0	0	328	1,262	2,408	4,199	7,248	12,053	19,054	28,614	ERR	64%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	18	26	38	50	58	61	NA	28%
Workstation Revenue	NA	NA	NA	NA	18	26	38	50	58	61	NA	28%
Software Revenue	NA	NA	NA	NA	36	43	67	94	123	152	NA	34%
Peripheral Revenue	NA	NA	NA	NA	16	22	34	47	60	72	NA	36%
Service Revenue	0	0	2	7	14	20	31	46	66	92	ERR	46%
Total Revenue	0	0	27	69	101	137	208	286	365	438	ERR	34%
Increase over prior year	NA	ERR	ERR	157%	45%	37%	51%	38%	28%	20%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.33
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Europe
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	321	341	352	824	1,388	2,236	3,357	4,852	ERR	69%
Total Workstation Shipments	0	0	321	341	352	824	1,388	2,236	3,357	4,852	ERR	69%
New Workstation Shipments	0	0	321	341	352	824	1,388	2,236	3,357	4,852	ERR	69%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	321	662	1,013	1,838	3,207	5,411	8,714	13,479	ERR	68%
Workstation Installed Base	0	0	321	662	1,013	1,838	3,207	5,411	8,714	13,479	ERR	68%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	10	12	17	23	27	30	NA	25%
Workstation Revenue	NA	NA	NA	NA	10	12	17	23	27	30	NA	25%
Software Revenue	NA	NA	NA	NA	16	20	30	43	58	75	NA	36%
Peripheral Revenue	NA	NA	NA	NA	5	10	15	21	28	36	NA	47%
Service Revenue	0	0	2	3	9	9	14	21	31	46	ERR	40%
Total Revenue	0	0	26	31	50	63	93	131	172	218	ERR	34%
Increase over prior year	NA	ERR	ERR	20%	60%	27%	48%	40%	31%	27%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-2.34
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Far East
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	60	33	305	1,112	2,078	3,205	4,444	6,122	ERR	82%
Total Workstation Shipments	0	0	60	33	305	1,112	2,078	3,205	4,444	6,122	ERR	82%
New Workstation Shipments	0	0	60	33	305	1,112	2,078	3,205	4,444	6,122	ERR	82%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	60	93	398	1,509	3,572	6,742	11,118	17,129	ERR	112%
Workstation Installed Base	0	0	60	93	398	1,509	3,572	6,742	11,118	17,129	ERR	112%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	9	16	26	33	36	38	NA	35%
Workstation Revenue	NA	NA	NA	NA	9	16	26	33	36	38	NA	35%
Software Revenue	NA	NA	NA	NA	15	27	45	62	77	95	NA	45%
Peripheral Revenue	NA	NA	NA	NA	3	14	23	31	37	45	NA	67%
Service Revenue	0	0	0	0	5	12	21	30	41	58	ERR	60%
Total Revenue	0	0	5	3	41	85	140	188	228	275	ERR	47%
Increase over prior year	NA	ERR	ERR	-40%	1254%	109%	64%	34%	21%	21%		

Source: Dataquest
 June 1986

A.2 All Standalone Products

TABLE NUMBER: A-2.35
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Rest of World
 PRODUCT TYPE: Standalone
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	4	11	20	35	54	96	151	205	ERR	59%
Total Workstation Shipments	0	0	4	11	20	35	54	96	151	205	ERR	59%
New Workstation Shipments	0	0	4	11	20	35	54	96	151	205	ERR	59%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	4	15	35	70	123	218	368	569	ERR	74%
Workstation Installed Base	0	0	4	15	35	70	123	218	368	569	ERR	74%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	1	1	1	1	1	NA	31%
Workstation Revenue	NA	NA	NA	NA	0	1	1	1	1	1	NA	31%
Software Revenue	NA	NA	NA	NA	1	1	1	2	3	3	NA	40%
Peripheral Revenue	NA	NA	NA	NA	0	0	1	1	1	2	NA	46%
Service Revenue	0	0	0	0	0	0	1	1	1	2	ERR	44%
Total Revenue	0	0	0	1	2	3	4	6	8	9	ERR	38%
Increase over prior year	NA	ERR	ERR	ERR	82%	47%	36%	56%	37%	19%		

Source: Dataquest
 June 1986

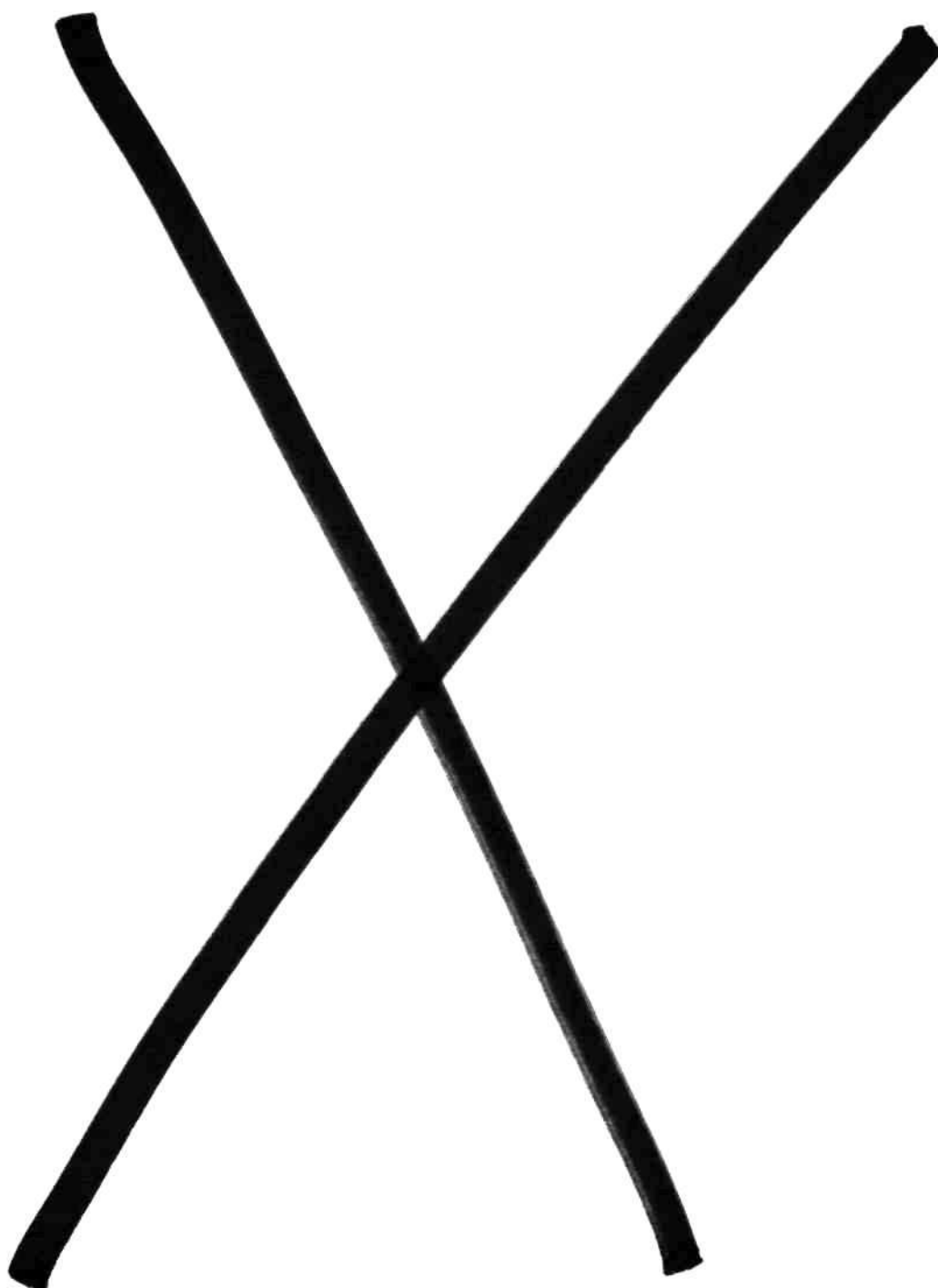


TABLE NUMBER: A-3.11
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Worldwide
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	325	585	388	566	880	1,002	1,115	1,199	1,183	1,040	28%	3%
Total Workstation Shipments	1,264	2,079	1,700	2,718	3,928	4,738	5,542	6,333	6,715	6,469	33%	10%
New Workstation Shipments	1,175	1,927	1,548	2,265	3,239	3,912	4,610	5,258	5,497	5,123	29%	10%
Add-On Workstation Shipments	89	153	152	453	697	826	932	1,075	1,218	1,345	67%	14%
CPU Installed Base	1,235	1,766	2,066	2,612	3,465	4,398	5,425	6,516	7,568	8,457	29%	20%
Workstation Installed Base	3,989	5,884	7,290	9,789	13,423	17,758	22,767	28,418	34,280	39,720	35%	24%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	114	118	111	99	79	55	NA	-14%
Workstation Revenue	NA	NA	NA	NA	161	178	176	170	154	129	NA	-4%
Software Revenue	NA	NA	NA	NA	85	82	84	86	82	72	NA	-3%
Peripheral Revenue	NA	NA	NA	NA	39	45	45	45	43	39	NA	0%
Service Revenue	21	31	42	57	72	79	84	90	98	106	36%	8%
Total Revenue	144	201	241	334	470	501	500	491	457	401	34%	-3%
Increase over prior year	NA	40%	20%	39%	41%	6%	-0%	-2%	-7%	-12%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.12
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: North America
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	246	480	264	380	470	597	693	756	760	703	18%	8%
Total Workstation Shipments	960	1,661	1,169	1,824	2,224	2,822	3,443	3,991	4,312	4,372	23%	14%
New Workstation Shipments	893	1,542	1,075	1,520	1,724	2,330	2,864	3,314	3,530	3,462	18%	15%
Add-On Workstation Shipments	67	119	94	304	499	492	579	678	782	909	65%	13%
CPU Installed Base	923	1,361	1,557	1,921	2,372	2,922	3,556	4,241	4,915	5,520	27%	18%
Workstation Installed Base	3,013	4,533	5,475	7,135	9,144	11,692	14,784	18,332	22,095	25,803	32%	23%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	62	70	69	63	51	37	NA	-10%
Workstation Revenue	NA	NA	NA	NA	97	106	109	107	99	87	NA	-2%
Software Revenue	NA	NA	NA	NA	52	49	52	54	53	49	NA	-1%
Peripheral Revenue	NA	NA	NA	NA	23	27	28	29	28	26	NA	2%
Service Revenue	16	23	27	37	52	47	52	57	63	72	34%	7%
Total Revenue	113	161	163	217	286	298	311	309	294	271	26%	-1%
Increase over prior year	NA	42%	1%	33%	32%	4%	4%	-0%	-5%	-8%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.15
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Rest of World
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	79	105	10	8	19	37	45	49	50	44	-30%	18%
Total Workstation Shipments	304	418	46	38	134	176	223	261	282	275	-19%	15%
New Workstation Shipments	282	385	42	32	108	145	185	216	231	218	-21%	15%
Add-On Workstation Shipments	22	34	4	6	26	31	37	44	51	57	5%	17%
CPU Installed Base	312	405	395	399	414	443	479	519	558	592	7%	7%
Workstation Installed Base	976	1,351	1,330	1,328	1,422	1,556	1,732	1,941	2,165	2,375	10%	11%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	4	4	4	4	3	2	NA	-8%
Workstation Revenue	NA	NA	NA	NA	6	7	7	7	6	5	NA	-2%
Software Revenue	NA	NA	NA	NA	3	3	3	4	3	3	NA	4%
Peripheral Revenue	NA	NA	NA	NA	1	2	2	2	2	2	NA	3%
Service Revenue	5	8	1	1	3	3	3	4	4	5	-13%	9%
Total Revenue	31	40	6	5	16	19	20	20	19	17	-15%	1%
Increase over prior year	NA	29%	-85%	-17%	228%	13%	8%	0%	-5%	-11%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.16
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Worldwide
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	167	245	102	225	256	328	442	569	691	771	11%	25%
Total Workstation Shipments	613	912	790	1,080	1,577	2,041	2,880	3,910	5,033	6,006	27%	31%
New Workstation Shipments	556	830	730	900	1,333	1,811	2,584	3,527	4,537	5,368	24%	32%
Add-On Workstation Shipments	57	82	60	179	300	230	296	383	496	637	51%	16%
CPU Installed Base	453	674	960	1,176	1,408	1,709	2,116	2,643	3,281	3,987	33%	23%
Workstation Installed Base	1,682	2,511	4,085	5,042	6,468	8,315	10,946	14,527	19,125	24,557	40%	31%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	48	58	65	69	68	60	NA	5%
Workstation Revenue	NA	NA	NA	NA	70	82	96	109	118	119	NA	11%
Software Revenue	NA	NA	NA	NA	45	59	73	89	107	123	NA	22%
Peripheral Revenue	NA	NA	NA	NA	16	18	22	26	29	32	NA	14%
Service Revenue	10	16	21	24	35	44	55	69	89	116	37%	27%
Total Revenue	73	109	91	150	215	260	311	362	411	451	31%	16%
Increase over prior year	NA	49%	-17%	65%	43%	21%	20%	16%	14%	10%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.13
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Europe
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	78	103	161	190	227	251	238	179	ERR	2%
Total Workstation Shipments	0	0	348	497	749	899	1,127	1,325	1,350	1,113	ERR	8%
New Workstation Shipments	0	0	307	414	625	742	938	1,100	1,105	881	ERR	7%
Add-On Workstation Shipments	0	0	41	83	132	157	190	225	245	231	ERR	12%
CPU Installed Base	0	0	78	181	340	524	740	976	1,194	1,349	ERR	32%
Workstation Installed Base	0	0	348	834	1,558	2,411	3,466	4,686	5,895	6,831	ERR	34%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	18	22	23	21	16	9	NA	-12%
Workstation Revenue	NA	NA	NA	NA	30	34	36	36	31	22	NA	-6%
Software Revenue	NA	NA	NA	NA	17	16	17	18	17	12	NA	-6%
Peripheral Revenue	NA	NA	NA	NA	6	8	9	9	9	7	NA	2%
Service Revenue	0	0	11	11	14	15	17	19	20	18	ERR	6%
Total Revenue	0	0	52	65	85	95	102	103	92	69	ERR	-4%
Increase over prior year	NA	ERR	ERR	25%	30%	12%	7%	1%	-10%	-25%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.14
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Far East
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	36	75	229	178	150	143	136	114	ERR	-13%
Total Workstation Shipments	0	0	137	359	821	841	748	757	770	709	ERR	-3%
New Workstation Shipments	0	0	124	299	782	694	622	628	630	562	ERR	-6%
Add-On Workstation Shipments	0	0	13	60	40	147	126	129	140	148	ERR	30%
CPU Installed Base	0	0	36	110	339	510	650	780	900	996	ERR	24%
Workstation Installed Base	0	0	137	492	1,298	2,100	2,786	3,459	4,125	4,711	ERR	29%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	31	21	15	12	9	6	NA	-28%
Workstation Revenue	NA	NA	NA	NA	27	32	24	20	18	14	NA	-12%
Software Revenue	NA	NA	NA	NA	14	15	11	10	9	8	NA	-11%
Peripheral Revenue	NA	NA	NA	NA	8	8	6	5	5	4	NA	-12%
Service Revenue	0	0	3	8	4	14	11	11	11	12	ERR	26%
Total Revenue	0	0	20	47	83	89	68	59	52	44	ERR	-12%
Increase over prior year	NA	ERR	ERR	135%	78%	7%	-24%	-13%	-11%	-16%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.17
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: North America
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	136	207	74	163	146	220	303	407	513	589	2%	32%
Total Workstation Shipments	486	756	622	784	1,081	1,369	1,972	2,798	3,740	4,588	22%	34%
New Workstation Shipments	438	688	584	654	851	1,215	1,770	2,524	3,372	4,101	18%	37%
Add-On Workstation Shipments	48	68	38	130	229	154	203	274	368	487	48%	16%
CPU Installed Base	351	540	587	745	876	1,079	1,360	1,740	2,219	2,763	26%	26%
Workstation Installed Base	1,286	1,979	2,503	3,212	4,196	5,439	7,248	9,829	13,274	17,464	34%	33%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	30	39	45	50	51	46	NA	9%
Workstation Revenue	NA	NA	NA	NA	46	55	66	78	88	91	NA	15%
Software Revenue	NA	NA	NA	NA	29	40	50	64	79	94	NA	26%
Peripheral Revenue	NA	NA	NA	NA	11	12	15	19	22	24	NA	17%
Service Revenue	8	13	15	17	25	29	38	49	66	89	33%	29%
Total Revenue	56	87	62	106	142	174	213	259	306	345	26%	19%
Increase over prior year	NA	55%	-29%	71%	34%	23%	22%	22%	18%	13%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.18
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Europe
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	9	35	67	63	88	113	130	134	ERR	15%
Total Workstation Shipments	0	0	75	168	256	393	575	775	945	1,044	ERR	32%
New Workstation Shipments	0	0	64	140	275	349	516	699	852	933	ERR	28%
Add-On Workstation Shipments	0	0	11	28	38	44	59	76	93	111	ERR	24%
CPU Installed Base	0	0	227	260	321	378	459	563	681	801	ERR	20%
Workstation Installed Base	0	0	984	1,123	1,345	1,698	2,223	2,930	3,788	4,718	ERR	29%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	9	11	13	14	13	10	NA	2%
Workstation Revenue	NA	NA	NA	NA	15	16	19	22	22	21	NA	7%
Software Revenue	NA	NA	NA	NA	11	11	15	18	20	21	NA	13%
Peripheral Revenue	NA	NA	NA	NA	3	4	4	5	6	6	NA	16%
Service Revenue	0	0	5	4	7	8	11	14	17	20	ERR	22%
Total Revenue	0	0	16	25	45	50	62	72	77	78	ERR	12%
Increase over prior year	NA	ERR	ERR	56%	82%	10%	24%	15%	8%	1%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.19
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Far East
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	15	22	33	30	30	22	14	7	ERR	-26%
Total Workstation Shipments	0	0	73	108	157	185	198	150	102	56	ERR	-19%
New Workstation Shipments	0	0	64	90	140	164	177	135	92	50	ERR	-19%
Add-On Workstation Shipments	0	0	9	18	17	21	20	15	10	6	ERR	-19%
CPU Installed Base	0	0	15	37	69	98	126	145	156	161	ERR	18%
Workstation Installed Base	0	0	73	178	330	505	688	817	895	924	ERR	23%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	7	5	4	3	1	1	NA	-39%
Workstation Revenue	NA	NA	NA	NA	5	7	7	4	2	1	NA	-27%
Software Revenue	NA	NA	NA	NA	3	5	5	3	2	1	NA	-16%
Peripheral Revenue	NA	NA	NA	NA	2	2	2	1	1	0	NA	-30%
Service Revenue	0	0	1	3	1	4	4	3	2	1	ERR	-2%
Total Revenue	0	0	10	16	18	24	21	14	8	4	ERR	-25%
Increase over prior year	NA	ERR	ERR	60%	13%	31%	-9%	-35%	-40%	-50%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.20
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Rest of World
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	31	38	4	4	10	15	21	27	34	41	-24%	31%
Total Workstation Shipments	127	156	20	20	83	94	135	187	245	317	-10%	31%
New Workstation Shipments	118	142	18	17	67	84	121	169	221	284	-13%	34%
Add-On Workstation Shipments	9	14	2	3	16	11	14	18	24	34	16%	16%
CPU Installed Base	102	134	131	134	142	154	172	196	225	262	9%	13%
Workstation Installed Base	396	532	525	529	596	673	788	951	1,168	1,450	11%	19%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	2	3	3	3	3	3	NA	9%
Workstation Revenue	NA	NA	NA	NA	4	4	5	5	6	6	NA	12%
Software Revenue	NA	NA	NA	NA	1	3	3	4	5	7	NA	34%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	1	2	NA	14%
Service Revenue	2	3	0	0	2	2	3	3	4	6	-3%	29%
Total Revenue	17	22	3	3	10	12	15	17	20	24	-13%	19%
Increase over prior year	NA	29%	-86%	0%	228%	22%	21%	19%	16%	19%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.21
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Worldwide
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	3	277	1	18	83	61	58	55	44	26	129%	-21%
Total Workstation Shipments	3	277	10	3	114	90	90	90	77	48	149%	-16%
New Workstation Shipments	3	277	10	0	114	90	90	90	77	48	148%	-16%
Add-On Workstation Shipments	0	0	0	3	0	0	0	0	0	0	ERR	-31%
CPU Installed Base	3	305	232	247	328	386	440	491	530	551	223%	11%
Workstation Installed Base	3	305	241	238	346	425	502	578	637	666	228%	14%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	7	5	4	3	1	0	NA	-44%
Workstation Revenue	NA	NA	NA	NA	6	5	4	3	2	1	NA	-29%
Software Revenue	NA	NA	NA	NA	24	19	17	17	16	15	NA	-10%
Peripheral Revenue	NA	NA	NA	NA	26	15	13	11	9	5	NA	-28%
Service Revenue	0	2	0	1	7	5	5	5	5	5	ERR	-8%
Total Revenue	0	21	1	10	71	49	43	39	33	26	265%	-18%
Increase over prior year	NA	5150%	-95%	906%	606%	-31%	-12%	-9%	-15%	-22%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.22
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: North America
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	3	240	1	9	45	48	44	40	34	22	97%	-13%
Total Workstation Shipments	3	240	10	1	40	71	68	66	59	41	91%	1%
New Workstation Shipments	3	240	10	0	40	70	68	66	59	41	91%	1%
Add-On Workstation Shipments	0	0	0	1	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	3	243	232	239	282	327	368	405	435	453	211%	10%
Workstation Installed Base	3	243	241	237	270	332	390	445	491	517	208%	14%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	2	4	3	2	1	0	NA	-29%
Workstation Revenue	NA	NA	NA	NA	2	4	3	2	2	1	NA	-11%
Software Revenue	NA	NA	NA	NA	16	15	13	13	12	12	NA	-5%
Peripheral Revenue	NA	NA	NA	NA	23	12	10	8	7	4	NA	-28%
Service Revenue	0	2	0	1	5	4	4	3	4	4	ERR	-5%
Total Revenue	0	19	1	5	48	38	32	29	26	22	230%	-14%
Increase over prior year	NA	4650%	-95%	398%	857%	-20%	-16%	-11%	-10%	-13%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.23
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Europe
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	2	21	10	10	11	8	3	ERR	-33%
Total Workstation Shipments	0	0	0	0	19	14	16	18	13	5	ERR	-23%
New Workstation Shipments	0	0	0	0	19	14	16	18	13	5	ERR	-23%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	-100%
CPU Installed Base	0	0	0	2	22	32	42	52	59	61	ERR	22%
Workstation Installed Base	0	0	0	0	19	33	48	64	75	78	ERR	32%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	2	1	1	0	0	0	NA	-53%
Workstation Revenue	NA	NA	NA	NA	2	1	1	1	0	0	NA	-45%
Software Revenue	NA	NA	NA	NA	6	3	3	3	3	2	NA	-24%
Peripheral Revenue	NA	NA	NA	NA	2	2	2	2	1	1	NA	-21%
Service Revenue	0	0	0	0	2	1	1	1	1	0	ERR	-21%
Total Revenue	0	0	0	1	14	8	8	8	6	3	ERR	-28%
Increase over prior year	NA	ERR	ERR	ERR	1254%	-44%	1%	-2%	-24%	-52%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.24
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Far East
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	7	17	3	3	3	2	1	ERR	-45%
Total Workstation Shipments	0	0	0	1	54	4	5	5	3	2	ERR	-51%
New Workstation Shipments	0	0	0	0	54	4	5	5	3	2	ERR	-51%
Add-On Workstation Shipments	0	0	0	1	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	7	23	26	29	32	34	34	ERR	8%
Workstation Installed Base	0	0	0	1	55	58	61	65	66	66	ERR	4%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	3	0	0	0	0	0	NA	-69%
Workstation Revenue	NA	NA	NA	NA	2	0	0	0	0	0	NA	-55%
Software Revenue	NA	NA	NA	NA	2	1	1	1	1	0	NA	-26%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	0	0	NA	-35%
Service Revenue	0	0	0	1	0	0	0	0	0	0	ERR	1%
Total Revenue	0	0	0	4	9	2	2	2	1	1	ERR	-38%
Increase over prior year	NA	ERR	ERR	ERR	134%	-75%	1%	-1%	-40%	-40%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.25
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Rest of World
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	37	0	0	0	1	1	1	0	0	ERR	-15%
Total Workstation Shipments	0	37	0	0	2	1	1	1	1	0	ERR	-24%
New Workstation Shipments	0	37	0	0	2	1	1	1	1	0	ERR	-24%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	62	0	0	1	1	2	2	3	3	ERR	37%
Workstation Installed Base	0	62	0	0	2	2	3	4	5	5	ERR	26%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-100%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-32%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	9%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-31%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	-8%
Total Revenue	0	2	0	0	1	0	0	0	0	0	ERR	-17%
Increase over prior year	NA	ERR	-100%	ERR	410%	-8%	-4%	-7%	-19%	-41%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.26
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Worldwide
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	158	176	175	221	174	200	143	93	54	25	2%	-32%
Total Workstation Shipments	660	679	609	794	397	396	302	208	131	67	-12%	-30%
New Workstation Shipments	619	636	502	662	313	381	290	199	123	61	-16%	-28%
Add-On Workstation Shipments	41	43	106	132	84	16	12	10	8	6	20%	-41%
CPU Installed Base	759	904	1,035	1,235	1,384	1,557	1,669	1,728	1,748	1,738	16%	5%
Workstation Installed Base	2,607	3,181	3,585	4,271	4,540	4,800	4,958	5,018	4,998	4,915	15%	2%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	21	19	12	7	3	1	NA	-43%
Workstation Revenue	NA	NA	NA	NA	25	21	14	8	5	2	NA	-39%
Software Revenue	NA	NA	NA	NA	29	27	19	13	9	6	NA	-28%
Peripheral Revenue	NA	NA	NA	NA	8	6	4	3	2	1	NA	-37%
Service Revenue	11	12	12	18	16	15	11	8	7	5	10%	-20%
Total Revenue	82	93	96	113	99	88	61	39	25	15	5%	-31%
Increase over prior year	NA	13%	4%	18%	-13%	-11%	-31%	-36%	-37%	-39%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.27
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: North America
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	130	145	124	145	101	113	95	63	37	16	-6%	-31%
Total Workstation Shipments	540	545	406	520	187	224	200	142	88	42	-23%	-26%
New Workstation Shipments	506	510	361	433	127	215	191	136	83	38	-29%	-21%
Add-On Workstation Shipments	34	35	45	86	60	9	8	7	5	4	15%	-42%
CPU Installed Base	566	687	777	906	989	1,082	1,155	1,195	1,208	1,200	15%	4%
Workstation Installed Base	1,996	2,458	2,741	3,178	3,270	3,396	3,494	3,531	3,514	3,451	13%	1%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	10	11	8	5	2	1	NA	-40%
Workstation Revenue	NA	NA	NA	NA	13	12	9	6	3	1	NA	-36%
Software Revenue	NA	NA	NA	NA	16	15	13	9	6	4	NA	-26%
Peripheral Revenue	NA	NA	NA	NA	4	4	3	2	1	0	NA	-36%
Service Revenue	9	10	9	11	10	8	7	6	4	3	3%	-20%
Total Revenue	68	75	68	75	53	50	40	27	17	9	-6%	-29%
Increase over prior year	NA	10%	-9%	11%	-29%	-6%	-19%	-34%	-37%	-44%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.28
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Europe
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	33	36	20	36	26	19	13	7	ERR	-18%
Total Workstation Shipments	0	0	104	131	43	71	54	43	32	19	ERR	-15%
New Workstation Shipments	0	0	93	109	23	68	52	41	30	17	ERR	-6%
Add-On Workstation Shipments	0	0	10	22	20	3	2	2	2	2	ERR	-38%
CPU Installed Base	0	0	33	69	87	121	144	160	170	174	ERR	15%
Workstation Installed Base	0	0	104	232	268	331	375	407	426	433	ERR	10%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	3	3	2	1	1	0	NA	-35%
Workstation Revenue	NA	NA	NA	NA	4	4	3	2	1	1	NA	-32%
Software Revenue	NA	NA	NA	NA	6	5	3	3	2	2	NA	-22%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	0	0	NA	-29%
Service Revenue	0	0	2	3	4	3	2	2	2	2	ERR	-18%
Total Revenue	0	0	18	15	18	16	11	8	6	4	ERR	-25%
Increase over prior year	NA	ERR	ERR	-14%	15%	-11%	-31%	-26%	-24%	-30%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.29
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Far East
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	18	35	52	48	22	10	4	2	ERR	-47%
Total Workstation Shipments	0	0	97	125	161	96	46	22	10	6	ERR	-48%
New Workstation Shipments	0	0	46	104	159	92	44	21	9	5	ERR	-49%
Add-On Workstation Shipments	0	0	51	21	3	4	2	1	1	1	ERR	-28%
CPU Installed Base	0	0	18	52	103	149	168	175	175	174	ERR	11%
Workstation Installed Base	0	0	51	174	331	417	450	459	455	447	ERR	6%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	8	5	2	1	0	0	NA	-58%
Workstation Revenue	NA	NA	NA	NA	8	5	2	1	0	0	NA	-52%
Software Revenue	NA	NA	NA	NA	7	7	3	1	1	1	NA	-41%
Peripheral Revenue	NA	NA	NA	NA	2	2	1	0	0	0	NA	-49%
Service Revenue	0	0	1	3	2	4	2	1	1	0	ERR	-22%
Total Revenue	0	0	10	20	26	21	9	4	2	1	ERR	-45%
Increase over prior year	NA	ERR	ERR	99%	33%	-19%	-57%	-55%	-54%	-30%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.30
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Rest of World
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	28	31	0	5	2	2	1	0	0	0	-47%	-100%
Total Workstation Shipments	120	134	2	19	5	5	3	1	0	0	-55%	-100%
New Workstation Shipments	113	126	2	15	4	5	3	1	0	0	-57%	-100%
Add-On Workstation Shipments	7	8	0	3	1	0	0	0	0	0	-34%	-100%
CPU Installed Base	193	217	207	208	206	204	202	198	194	190	2%	-2%
Workstation Installed Base	611	723	689	687	671	656	639	621	602	584	2%	-3%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-100%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-100%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-100%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-100%
Service Revenue	2	2	0	0	0	0	0	0	0	0	-32%	-100%
Total Revenue	14	18	0	3	2	1	1	0	0	0	-41%	-100%
Increase over prior year	NA	29%	-98%	638%	-44%	-33%	-49%	-66%	-100%	ERR		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.31
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Worldwide
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	647	831	518	419	526	565	450	338	249	155	-5%	-22%
Total Workstation Shipments	1,485	1,854	1,717	1,757	1,746	1,837	1,548	1,241	981	668	4%	-17%
New Workstation Shipments	1,391	1,712	1,540	1,258	1,459	1,659	1,401	1,116	871	575	1%	-17%
Add-On Workstation Shipments	95	143	177	499	289	178	148	124	110	94	32%	-20%
CPU Installed Base	1,841	2,609	2,996	3,385	3,878	4,404	4,810	5,100	5,298	5,400	20%	7%
Workstation Installed Base	4,332	6,016	7,432	8,966	10,443	11,966	13,156	14,002	14,563	14,794	25%	7%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	68	60	43	28	18	9	NA	-33%
Workstation Revenue	NA	NA	NA	NA	70	63	47	34	24	15	NA	-26%
Software Revenue	NA	NA	NA	NA	46	41	32	24	19	13	NA	-23%
Peripheral Revenue	NA	NA	NA	NA	19	17	13	10	7	5	NA	-24%
Service Revenue	21	27	35	38	34	31	26	21	19	17	13%	-13%
Total Revenue	174	231	213	235	237	213	161	118	87	59	8%	-24%
Increase over prior year	NA	33%	-8%	10%	1%	-10%	-24%	-27%	-26%	-33%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.32
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: North America
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	290	362	265	248	203	245	196	144	95	63	-9%	-21%
Total Workstation Shipments	743	869	902	1,040	528	796	676	528	374	272	-8%	-12%
New Workstation Shipments	689	792	806	744	357	719	612	475	332	234	-15%	-8%
Add-On Workstation Shipments	53	77	96	295	171	77	65	53	42	38	34%	-26%
CPU Installed Base	840	1,172	1,378	1,612	1,799	2,026	2,202	2,324	2,395	2,434	21%	6%
Workstation Installed Base	2,360	3,133	3,878	4,801	5,185	5,825	6,326	6,665	6,839	6,905	22%	6%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	23	26	19	12	7	4	NA	-30%
Workstation Revenue	NA	NA	NA	NA	28	27	21	14	9	6	NA	-26%
Software Revenue	NA	NA	NA	NA	18	18	14	10	7	5	NA	-22%
Peripheral Revenue	NA	NA	NA	NA	7	7	6	4	3	2	NA	-23%
Service Revenue	10	12	19	21	20	14	11	9	7	7	19%	-19%
Total Revenue	85	108	118	134	96	92	70	50	33	24	3%	-24%
Increase over prior year	NA	27%	9%	13%	-28%	-4%	-24%	-29%	-34%	-28%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.33
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Europe
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	186	78	89	146	141	126	101	64	ERR	-6%
Total Workstation Shipments	0	0	582	327	213	476	487	461	398	275	ERR	5%
New Workstation Shipments	0	0	535	234	142	430	440	415	353	236	ERR	11%
Add-On Workstation Shipments	0	0	47	93	71	46	46	46	45	38	ERR	-12%
CPU Installed Base	0	0	186	262	348	491	627	747	840	895	ERR	21%
Workstation Installed Base	0	0	582	891	1,077	1,521	1,962	2,364	2,691	2,885	ERR	22%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	12	16	13	11	7	4	NA	-20%
Workstation Revenue	NA	NA	NA	NA	14	16	15	13	10	6	NA	-15%
Software Revenue	NA	NA	NA	NA	11	11	10	9	8	5	NA	-14%
Peripheral Revenue	NA	NA	NA	NA	3	4	4	4	3	2	NA	-8%
Service Revenue	0	0	11	7	10	8	8	8	8	7	ERR	-7%
Total Revenue	0	0	65	46	50	55	51	44	35	24	ERR	-13%
Increase over prior year	NA	ERR	ERR	-29%	7%	11%	-8%	-14%	-19%	-32%		

Source: Dataquest
 June 1986

A.3 All Host-Dependent Products

TABLE NUMBER: A-3.34
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Far East
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	60	86	232	167	105	64	52	28	ERR	-35%
Total Workstation Shipments	0	0	200	362	988	545	362	235	204	119	ERR	-35%
New Workstation Shipments	0	0	171	259	948	492	328	212	181	102	ERR	-36%
Add-On Workstation Shipments	0	0	29	103	43	53	35	24	23	17	ERR	-17%
CPU Installed Base	0	0	60	146	376	540	640	698	742	763	ERR	15%
Workstation Installed Base	0	0	200	556	1,528	2,027	2,329	2,494	2,623	2,663	ERR	12%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	33	18	10	5	4	2	NA	-45%
Workstation Revenue	NA	NA	NA	NA	27	19	11	6	5	3	NA	-37%
Software Revenue	NA	NA	NA	NA	17	12	8	5	4	2	NA	-33%
Peripheral Revenue	NA	NA	NA	NA	8	5	3	2	2	1	NA	-36%
Service Revenue	0	0	4	8	4	9	6	4	4	3	ERR	-5%
Total Revenue	0	0	26	51	88	63	38	22	18	10	ERR	-35%
Increase over prior year	NA	ERR	ERR	97%	72%	-28%	-40%	-41%	-19%	-42%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-3.35
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Rest of World
 PRODUCT TYPE: Host-Dependent
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	357	469	7	7	3	6	7	4	2	1	-69%	-24%
Total Workstation Shipments	742	985	33	28	17	21	23	16	6	3	-61%	-27%
New Workstation Shipments	702	920	28	20	13	19	21	14	5	3	-63%	-25%
Add-On Workstation Shipments	42	66	5	8	4	2	2	2	1	0	-44%	-35%
CPU Installed Base	1,001	1,437	1,372	1,365	1,355	1,347	1,341	1,332	1,320	1,307	8%	-1%
Workstation Installed Base	1,972	2,883	2,772	2,717	2,653	2,594	2,539	2,478	2,410	2,341	8%	-2%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	1	1	0	0	0	NA	-39%
Workstation Revenue	NA	NA	NA	NA	1	1	1	0	0	0	NA	-38%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-31%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-37%
Service Revenue	11	15	1	1	0	0	0	0	0	0	-56%	-27%
Total Revenue	89	123	4	4	3	2	2	1	1	0	-59%	-35%
Increase over prior year	NA	38%	-97%	0%	-37%	-6%	2%	-39%	-64%	-43%		

Source: Dataquest
 June 1986

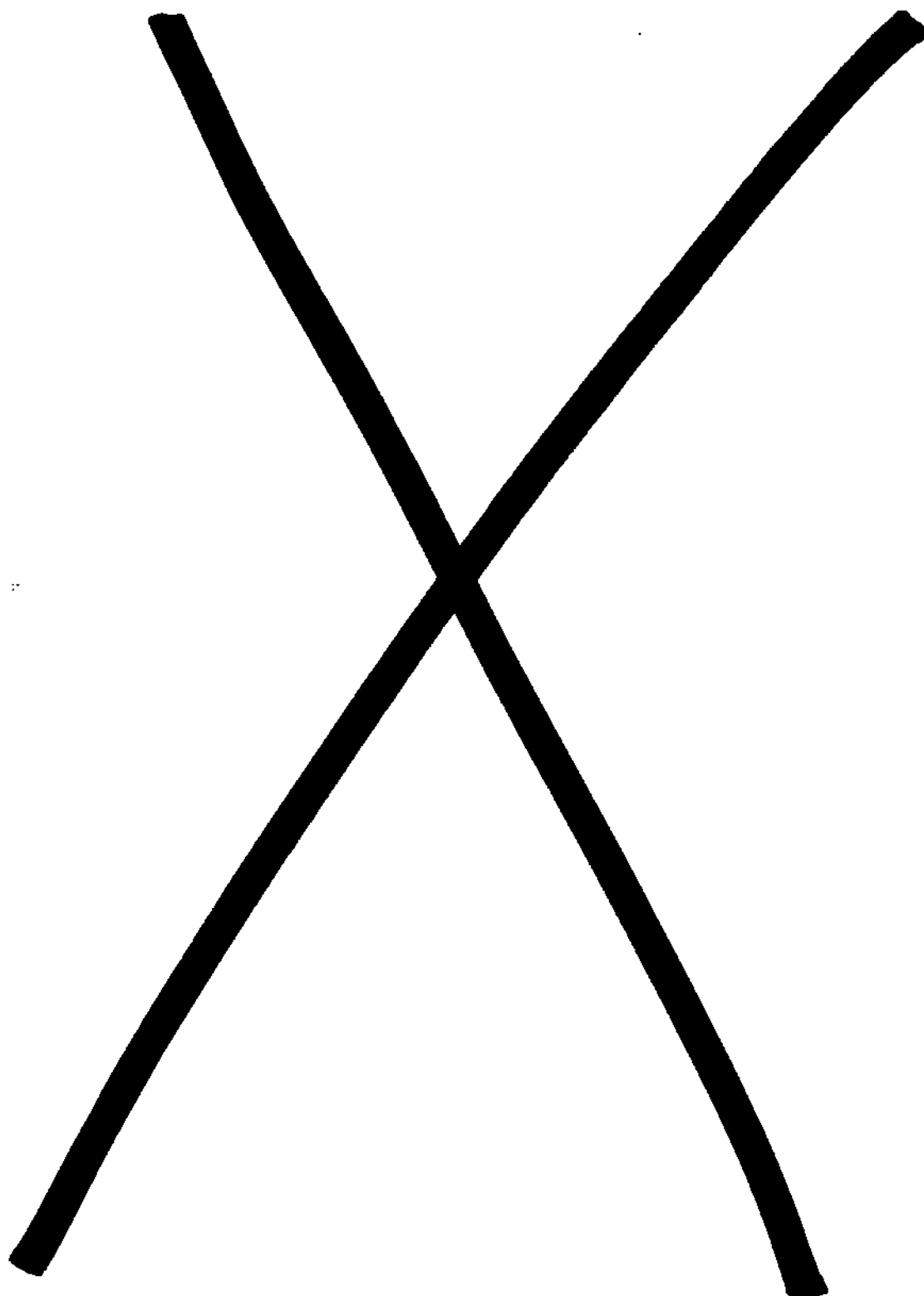


TABLE NUMBER: A-4.11
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Worldwide
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	9,530	12,912	13,093	14,594	15,875	16,839	16,600	ERR	5%
Total Workstation Shipments	0	0	0	9,530	12,912	13,093	14,594	15,875	16,839	16,600	ERR	5%
New Workstation Shipments	0	0	0	9,530	12,912	13,093	14,594	15,875	16,839	16,600	ERR	5%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	9,530	22,441	35,534	50,128	66,003	82,842	99,442	ERR	35%
Workstation Installed Base	0	0	0	9,530	22,441	35,534	50,128	66,003	82,842	99,442	ERR	35%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	40	47	55	63	70	71	NA	12%
Workstation Revenue	NA	NA	NA	NA	40	47	55	63	70	71	NA	12%
Software Revenue	NA	NA	NA	NA	28	34	42	52	63	71	NA	20%
Peripheral Revenue	NA	NA	NA	NA	3	3	4	4	4	4	NA	9%
Service Revenue	0	0	0	1	2	2	3	3	4	4	ERR	14%
Total Revenue	0	0	0	103	113	133	158	185	210	221	ERR	14%
Increase over prior year	NA	ERR	ERR	ERR	9%	18%	19%	17%	14%	5%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.12
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: North America
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	6,402	7,519	7,195	8,085	9,084	10,185	10,626	ERR	7%
Total Workstation Shipments	0	0	0	6,402	7,519	7,195	8,085	9,084	10,185	10,626	ERR	7%
New Workstation Shipments	0	0	0	6,402	7,519	7,195	8,085	9,084	10,185	10,626	ERR	7%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	6,402	13,921	21,116	29,202	38,285	48,470	59,096	ERR	34%
Workstation Installed Base	0	0	0	6,402	13,921	21,116	29,202	38,285	48,470	59,096	ERR	34%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	22	26	30	36	42	45	NA	15%
Workstation Revenue	NA	NA	NA	NA	22	26	30	36	42	45	NA	15%
Software Revenue	NA	NA	NA	NA	15	19	24	30	38	45	NA	25%
Peripheral Revenue	NA	NA	NA	NA	1	2	2	2	3	3	NA	37%
Service Revenue	0	0	0	1	1	1	1	2	2	2	ERR	35%
Total Revenue	0	0	0	67	60	73	88	106	127	141	ERR	19%
Increase over prior year	NA	ERR	ERR	ERR	-10%	21%	20%	21%	20%	11%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.13
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Europe
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	1,651	3,962	3,400	3,824	4,082	4,160	3,819	ERR	-1%
Total Workstation Shipments	0	0	0	1,651	3,962	3,400	3,824	4,082	4,160	3,819	ERR	-1%
New Workstation Shipments	0	0	0	1,651	3,962	3,400	3,824	4,082	4,160	3,819	ERR	-1%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	1,651	5,612	9,012	12,836	16,919	21,079	24,898	ERR	35%
Workstation Installed Base	0	0	0	1,651	5,612	9,012	12,836	16,919	21,079	24,898	ERR	35%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	11	12	14	16	17	16	NA	8%
Workstation Revenue	NA	NA	NA	NA	11	12	14	16	17	16	NA	8%
Software Revenue	NA	NA	NA	NA	6	9	11	13	16	16	NA	23%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	4%
Service Revenue	0	0	0	0	1	1	1	1	1	1	ERR	-3%
Total Revenue	0	0	0	19	30	35	42	48	52	51	ERR	11%
Increase over prior year	NA	ERR	ERR	ERR	56%	17%	20%	15%	9%	-2%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.14
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Far East
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	1,216	1,113	2,185	2,314	2,276	2,007	1,652	ERR	8%
Total Workstation Shipments	0	0	0	1,216	1,113	2,185	2,314	2,276	2,007	1,652	ERR	8%
New Workstation Shipments	0	0	0	1,216	1,113	2,185	2,314	2,276	2,007	1,652	ERR	8%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	1,216	2,329	4,513	6,827	9,103	11,111	12,762	ERR	41%
Workstation Installed Base	0	0	0	1,216	2,329	4,513	6,827	9,103	11,111	12,762	ERR	41%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	6	8	9	9	8	7	NA	4%
Workstation Revenue	NA	NA	NA	NA	6	8	9	9	8	7	NA	4%
Software Revenue	NA	NA	NA	NA	6	6	7	8	8	7	NA	2%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	1	0	NA	-21%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	0%
Total Revenue	0	0	0	14	20	22	25	27	25	22	ERR	2%
Increase over prior year	NA	ERR	ERR	ERR	41%	12%	13%	6%	-5%	-12%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.15
 TITLE: CAD/CAM History and Forecast
 APPLICATION: AEC
 REGION: Rest of World
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	261	318	313	370	433	487	503	ERR	10%
Total Workstation Shipments	0	0	0	261	318	313	370	433	487	503	ERR	10%
New Workstation Shipments	0	0	0	261	318	313	370	433	487	503	ERR	10%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	261	579	892	1,263	1,696	2,182	2,685	ERR	36%
Workstation Installed Base	0	0	0	261	579	892	1,263	1,696	2,182	2,685	ERR	36%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	1	1	2	2	2	NA	18%
Workstation Revenue	NA	NA	NA	NA	1	1	1	2	2	2	NA	18%
Software Revenue	NA	NA	NA	NA	1	1	1	1	2	2	NA	20%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	45%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	62%
Total Revenue	0	0	0	3	3	3	4	5	6	7	ERR	19%
Increase over prior year	NA	ERR	ERR	ERR	-6%	13%	26%	25%	20%	10%		

Source: Dataquest
 June 1986

A.4 All Personal Computer Products

TABLE NUMBER: A-4.16
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Worldwide
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	28	149	1,624	2,323	2,056	1,668	1,075	ERR	48%
Total Workstation Shipments	0	0	0	28	149	1,624	2,323	2,056	1,668	1,075	ERR	48%
New Workstation Shipments	0	0	0	28	149	1,624	2,323	2,056	1,668	1,075	ERR	48%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	28	177	1,801	4,124	6,172	7,831	8,894	ERR	119%
Workstation Installed Base	0	0	0	28	177	1,801	4,124	6,172	7,831	8,894	ERR	119%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	1	2	2	2	1	NA	13%
Workstation Revenue	NA	NA	NA	NA	1	1	2	2	2	1	NA	13%
Software Revenue	NA	NA	NA	NA	2	5	9	10	11	11	NA	39%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	15%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	32%
Total Revenue	0	0	0	1	3	8	14	15	15	13	ERR	32%
Increase over prior year	NA	ERR	ERR	ERR	226%	151%	69%	6%	2%	-13%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.17
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: North America
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	51	897	1,536	1,206	819	391	ERR	50%
Total Workstation Shipments	0	0	0	0	51	897	1,536	1,206	819	391	ERR	50%
New Workstation Shipments	0	0	0	0	51	897	1,536	1,206	819	391	ERR	50%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	51	948	2,484	3,686	4,500	4,884	ERR	149%
Workstation Installed Base	0	0	0	0	51	948	2,484	3,686	4,500	4,884	ERR	149%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	1	1	1	1	0	NA	11%
Workstation Revenue	NA	NA	NA	NA	0	1	1	1	1	0	NA	11%
Software Revenue	NA	NA	NA	NA	2	3	6	6	6	4	NA	17%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	0	2	5	9	9	7	5	ERR	16%
Increase over prior year	NA	ERR	ERR	ERR	ERR	104%	101%	-6%	-14%	-36%		

Source: Dataquest
June 1986

TABLE NUMBER: A-4.18
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Europe
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	94	614	622	577	566	458	ERR	37%
Total Workstation Shipments	0	0	0	0	94	614	622	577	566	458	ERR	37%
New Workstation Shipments	0	0	0	0	94	614	622	577	566	458	ERR	37%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	94	708	1,330	1,904	2,467	2,921	ERR	99%
Workstation Installed Base	0	0	0	0	94	708	1,330	1,904	2,467	2,921	ERR	99%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	1	1	1	1	0	NA	7%
Workstation Revenue	NA	NA	NA	NA	0	1	1	1	1	0	NA	7%
Software Revenue	NA	NA	NA	NA	0	2	2	3	4	5	NA	101%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	0%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	8%
Total Revenue	0	0	0	0	1	3	4	4	5	6	ERR	47%
Increase over prior year	NA	ERR	ERR	ERR	ERR	276%	20%	11%	24%	9%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.19
TITLE: CAD/CAM History and forecast
APPLICATION: Mapping
REGION: Far East
PRODUCT TYPE: Personal Computer
UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	28	3	48	80	167	165	124	ERR	108%
Total Workstation Shipments	0	0	0	28	3	48	80	167	165	124	ERR	108%
New Workstation Shipments	0	0	0	28	3	48	80	167	165	124	ERR	108%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	28	31	79	158	325	489	612	ERR	82%
Workstation Installed Base	0	0	0	28	31	79	158	325	489	612	ERR	82%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	32%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	32%
Software Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	73%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	0%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	1	0	0	0	1	1	2	ERR	61%
Increase over prior year	NA	ERR	ERR	ERR	-86%	71%	96%	153%	24%	1%		

Source: Dataquest
June 1986

TABLE NUMBER: A-4.20
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Mapping
 REGION: Rest of World
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	====	====	====	====	====	====	====	====	====	====	====	====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	1	65	85	106	119	103	ERR	150%
Total Workstation Shipments	0	0	0	0	1	65	85	106	119	103	ERR	150%
New Workstation Shipments	0	0	0	0	1	65	85	106	119	103	ERR	150%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	1	66	151	257	375	477	ERR	239%
Workstation Installed Base	0	0	0	0	1	66	151	257	375	477	ERR	239%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Software Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	71%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	0	0	0	1	1	1	1	ERR	73%
Increase over prior year	NA	ERR	ERR	ERR	ERR	313%	55%	47%	43%	16%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.21
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Worldwide
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	2,199	10,089	12,037	12,853	12,650	11,830	10,425	ERR	1%
Total Workstation Shipments	0	0	0	2,199	10,089	12,037	12,853	12,650	11,830	10,425	ERR	1%
New Workstation Shipments	0	0	0	2,199	10,089	12,037	12,853	12,650	11,830	10,425	ERR	1%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	2,199	12,288	24,326	37,179	49,828	61,658	72,083	ERR	42%
Workstation Installed Base	0	0	0	2,199	12,288	24,326	37,179	49,828	61,658	72,083	ERR	42%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	45	52	58	61	58	49	NA	2%
Workstation Revenue	NA	NA	NA	NA	45	52	58	61	58	49	NA	2%
Software Revenue	NA	NA	NA	NA	47	56	67	76	80	76	NA	10%
Peripheral Revenue	NA	NA	NA	NA	3	3	3	3	2	1	NA	-13%
Service Revenue	0	0	0	0	3	3	4	4	4	4	ERR	5%
Total Revenue	0	0	0	47	143	167	190	204	202	179	ERR	5%
Increase over prior year	NA	ERR	ERR	ERR	205%	17%	14%	7%	-1%	-11%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.22
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: North America
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	1,721	7,866	8,888	9,574	9,436	8,953	7,953	ERR	0%
Total Workstation Shipments	0	0	0	1,721	7,866	8,888	9,574	9,436	8,953	7,953	ERR	0%
New Workstation Shipments	0	0	0	1,721	7,866	8,888	9,574	9,436	8,953	7,953	ERR	0%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	1,721	9,587	18,475	28,049	37,485	46,437	54,390	ERR	42%
Workstation Installed Base	0	0	0	1,721	9,587	18,475	28,049	37,485	46,437	54,390	ERR	42%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	35	39	43	45	44	38	NA	2%
Workstation Revenue	NA	NA	NA	NA	35	39	43	45	44	38	NA	2%
Software Revenue	NA	NA	NA	NA	29	42	50	56	60	58	NA	14%
Peripheral Revenue	NA	NA	NA	NA	1	2	2	2	2	1	NA	-4%
Service Revenue	0	0	0	0	2	3	3	3	3	3	ERR	7%
Total Revenue	0	0	0	36	102	124	142	152	153	137	ERR	6%
Increase over prior year	NA	ERR	ERR	ERR	184%	21%	15%	7%	1%	-11%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.23
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Europe
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	261	1,693	1,727	1,653	1,518	1,198	789	ERR	-14%
Total Workstation Shipments	0	0	0	261	1,693	1,727	1,653	1,518	1,198	789	ERR	-14%
New Workstation Shipments	0	0	0	261	1,693	1,727	1,653	1,518	1,198	789	ERR	-14%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	261	1,953	3,680	5,333	6,851	8,048	8,837	ERR	35%
Workstation Installed Base	0	0	0	261	1,953	3,680	5,333	6,851	8,048	8,837	ERR	35%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	7	8	8	7	6	4	NA	-11%
Workstation Revenue	NA	NA	NA	NA	7	8	8	7	6	4	NA	-11%
Software Revenue	NA	NA	NA	NA	10	8	9	9	8	6	NA	-10%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	-24%
Service Revenue	0	0	0	0	1	0	1	1	0	0	ERR	-15%
Total Revenue	0	0	0	6	24	24	24	24	21	14	ERR	-11%
Increase over prior year	NA	ERR	ERR	ERR	306%	-1%	2%	0%	-16%	-34%		

Source: Dataquest
 June 1986

A.4 All Personal Computer Products

TABLE NUMBER: A-4.24
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Far East
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	174	529	1,416	1,611	1,674	1,660	1,673	ERR	26%
Total Workstation Shipments	0	0	0	174	529	1,416	1,611	1,674	1,660	1,673	ERR	26%
New Workstation Shipments	0	0	0	174	529	1,416	1,611	1,674	1,660	1,673	ERR	26%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	174	703	2,119	3,730	5,404	7,064	8,736	ERR	66%
Workstation Installed Base	0	0	0	174	703	2,119	3,730	5,404	7,064	8,736	ERR	66%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	4	6	7	8	8	8	NA	16%
Workstation Revenue	NA	NA	NA	NA	4	6	7	8	8	8	NA	16%
Software Revenue	NA	NA	NA	NA	8	7	8	10	11	12	NA	9%
Peripheral Revenue	NA	NA	NA	NA	1	0	0	0	0	0	NA	-28%
Service Revenue	0	0	0	0	0	0	0	1	1	1	ERR	17%
Total Revenue	0	0	0	4	17	20	24	27	28	29	ERR	12%
Increase over prior year	NA	ERR	ERR	ERR	319%	18%	21%	13%	5%	1%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.25
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Electronic Design Automation
 REGION: Rest of World
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	-----	-----	-----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	43	1	7	15	22	20	12	ERR	55X
Total Workstation Shipments	0	0	0	43	1	7	15	22	20	12	ERR	55X
New Workstation Shipments	0	0	0	43	1	7	15	22	20	12	ERR	55X
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	43	45	52	67	89	108	120	ERR	22X
Workstation Installed Base	0	0	0	43	45	52	67	89	108	120	ERR	22X
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	43X
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	43X
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	1	0	0	0	0	0	0	ERR	82X
Increase over prior year	NA	ERR	ERR	ERR	-99X	800X	156X	52X	-3X	-41X		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.26
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Worldwide
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	28	106	189	235	330	395	462	ERR	34%
Total Workstation Shipments	0	0	0	28	106	189	235	330	395	462	ERR	34%
New Workstation Shipments	0	0	0	28	106	189	235	330	395	462	ERR	34%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	28	140	329	565	895	1,290	1,751	ERR	66%
Workstation Installed Base	0	0	0	28	140	329	565	895	1,290	1,751	ERR	66%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	1	1	2	2	2	NA	28%
Workstation Revenue	NA	NA	NA	NA	0	1	1	2	2	2	NA	28%
Software Revenue	NA	NA	NA	NA	1	2	2	3	4	4	NA	36%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	1	1	1	NA	32%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	32%
Total Revenue	0	0	0	1	2	5	5	7	8	8	ERR	32%
Increase over prior year	NA	ERR	ERR	ERR	109%	121%	17%	31%	10%	7%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.27
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: North America
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	58	118	138	199	237	275	ERR	36%
Total Workstation Shipments	0	0	0	0	58	118	138	199	237	275	ERR	36%
New Workstation Shipments	0	0	0	0	58	118	138	199	237	275	ERR	36%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	58	176	314	513	750	1,025	ERR	78%
Workstation Installed Base	0	0	0	0	58	176	314	513	750	1,025	ERR	78%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	1	1	1	1	1	NA	29%
Workstation Revenue	NA	NA	NA	NA	0	1	1	1	1	1	NA	29%
Software Revenue	NA	NA	NA	NA	0	1	1	2	2	2	NA	93%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	54%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	64%
Total Revenue	0	0	0	0	1	3	3	4	5	5	ERR	48%
Increase over prior year	NA	ERR	ERR	ERR	ERR	314%	11%	34%	10%	6%		

Source: Dataquest
 June 1986

A.4 All Personal Computer Products

TABLE NUMBER: A-4.28
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Europe
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	40	53	71	94	103	103	ERR	21%
Total Workstation Shipments	0	0	0	0	40	53	71	94	103	103	ERR	21%
New Workstation Shipments	0	0	0	0	40	53	71	94	103	103	ERR	21%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	40	92	164	258	361	464	ERR	64%
Workstation Installed Base	0	0	0	0	40	92	164	258	361	464	ERR	64%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	25%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	25%
Software Revenue	NA	NA	NA	NA	1	1	1	1	1	1	NA	6%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	10%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	2%
Total Revenue	0	0	0	0	1	1	2	2	2	2	ERR	12%
Increase over prior year	NA	ERR	ERR	ERR	ERR	22%	26%	24%	0%	-9%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.29
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Integrated Circuit
 REGION: Far East
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	28	7	16	23	32	48	74	ERR	63%
Total Workstation Shipments	0	0	0	28	7	16	23	32	48	74	ERR	63%
New Workstation Shipments	0	0	0	28	7	16	23	32	48	74	ERR	63%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	28	35	51	74	106	155	229	ERR	46%
Workstation Installed Base	0	0	0	28	35	51	74	106	155	229	ERR	46%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	34%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	34%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	1	NA	46%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	27%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	1	0	0	1	1	1	1	ERR	38%
Increase over prior year	NA	ERR	ERR	ERR	-73%	52%	24%	35%	39%	41%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.30
TITLE: CAD/CAM History and Forecast
APPLICATION: Integrated Circuit
REGION: Rest of World
PRODUCT TYPE: Personal Computer
UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	0	1	2	3	4	7	10	ERR	48%
Total Workstation Shipments	0	0	0	0	1	2	3	4	7	10	ERR	48%
New Workstation Shipments	0	0	0	0	1	2	3	4	7	10	ERR	48%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	0	8	10	13	17	24	34	ERR	35%
Workstation Installed Base	0	0	0	0	8	10	13	17	24	34	ERR	35%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	6%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	6%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	ERR
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	0	0	0	0	0	0	0	ERR	21%
Increase over prior year	NA	ERR	ERR	ERR	ERR	-29%	40%	29%	44%	38%		

Source: Dataquest
June 1986

TABLE NUMBER: A-4.31
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Worldwide
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	951	2,100	2,622	2,816	2,639	2,311	2,066	ERR	-0%
Total Workstation Shipments	0	0	0	951	2,100	2,622	2,816	2,639	2,311	2,066	ERR	-0%
New Workstation Shipments	0	0	0	951	2,100	2,622	2,816	2,639	2,311	2,066	ERR	-0%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	951	3,051	5,673	8,490	11,128	13,439	15,505	ERR	38%
Workstation Installed Base	0	0	0	951	3,051	5,673	8,490	11,128	13,439	15,505	ERR	38%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	8	8	8	7	6	5	NA	-11%
Workstation Revenue	NA	NA	NA	NA	8	8	8	7	6	5	NA	-11%
Software Revenue	NA	NA	NA	NA	28	31	34	33	30	28	NA	-0%
Peripheral Revenue	NA	NA	NA	NA	2	2	2	2	1	1	NA	-16%
Service Revenue	0	0	0	1	1	1	1	1	1	1	ERR	-4%
Total Revenue	0	0	0	15	47	50	53	50	43	38	ERR	-4%
Increase over prior year	NA	ERR	ERR	ERR	203%	7%	7%	-7%	-13%	-12%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.32
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: North America
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	****	****	****	****	****	****	****	****	****	****	****	****
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	517	944	1,259	1,309	1,136	885	773	ERR	-4%
Total Workstation Shipments	0	0	0	517	944	1,259	1,309	1,136	885	773	ERR	-4%
New Workstation Shipments	0	0	0	517	944	1,259	1,309	1,136	885	773	ERR	-4%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	517	1,461	2,720	4,029	5,166	6,051	6,824	ERR	36%
Workstation Installed Base	0	0	0	517	1,461	2,720	4,029	5,166	6,051	6,824	ERR	36%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	4	4	4	3	2	2	NA	-17%
Workstation Revenue	NA	NA	NA	NA	4	4	4	3	2	2	NA	-17%
Software Revenue	NA	NA	NA	NA	13	15	16	14	11	10	NA	-4%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	1	0	NA	-10%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	-12%
Total Revenue	0	0	0	8	22	24	25	21	17	14	ERR	-9%
Increase over prior year	NA	ERR	ERR	ERR	177%	8%	4%	-14%	-23%	-14%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.33
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Europe
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	117	706	848	890	805	706	617	ERR	-3%
Total Workstation Shipments	0	0	0	117	706	848	890	805	706	617	ERR	-3%
New Workstation Shipments	0	0	0	117	706	848	890	805	706	617	ERR	-3%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	117	824	1,672	2,562	3,368	4,074	4,691	ERR	42%
Workstation Installed Base	0	0	0	117	824	1,672	2,562	3,368	4,074	4,691	ERR	42%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	2	3	3	2	2	1	NA	-9%
Workstation Revenue	NA	NA	NA	NA	2	3	3	2	2	1	NA	-9%
Software Revenue	NA	NA	NA	NA	11	10	11	10	9	8	NA	-6%
Peripheral Revenue	NA	NA	NA	NA	1	1	1	1	0	0	NA	-24%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	-8%
Total Revenue	0	0	0	2	17	16	17	15	13	11	ERR	-8%
Increase over prior year	NA	ERR	ERR	ERR	740%	-4%	5%	-10%	-13%	-14%		

Source: Dataquest
 June 1986

TABLE NUMBER: A-4.34
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Far East
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

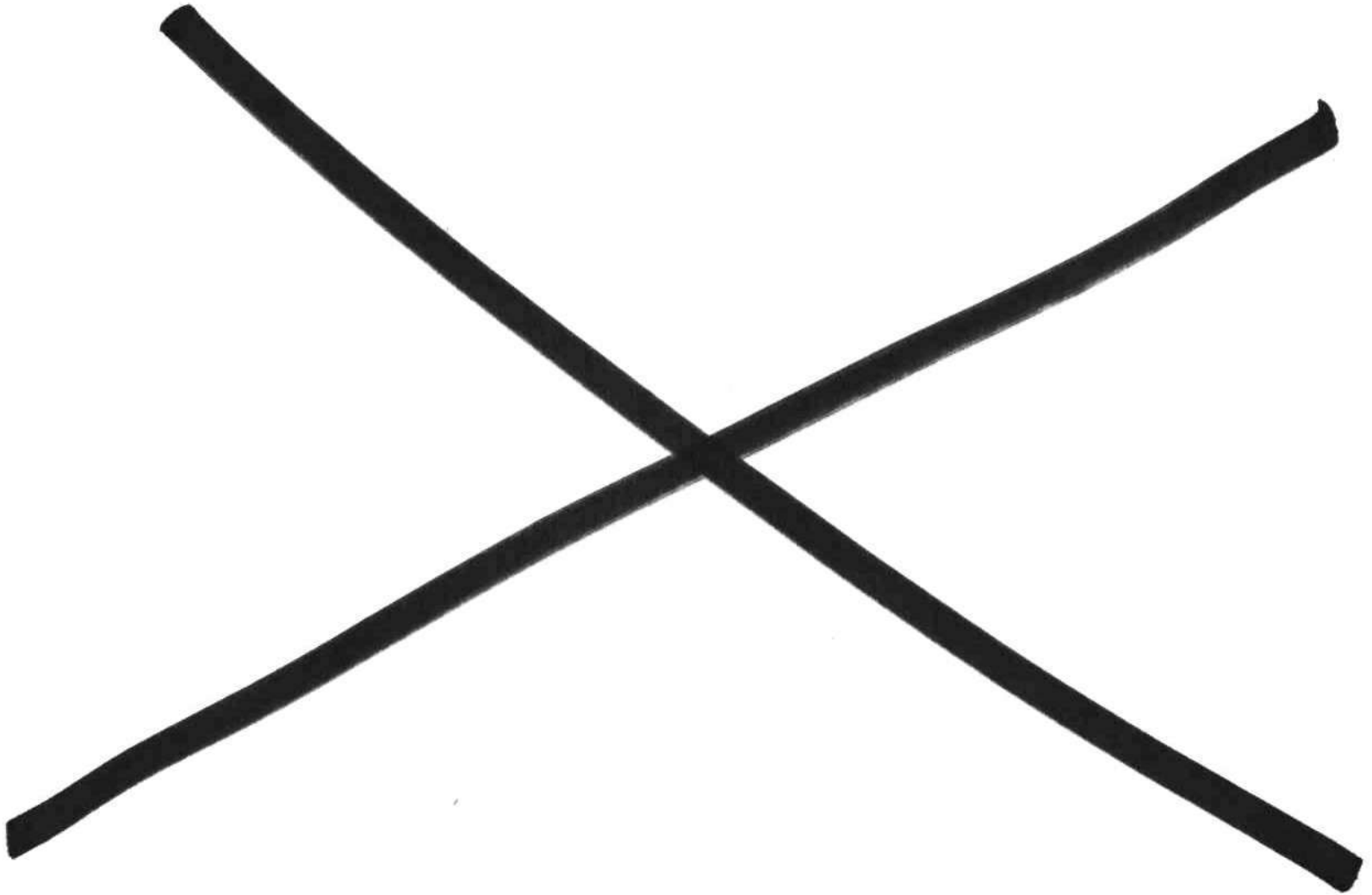
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	----	----	----	----	----	----	----	----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	294	440	498	597	673	691	643	ERR	8%
Total Workstation Shipments	0	0	0	294	440	498	597	673	691	643	ERR	8%
New Workstation Shipments	0	0	0	294	440	498	597	673	691	643	ERR	8%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	294	733	1,231	1,828	2,501	3,192	3,835	ERR	39%
Workstation Installed Base	0	0	0	294	733	1,231	1,828	2,501	3,192	3,835	ERR	39%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	1	2	2	2	2	1	NA	1%
Workstation Revenue	NA	NA	NA	NA	1	2	2	2	2	1	NA	1%
Software Revenue	NA	NA	NA	NA	4	6	7	8	9	9	NA	16%
Peripheral Revenue	NA	NA	NA	NA	1	0	0	0	0	0	NA	-14%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	45%
Total Revenue	0	0	0	5	7	9	11	13	13	12	ERR	10%
Increase over prior year	NA	ERR	ERR	ERR	47%	28%	20%	12%	2%	-8%		

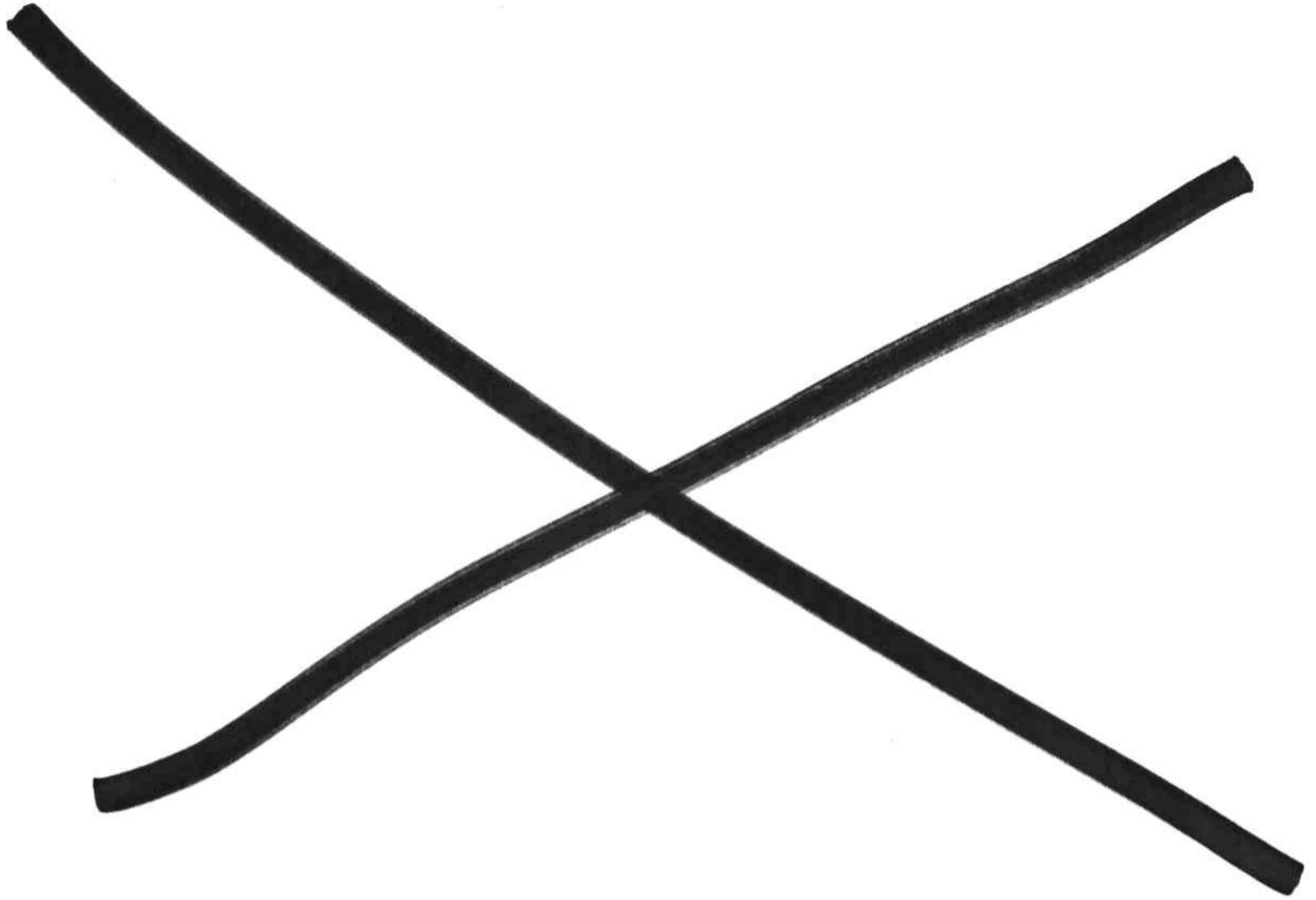
Source: Dataquest
 June 1986

TABLE NUMBER: A-4.35
 TITLE: CAD/CAM History and Forecast
 APPLICATION: Printed Circuit Board
 REGION: Rest of World
 PRODUCT TYPE: Personal Computer
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	81-85 CAGR	85-90 CAGR
	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----
UNIT SHIPMENT DATA												
CPU Shipments	0	0	0	23	9	17	20	24	28	33	ERR	28%
Total Workstation Shipments	0	0	0	23	9	17	20	24	28	33	ERR	28%
New Workstation Shipments	0	0	0	23	9	17	20	24	28	33	ERR	28%
Add-On Workstation Shipments	0	0	0	0	0	0	0	0	0	0	ERR	ERR
CPU Installed Base	0	0	0	23	33	50	70	94	123	155	ERR	36%
Workstation Installed Base	0	0	0	23	33	50	70	94	123	155	ERR	36%
REVENUE DATA												
CPU Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	12%
Workstation Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	12%
Software Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	18%
Peripheral Revenue	NA	NA	NA	NA	0	0	0	0	0	0	NA	15%
Service Revenue	0	0	0	0	0	0	0	0	0	0	ERR	ERR
Total Revenue	0	0	0	0	0	0	0	0	1	1	ERR	16%
Increase over prior year	NA	ERR	ERR	ERR	-28%	10%	22%	18%	15%	15%		

Source: Dataquest
 June 1986





B.1 Market Share — All Product Types

TABLE NUMBER: B-1.7
 TITLE: 1985 Market Share
 APPLICATION: AEC
 PRODUCT TYPE: All Product Types
 MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Applicon	\$23	3.1%
Auto-Trol	33	4.4%
Autodesk	14	1.9%
Calcomp	33	4.4%
Calma	37	4.9%
Computervision	49	6.5%
Control Data	5	.6%
Ferranti	1	.1%
Hewlett-Packard	10	1.3%
Holguin-CAD	38	5.0%
IBM	35	4.7%
Intergraph	204	27.4%
Matra Datavision	1	.1%
McAuto	30	4.0%
MacNeal Schwendler	1	.1%
Prime	28	3.8%
SDRC	2	.2%
Other Computer Companies	63	8.5%
Other Europe Companies	32	4.3%
Other Far East Companies	77	10.3%
Other Turnkey and Software	32	4.2%
All Companies	\$746	100.0%

Source: Dataquest
 June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.8
 TITLE: 1985 Market Share
 APPLICATION: AEC
 PRODUCT TYPE: All Product Types
 MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Applicon	372	1.9%
Auto-Trol	264	1.4%
Calcomp	277	1.4%
Calma	277	1.4%
Computervision	555	2.9%
Control Data	111	.6%
Ferranti	3	.0%
Hewlett-Packard	161	.8%
Holguin-CAD	377	1.9%
IBM	534	2.8%
Intergraph	2,000	10.3%
Matra Datavision	8	.0%
McAuto	449	2.3%
Prime	249	1.3%
Other Computer Companies	10,766	55.6%
Other Europe Companies	1,495	7.7%
Other Far East Companies	955	4.9%
Other Turnkey and Software	508	2.6%
All Companies	19,360	100.0%

Source: Dataquest
 June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.9
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Applicon	1,548	5.6%
Auto-Trol	1,605	5.8%
Calcomp	277	1.0%
Calma	843	3.1%
Computervision	1,730	6.3%
Control Data	111	.4%
Ferranti	3	.0%
Hewlett-Packard	161	.6%
IBM	626	2.3%
Intergraph	5,278	19.2%
Matra Datavision	8	.0%
McAuto	655	2.4%
Prime	710	2.6%
Other Computer Companies	10,766	39.2%
Other Europe Companies	1,495	5.4%
Other Far East Companies	1,145	4.2%
Other Turnkey and Software	508	1.8%
All Companies	27,467	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.10
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: All Product Types
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Autodesk	1	.6%
Calcomp	1	.3%
Computervision	4	2.0%
IBM	26	11.9%
Intergraph	135	61.2%
SDRC	1	.3%
Synercom	17	7.7%
Other Computer Companies	1	.4%
Other Europe Companies	22	9.9%
Other Far East Companies	12	5.5%
Other Turnkey and Software	1	.2%
All Companies	\$220	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.11
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Calcomp	6	.3%
Computervision	43	2.2%
IBM	252	12.9%
Intergraph	1,302	66.9%
Other Computer Companies	90	4.6%
Other Europe Companies	150	7.7%
Other Far East Companies	90	4.6%
Other Turnkey and Software	16	.8%
All Companies	1,947	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.12
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Auto-Trol	185	3.0%
Calcomp	6	.1%
Calma	77	1.2%
Computervision	622	10.1%
IBM	366	5.9%
Intergraph	4,522	73.2%
Other Computer Companies	90	1.5%
Other Europe Companies	150	2.4%
Other Far East Companies	143	2.3%
Other Turnkey and Software	16	.3%
All Companies	6,176	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.13
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: All Product Types
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Cadnetix	8	1.4%
Calma	4	.7%
Computervision	13	2.5%
Control Data	14	2.6%
Daisy	107	20.2%
Futurenet	20	3.7%
Mentor	127	23.9%
Racal-Redac	1	.2%
Silver-Lisco	11	2.1%
Tektronix	11	2.1%
Telesis	2	.5%
Valid	49	9.2%
Zycad	26	4.9%
Other Computer Companies	79	14.9%
Other Europe Companies	10	1.9%
Other Far East Companies	20	3.8%
Other Turnkey and Software	29	5.4%
All Companies	\$531	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.14
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Cadnetix	101	.7%
Calma	31	.2%
Computervision	244	1.7%
Control Data	131	.9%
Daisy	1,691	12.0%
Futurenet	33	.2%
Mentor	1,276	9.0%
Rascal-Redac	7	.1%
Tektronix	208	1.5%
Telesis	29	.2%
Valid	888	6.3%
Other Computer Companies	8,785	62.2%
Other Europe Companies	328	2.3%
Other Far East Companies	322	2.3%
Other Turnkey and Software	39	.3%
All Companies	14,114	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.15
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Cadnetix	101	.5%
Calma	71	.4%
Computervision	244	1.3%
Control Data	222	1.2%
Daisy	3,398	17.9%
Futurenet	33	.2%
Mentor	2,988	15.8%
Racal-Redac	23	.1%
Tektronix	208	1.1%
Telesis	29	.2%
Valid	2,100	11.1%
Other Computer Companies	8,785	46.4%
Other Europe Companies	328	1.7%
Other Far East Companies	382	2.0%
Other Turnkey and Software	39	.2%
All Companies	18,952	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.16
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: All Product Types
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Applicon	\$5	2.3%
Calma	55	27.7%
Computervision	18	8.9%
Control Data	5	2.3%
Daisy	27	13.6%
Mentor	10	5.0%
Recal-Redac	1	.3%
Scientific Calculations	3	1.7%
Silver-Lisco	7	3.7%
Tektronix	3	1.6%
Valid	8	4.1%
Other Computer Companies	1	.3%
Other Far East Companies	21	10.8%
Other Turnkey and Software	35	17.7%
All Companies	\$198	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.17
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	58	3.4%
Celma	405	24.1%
Computervision	150	8.9%
Control Data	30	1.8%
Daisy	310	18.4%
Mentor	106	6.3%
Racal-Redac	2	.1%
Scientific Calculations	73	4.3%
Tektronix	28	1.7%
Valid	102	6.1%
Other Computer Companies	70	4.2%
Other Far East Companies	178	10.6%
Other Turnkey and Software	169	10.1%
All Companies	1,681	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.18
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Applicon	1,682	28.8%
Celma	2,227	38.2%
Computervision	489	8.4%
Control Data	95	1.6%
Daisy	495	8.5%
Mentor	124	2.1%
Racal-Redac	2	.0%
Scientific Calculations	87	1.5%
Tektronix	28	.5%
Valid	187	3.2%
Other Computer Companies	70	1.2%
Other Far East Companies	178	3.1%
Other Turnkey and Software	169	2.9%
All Companies	5,833	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.19
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: All Product Types
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Applicon	\$17	3.5%
Autodesk	1	.3%
Cadnetix	17	3.7%
Calay	16	3.3%
Calma	18	3.8%
Computervision	53	11.1%
Ferranti	0	.0%
Gerber Scientific	6	1.3%
Hewlett-Packard	30	6.3%
IBM	26	5.5%
Intergraph	23	4.7%
Racal-Redac	49	10.2%
Scientific Calculations	45	9.4%
Tektronix	5	1.1%
Telesis	13	2.6%
Other Computer Companies	11	2.3%
Other Europe Companies	34	7.1%
Other Far East Companies	96	20.1%
Other Turnkey and Software	18	3.7%
All Companies	\$477	100.0%

Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.20
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: All Product Types
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	194	3.0%
Cadnetix	199	3.1%
Celcy	126	2.0%
Calma	227	3.5%
Computervision	466	7.3%
Ferranti	0	.0%
Gerber Scientific	64	1.0%
Hewlett-Packard	500	7.8%
IBM	252	3.9%
Intergraph	214	3.3%
Racal-Redac	219	3.4%
Scientific Calculations	364	5.7%
Tektronix	46	.7%
Telesis	150	2.3%
Other Computer Companies	1,229	19.1%
Other Europe Companies	686	10.7%
Other Far East Companies	992	15.4%
Other Turnkey and Software	499	7.8%
All Companies	6,428	100.0%

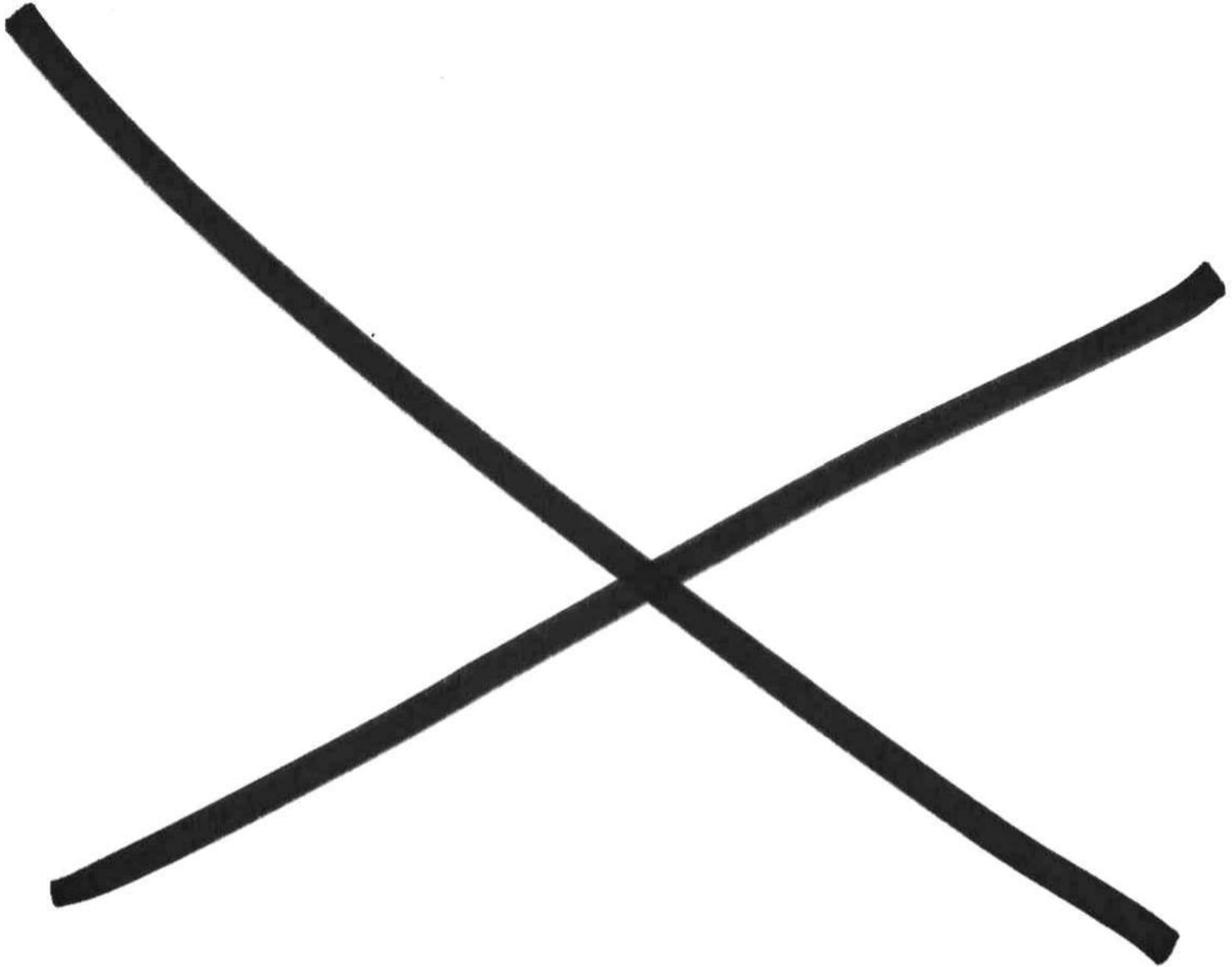
Source: Dataquest
June 1986

B.1 Market Share — All Product Types

TABLE NUMBER: B-1.21
 TITLE: 1985 Market Share
 APPLICATION: PCB
 PRODUCT TYPE: All Product Types
 MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Aplicon	1,553	11.5%
Auto-Trol	148	1.1%
Cadnetix	309	2.3%
Calay	275	2.0%
Calma	759	5.6%
Computervision	2,452	18.2%
Control Data	3	.0%
Ferranti	0	.0%
Gerber Scientific	279	2.1%
Hewlett-Packard	500	3.7%
IBM	723	5.4%
Intergraph	447	3.3%
McAuto	13	.1%
Prime	257	1.9%
Racal-Redac	1,386	10.3%
Scientific Calculations	604	4.5%
Tektronix	46	.3%
Telesis	357	2.7%
Other Computer Companies	1,229	9.1%
Other Europe Companies	686	5.1%
Other Far East Companies	932	6.9%
Other Turnkey and Software	499	3.7%
All Companies	13,458	100.0%

Source: Dataquest
 June 1986



B.2 All Standalone Products

TABLE NUMBER: B-2.7
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Standalone
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Applicon	\$2	1.3%
Auto-Trol	31	18.9%
Calcomp	31	18.9%
Calma	20	11.9%
Computervision	3	1.8%
Ferranti	0	.2%
Hewlett-Packard	10	6.1%
Kolguin-CAD	38	23.0%
MacNeal Schwendler	0	.2%
SDRC	1	.4%
Other Europe Companies	7	4.3%
Other Far East Companies	1	.4%
Other Turnkey and Software	21	12.7%
All Companies	\$163	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.8
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	25	1.5%
Auto-Trol	246	14.7%
Calcomp	187	11.1%
Calma	157	9.4%
Computervision	53	3.2%
Ferranti	1	.1%
Hewlett-Packard	161	9.6%
Holguin-CAD	377	22.5%
Other Europe Companies	137	8.2%
Other Far East Companies	10	.6%
Other Turnkey and Software	321	19.2%
All Companies	1,674	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.9
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Applicon	32	1.8%
Auto-Trol	532	30.1%
Calcomp	187	10.6%
Calma	324	18.3%
Computervision	56	3.2%
Ferranti	1	.1%
Hewlett-Packard	161	9.1%
McAuto	8	.4%
Other Europe Companies	137	7.7%
Other Far East Companies	10	.6%
Other Turnkey and Software	321	18.2%
All Companies	1,767	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: 8-2.10
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Standalone
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Cadnetix	8	2.4%
Calma	4	1.2%
Computervision	13	4.2%
Control Data	7	2.2%
Daisy	88	27.7%
Mentor	127	40.0%
Racal-Redac	1	.2%
Silver-Lisco	3	.8%
Tektronix	7	2.3%
Telesis	2	.6%
Valid	47	14.8%
Other Europe Companies	3	.8%
Other Far East Companies	2	.7%
Other Turnkey and Software	6	2.0%
All Companies	\$317	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.11
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Cadnetix	101	2.6%
Calma	31	.8%
Computervision	244	6.3%
Control Data	86	2.2%
Daisy	1,084	28.1%
Mentor	1,276	33.0%
Racal-Redac	7	.2%
Tektronix	97	2.5%
Telesis	16	.4%
Valid	832	21.5%
Other Europe Companies	45	1.2%
Other Far East Companies	38	1.0%
Other Turnkey and Software	5	.1%
All Companies	3,864	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.12
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Cadnetix	101	1.2%
Calma	71	.8%
Computervision	244	2.9%
Control Data	135	1.6%
Daisy	2,686	31.4%
Mentor	2,988	34.9%
Racal-Redac	19	.2%
Tektronix	97	1.1%
Telesis	16	.2%
Valid	2,045	23.9%
Other Europe Companies	45	.5%
Other Far East Companies	98	1.1%
Other Turnkey and Software	5	.1%
All Companies	8,552	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.13
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Standalone
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Calma	30	31.1%
Computervision	0	.1%
Daisy	26	27.0%
Mentor	10	10.3%
Racal-Redac	0	.4%
Silver-Lisco	1	.9%
Valid	8	8.0%
Other Far East Companies	2	2.0%
Other Turnkey and Software	20	20.2%
All Companies	\$97	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.14
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Calma	244	26.6%
Computervision	2	.2%
Daisy	284	31.0%
Mentor	106	11.6%
Racal-Redac	2	.2%
Valid	91	9.9%
Other Far East Companies	25	2.7%
Other Turnkey and Software	162	17.7%
All Companies	917	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.15
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Calma	244	20.0%
Computervision	2	.2%
Control Data	16	1.3%
Daisy	469	38.5%
Mentor	124	10.1%
Racal-Redac	2	.1%
Valid	176	14.4%
Other Far East Companies	25	2.0%
Other Turnkey and Software	162	13.3%
All Companies	1,220	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.16
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Standalone
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Cadnetix	17	9.1%
Calay	12	6.4%
Calma	13	6.8%
Computervision	0	.2%
Ferranti	0	.0%
Gerber Scientific	6	3.1%
Hewlett-Packard	30	15.6%
Racal-Redac	30	15.7%
Scientific Calculations	26	13.5%
Tektronix	0	.2%
Telesis	11	5.5%
Other Europe Companies	21	10.8%
Other Far East Companies	19	9.6%
Other Turnkey and Software	7	3.4%
All Companies	\$193	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.17
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Cadnetix	199	10.9%
Calay	80	4.4%
Calma	194	10.6%
Computervision	7	.4%
Ferranti	0	.0%
Gerber Scientific	64	3.5%
Hewlett-Packard	500	27.4%
Racal-Redac	181	10.0%
Scientific Calculations	94	5.1%
Tektronix	3	.2%
Telesis	87	4.8%
Other Europe Companies	207	11.4%
Other Far East Companies	90	5.0%
Other Turnkey and Software	116	6.4%
All Companies	1,823	100.0%

Source: Dataquest
June 1986

B.2 All Standalone Products

TABLE NUMBER: B-2.18
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Standalone
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Cadnetix	309	9.3%
Calay	110	3.3%
Calma	201	6.0%
Computervision	10	.3%
Ferranti	0	.0%
Gerber Scientific	279	8.3%
Hewlett-Packard	500	15.0%
Racal-Redac	1,041	31.2%
Scientific Calculations	139	4.1%
Tektronix	3	.1%
Telesis	294	8.8%
Other Europe Companies	207	6.2%
Other Far East Companies	130	3.9%
Other Turnkey and Software	116	3.5%
All Companies	\$3,339	100.0%

Source: Dataquest
June 1986



B.3 All Host-Dependent Products

TABLE NUMBER: B-3.7
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Applicon	\$19	4.1%
Auto-Trol	2	.4%
Calma	17	3.6%
Computervision	44	9.3%
Control Data	2	.5%
Ferranti	1	.1%
IBM	31	6.7%
Intergraph	204	43.5%
Matra Datavision	1	.2%
McAuto	30	6.4%
MacNeal Schwendler	1	.2%
Prime	28	6.0%
SDRC	1	.2%
Other Europe Companies	17	3.6%
Other Far East Companies	66	13.9%
Other Turnkey and Software	6	1.4%
All Companies	\$470	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.8
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Applicon	290	6.1%
Auto-Trol	18	.4%
Calma	109	2.3%
Computervision	403	8.4%
Control Data	15	.3%
Ferranti	2	.0%
IBM	303	6.4%
Intergraph	2,000	41.9%
Matra Datavision	8	.2%
McAuto	449	9.4%
Prime	249	5.2%
Other Europe Companies	236	4.9%
Other Far East Companies	537	11.2%
Other Turnkey and Software	155	3.2%
All Companies	4,774	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.9
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Applicon	1,459	11.5%
Auto-Trol	1,073	8.5%
Calma	509	4.0%
Computervision	1,575	12.5%
Control Data	15	.1%
Ferranti	2	.0%
IBM	395	3.1%
Intergraph	5,278	41.8%
Matra Datavision	8	.1%
McAuto	647	5.1%
Prime	710	5.6%
Other Europe Companies	236	1.9%
Other Far East Companies	579	4.6%
Other Turnkey and Software	155	1.2%
All Companies	12,641	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.10
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Computervision	4	1.9%
IBM	26	12.2%
Intergraph	135	62.7%
SDRC	0	.2%
Synercom	17	7.9%
Other Europe Companies	21	9.6%
Other Far East Companies	12	5.6%
All Companies	\$215	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.11
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Computervision	31	1.8%
IBM	252	14.2%
Intergraph	1,302	73.5%
Other Europe Companies	83	4.7%
Other Far East Companies	88	5.0%
Other Turnkey and Software	16	.9%
All Companies	1,772	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.12
TITLE: 1985 Market Share
APPLICATION: Mapping
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Auto-Trol	180	3.0%
Calma	77	1.3%
Computervision	610	10.2%
IBM	366	6.1%
Intergraph	4,522	75.5%
Other Europe Companies	83	1.4%
Other Far East Companies	132	2.2%
Other Turnkey and Software	16	.3%
All Companies	5,987	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.13
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Control Data	7	9.8%
Racal-Redac	0	.2%
Silver-Lisco	8	11.7%
Zycad	26	36.6%
Other Europe Companies	6	9.1%
Other Far East Companies	8	11.2%
Other Turnkey and Software	15	21.4%
All Companies	\$71	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.14
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Control Data	44	27.6%
Racal-Redac	0	.1%
Other Europe Companies	65	40.5%
Other Far East Companies	51	31.8%
All Companies	161	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.15
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Control Data	86	32.2%
Daisy	65	24.2%
Racal-Redac	1	.4%
Other Europe Companies	65	24.2%
Other Far East Companies	51	19.0%
All Companies	269	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.16
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Applicon	\$5	4.5%
Calma	25	24.9%
Computervision	17	17.6%
Control Data	5	4.7%
Racal-Redac	0	.0%
Scientific Calculations	3	3.3%
Silver-Liscon	6	6.5%
Tektronix	3	3.1%
Other Far East Companies	19	19.5%
Other Turnkey and Software	16	15.7%
All Companies	\$99	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.17
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	58	8.9%
Calma	160	24.6%
Computervision	145	22.3%
Control Data	30	4.5%
Racal-Redac	0	.0%
Scientific Calculations	73	11.1%
Tektronix	28	4.3%
Other Far East Companies	151	23.1%
Other Turnkey and Software	7	1.1%
All Companies	653	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.18
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Applicon	1,682	37.4%
Calma	1,982	44.0%
Computervision	484	10.8%
Control Data	79	1.7%
Racal-Redac	0	.0%
Scientific Calculations	87	1.9%
Tektronix	28	.6%
Other Far East Companies	151	3.4%
Other Turnkey and Software	7	.2%
All Companies	4,501	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.19
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Applicon	\$17	7.0%
Calay	3	1.3%
Calma	5	2.2%
Computervision	52	22.1%
IBM	26	11.0%
Intergraph	23	9.6%
Racal-Redac	3	1.2%
Scientific Calculations	19	8.0%
Tektronix	5	2.0%
Other Europe Companies	11	4.6%
Other Far East Companies	72	30.2%
Other Turnkey and Software	2	.9%
All Companies	\$237	100.0%

Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.20
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	194	7.7%
Calay	45	1.8%
Calma	33	1.3%
Computervision	451	18.0%
IBM	252	10.0%
Intergraph	214	8.6%
Rascal-Redac	6	.2%
Scientific Calculations	270	10.8%
Tektronix	43	1.7%
Other Europe Companies	108	4.3%
Other Far East Companies	504	20.1%
Other Turnkey and Software	383	15.3%
All Companies	2,505	100.0%

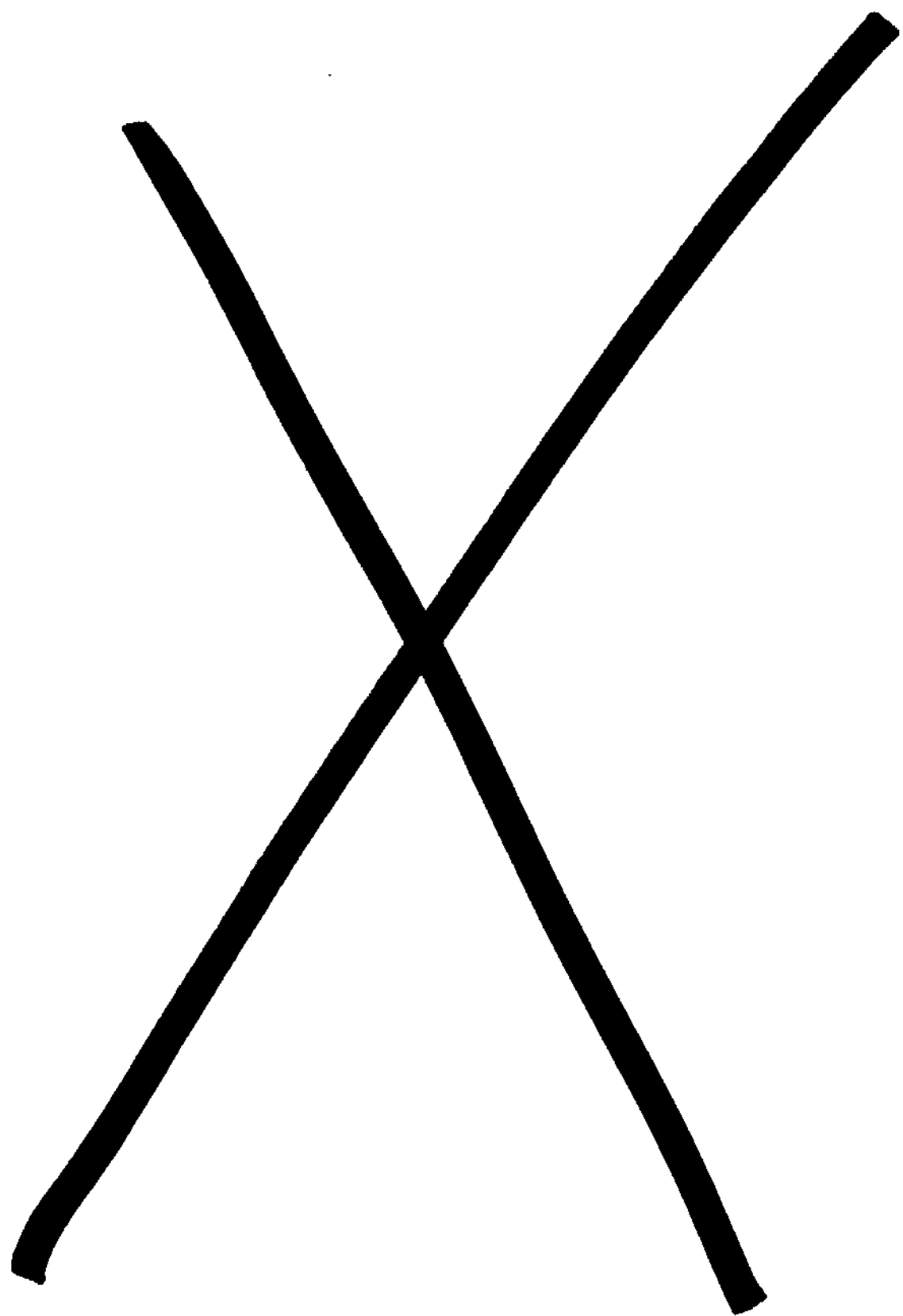
Source: Dataquest
June 1986

B.3 All Host-Dependent Products

TABLE NUMBER: B-3.21
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Host-Dependent
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Applicon	1,553	19.5%
Auto-Trol	148	1.9%
Calay	165	2.1%
Calma	558	7.0%
Computervision	2,434	30.6%
Control Data	3	.0%
IBM	723	9.1%
Intergraph	447	5.6%
McAuto	13	.2%
Prime	257	3.2%
Racal-Redac	250	3.1%
Scientific Calculations	466	5.9%
Tektronix	43	.5%
Other Europe Companies	108	1.4%
Other Far East Companies	404	5.1%
Other Turnkey and Software	383	4.8%
All Companies	7,957	100.0%

Source: Dataquest
June 1986



B.4 All Personal Computer Products

TABLE NUMBER: B-4.7
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Applicon	\$2	1.7%
Autodesk	14	12.3%
Calcomp	2	1.7%
Calma	0	.4%
Computervision	2	1.7%
Control Data	2	2.1%
IBM	3	3.0%
MacNeal Schwendler	0	.0%
Other Computer Companies	63	56.3%
Other Europe Companies	8	7.4%
Other Far East Companies	11	9.5%
Other Turnkey and Software	5	4.0%
All Companies	\$113	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.8
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Shipments

	Measure	Share
	*****	*****
Applicon	57	.4%
Calcomp	91	.7%
Calma	11	.1%
Computervision	99	.8%
Control Data	96	.7%
IBM	231	1.8%
Other Computer Companies	10,766	83.4%
Other Europe Companies	1,123	8.7%
Other Far East Companies	408	3.2%
Other Turnkey and Software	32	.2%
All Companies	12,912	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.9
TITLE: 1985 Market Share
APPLICATION: AEC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	*****
Applicon	57	.4%
Calcomp	91	.7%
Calma	11	.1%
Computervision	99	.8%
Control Data	96	.7%
IBM	231	1.8%
Other Computer Companies	10,766	82.4%
Other Europe Companies	1,123	8.6%
Other Far East Companies	556	4.3%
Other Turnkey and Software	32	.2%
All Companies	13,059	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.10
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Personal Computer
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Daisy	19	13.5%
Futurenet	20	13.8%
Racal-Redac	0	.3%
Tektronix	4	2.8%
Telesis	0	.3%
Valid	2	1.2%
Other Computer Companies	79	55.3%
Other Europe Companies	1	.8%
Other Far East Companies	10	7.0%
Other Turnkey and Software	7	5.0%
All Companies	\$143	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.11
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Daisy	607	6.0%
Futurenet	33	.3%
Tektronix	111	1.1%
Telesis	13	.1%
Valid	56	.6%
Other Computer Companies	8,785	87.1%
Other Europe Companies	218	2.2%
Other Far East Companies	233	2.3%
Other Turnkey and Software	34	.3%
All Companies	10,089	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.12
TITLE: 1985 Market Share
APPLICATION: EDA
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Installed Base

	Measure	Share
	*****	=====
Daisy	647	6.4%
Futurenet	33	.3%
Racal-Redac	3	.0%
Tektronix	111	1.1%
Telesis	13	.1%
Valid	56	.5%
Other Computer Companies	8,785	86.7%
Other Europe Companies	218	2.2%
Other Far East Companies	233	2.3%
Other Turnkey and Software	34	.3%
All Companies	10,132	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.13
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Total Revenue

	Measure	Share
	*****	*****
Computervision	0	1.9%
Daisy	1	35.9%
Racal-Redac	0	7.7%
Valid	0	16.3%
Other Computer Companies	1	30.1%
Other Far East Companies	0	8.1%
All Companies	\$2	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.14
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Computervision	2	2.0%
Daisy	26	23.0%
Valid	11	10.1%
Other Computer Companies	70	62.7%
Other Far East Companies	2	2.1%
All Companies	112	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.15
TITLE: 1985 Market Share
APPLICATION: IC
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Computervision	2	2.0%
Daisy	26	23.0%
Valid	11	10.1%
Other Computer Companies	70	62.7%
Other Far East Companies	2	2.1%
All Companies	112	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.16
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Personal Computer
MEASUREMENT: Total Revenue

	Measure	Share
	=====	=====
Autodesk	1	2.9%
Computervision	0	.3%
Racal-Redac	16	33.3%
Telesis	2	4.2%
Other Computer Companies	11	23.6%
Other Europe Companies	2	4.9%
Other Far East Companies	5	11.7%
Other Turnkey and Software	9	19.1%
All Companies	\$47	100.0%

Source: Dataquest
June 1986

B.4 All Personal Computer Products

TABLE NUMBER: B-4.17
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Shipments

	Measure	Share
	=====	=====
Computervision	8	.4%
Racal-Redac	32	1.5%
Telesis	63	3.0%
Other Computer Companies	1,229	58.5%
Other Europe Companies	371	17.7%
Other Far East Companies	398	18.9%
All Companies	2,100	100.0%

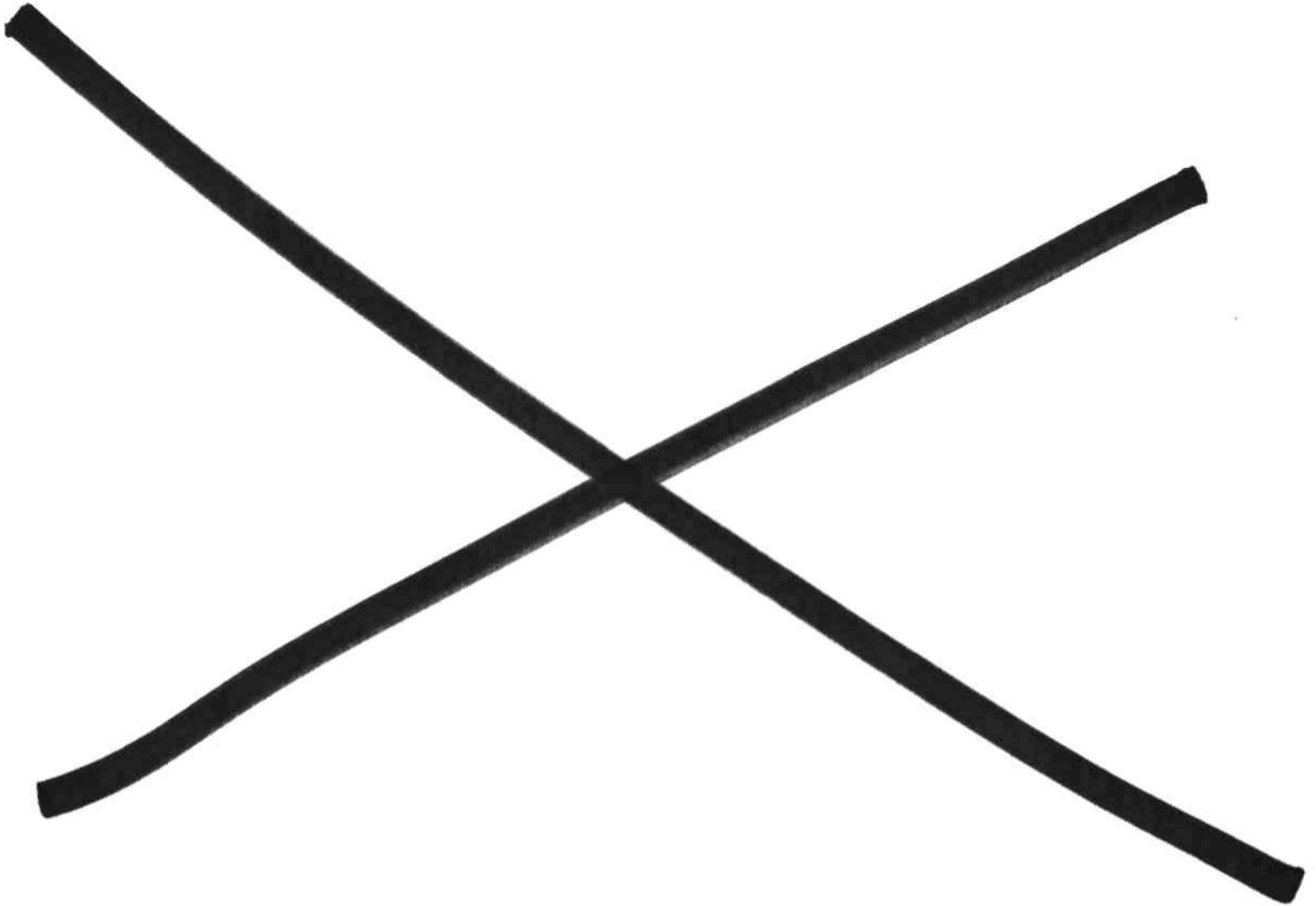
Source: Dataquest
June 1986

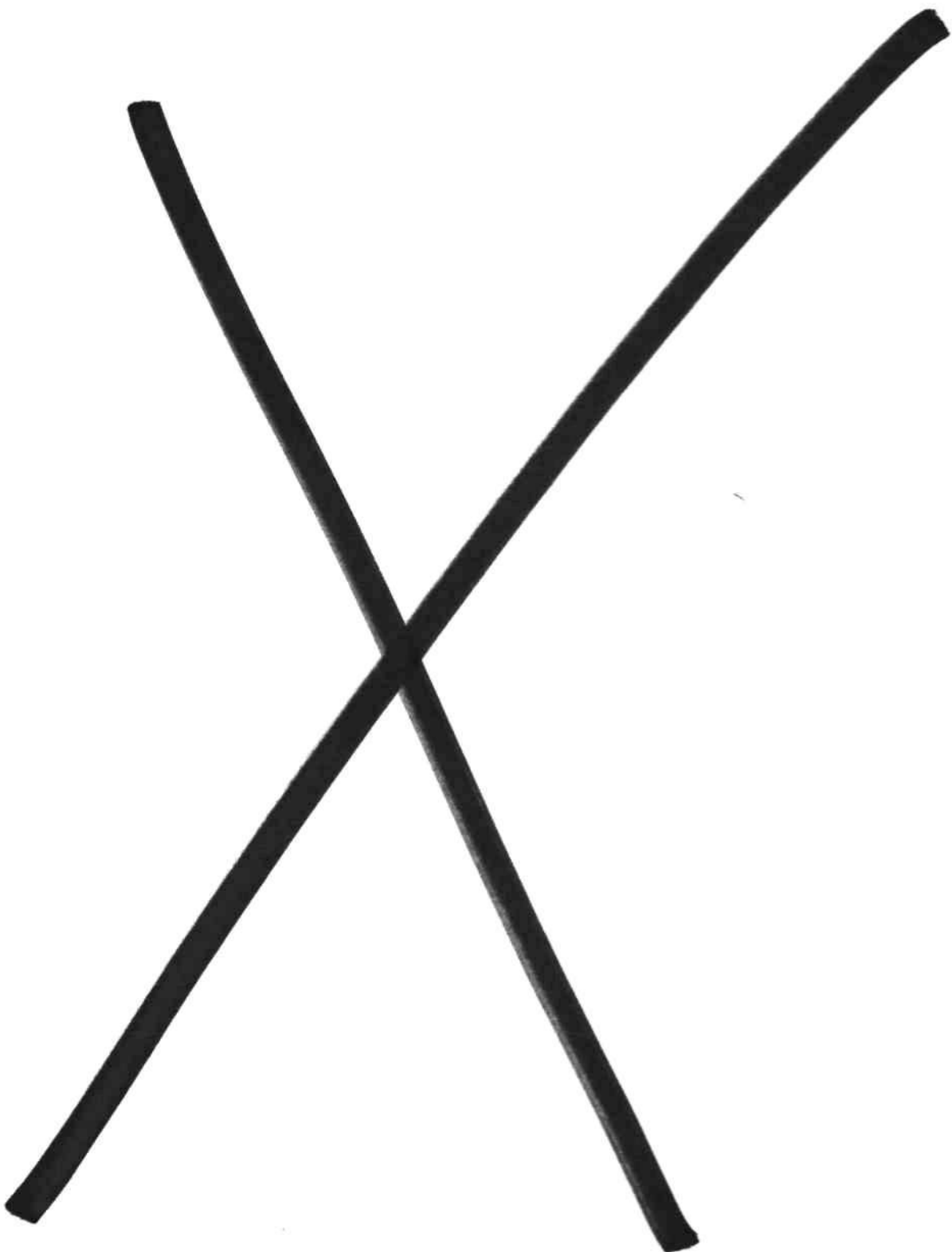
B.4 All Personal Computer Products

TABLE NUMBER: B-4.18
TITLE: 1985 Market Share
APPLICATION: PCB
PRODUCT TYPE: Personal Computer
MEASUREMENT: Workstation Installed Base

	Measure	Share
	=====	=====
Computervision	8	.3%
Racal-Redac	95	4.4%
Telesis	63	2.9%
Other Computer Companies	1,229	56.8%
Other Europe Companies	371	17.1%
Other Far East Companies	398	18.4%
All Companies	2,163	100.0%

Source: Dataquest
June 1986





C.1 Historical Data — By Company

TABLE NUMBER: C-3
 TITLE: Company History
 COMPANY: Applicon
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	11	13	28	19	23	20%
System Shipments	23	22	50	48	163	63%
Workstation Shipments	96	92	219	195	372	40%
Workstation Installed Base	791	857	1,030	1,176	1,548	18%
North America						
Total Revenue	9	10	21	14	19	20%
System Shipments	18	17	37	35	130	64%
Workstation Shipments	75	71	162	143	313	43%
Workstation Installed Base	508	564	698	805	1,118	22%
Europe						
Total Revenue	0	0	6	4	2	ERR
System Shipments	0	0	10	11	21	ERR
Workstation Shipments	0	0	44	43	31	ERR
Workstation Installed Base	0	0	43	84	115	ERR
Far East						
Total Revenue	0	0	1	1	2	ERR
System Shipments	0	0	3	2	10	ERR
Workstation Shipments	0	0	13	9	24	ERR
Workstation Installed Base	0	0	11	21	45	ERR
Rest of World						
Total Revenue	2	3	0	0	0	-42%
System Shipments	5	5	0	0	1	-27%
Workstation Shipments	21	21	0	0	4	-36%
Workstation Installed Base	283	293	278	266	270	-1%
Standalone						
Total Revenue	0	0	0	1	2	ERR
System Shipments	0	0	0	7	25	ERR
Workstation Shipments	0	0	0	7	25	ERR
Workstation Installed Base	0	0	0	7	32	ERR
Host-Dependent						
Total Revenue	11	13	28	18	19	14%
System Shipments	23	22	50	41	82	37%
Workstation Shipments	96	92	219	188	290	32%
Workstation Installed Base	791	857	1,030	1,169	1,459	17%
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	57	ERR
Workstation Shipments	0	0	0	0	57	ERR
Workstation Installed Base	0	0	0	0	57	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-4
 TITLE: Company History
 COMPANY: Applicon
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	46	30	36	50	5	-44%
System Shipments	52	51	34	57	16	-25%
Workstation Shipments	176	174	148	261	58	-24%
Workstation Installed Base	1,161	1,340	1,420	1,624	1,682	10%
North America						
Total Revenue	20	23	13	19	2	-41%
System Shipments	40	39	22	44	11	-28%
Workstation Shipments	126	124	96	202	39	-26%
Workstation Installed Base	752	891	943	1,111	1,150	11%
Europe						
Total Revenue	0	0	6	4	2	ERR
System Shipments	0	0	10	9	4	ERR
Workstation Shipments	0	0	43	41	14	ERR
Workstation Installed Base	0	0	43	82	96	ERR
Far East						
Total Revenue	0	0	17	27	0	ERR
System Shipments	0	0	2	3	1	ERR
Workstation Shipments	0	0	9	14	5	ERR
Workstation Installed Base	0	0	7	23	28	ERR
Rest of World						
Total Revenue	26	7	0	0	0	-80%
System Shipments	12	12	0	1	0	-65%
Workstation Shipments	50	50	0	4	1	-66%
Workstation Installed Base	409	449	427	408	409	-0%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	46	30	36	50	5	-44%
System Shipments	52	51	34	57	16	-25%
Workstation Shipments	176	174	148	261	58	-24%
Workstation Installed Base	1,161	1,340	1,420	1,624	1,682	10%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-9
 TITLE: Company History
 COMPANY: Autodesk
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-10
 TITLE: Company History
 COMPANY: Autodesk
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-11
 TITLE: Company History
 COMPANY: Auto-Trol
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	46	49	55	69	65	9%
System Shipments	99	92	218	396	504	50%
Workstation Shipments	428	394	295	415	531	6%
Workstation Installed Base	1,603	1,917	2,119	2,432	2,953	17%
North America						
Total Revenue	37	38	50	61	54	10%
System Shipments	83	75	196	354	428	51%
Workstation Shipments	369	321	267	372	451	5%
Workstation Installed Base	1,406	1,657	1,844	2,123	2,574	16%
Europe						
Total Revenue	0	0	4	4	8	ERR
System Shipments	0	0	16	21	46	ERR
Workstation Shipments	0	0	22	21	48	ERR
Workstation Installed Base	0	0	22	45	92	ERR
Far East						
Total Revenue	0	0	1	0	0	ERR
System Shipments	3	0	6	0	0	-100%
Workstation Shipments	3	0	6	1	0	-100%
Workstation Installed Base	3	2	8	8	0	-100%
Rest of World						
Total Revenue	9	11	0	4	4	-18%
System Shipments	13	17	0	21	30	23%
Workstation Shipments	56	73	0	21	31	-13%
Workstation Installed Base	194	258	245	256	287	10%
Standalone						
Total Revenue	0	0	35	66	62	ERR
System Shipments	3	0	188	388	495	258%
Workstation Shipments	3	0	183	388	495	258%
Workstation Installed Base	3	2	188	567	1,058	333%
Host-Dependent						
Total Revenue	46	49	20	3	4	-46%
System Shipments	96	92	30	8	9	-44%
Workstation Shipments	425	394	112	27	36	-46%
Workstation Installed Base	1,600	1,915	1,931	1,865	1,895	4%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-12
 TITLE: Company History
 COMPANY: Auto-Trol
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	9	15	28	32	33	40%
System Shipments	21	29	108	187	254	86%
Workstation Shipments	80	124	149	196	267	35%
Workstation Installed Base	351	457	582	750	1,016	30%
North America						
Total Revenue	7	12	26	28	28	43%
System Shipments	15	24	100	167	220	96%
Workstation Shipments	64	103	138	176	232	38%
Workstation Installed Base	307	395	513	662	894	31%
Europe						
Total Revenue	0	0	2	2	3	ERR
System Shipments	0	0	8	10	18	ERR
Workstation Shipments	0	0	11	10	19	ERR
Workstation Installed Base	0	0	11	22	41	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	3	0	0	0	0	-100%
Workstation Shipments	3	0	0	0	0	-100%
Workstation Installed Base	3	2	1	1	0	-100%
Rest of World						
Total Revenue	2	3	0	2	2	1%
System Shipments	3	5	0	10	15	49%
Workstation Shipments	13	21	0	10	16	5%
Workstation Installed Base	41	60	57	65	80	18%
Standalone						
Total Revenue	0	0	18	31	31	ERR
System Shipments	3	0	95	183	249	202%
Workstation Shipments	3	0	95	183	249	202%
Workstation Installed Base	3	2	95	273	521	263%
Host-Dependent						
Total Revenue	9	15	10	1	2	-31%
System Shipments	18	29	13	4	5	-28%
Workstation Shipments	77	124	54	13	18	-30%
Workstation Installed Base	348	455	487	477	494	9%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-13
 TITLE: Company History
 COMPANY: Auto-Trol
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	30	30	26	36	33	3%
System Shipments	61	54	104	209	250	42%
Workstation Shipments	261	232	142	219	264	0%
Workstation Installed Base	914	1,100	1,187	1,349	1,605	15%
North America						
Total Revenue	25	23	23	33	26	1%
System Shipments	54	45	90	187	207	40%
Workstation Shipments	231	193	125	196	219	-1%
Workstation Installed Base	811	963	1,039	1,183	1,402	15%
Europe						
Total Revenue	0	0	2	2	5	ERR
System Shipments	0	0	8	11	28	ERR
Workstation Shipments	0	0	11	11	29	ERR
Workstation Installed Base	0	0	11	23	52	ERR
Far East						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	6	0	0	ERR
Workstation Shipments	0	0	6	1	0	ERR
Workstation Installed Base	0	0	7	7	0	ERR
Rest of World						
Total Revenue	5	7	0	2	2	-21%
System Shipments	7	9	0	11	15	21%
Workstation Shipments	30	39	0	11	16	-15%
Workstation Installed Base	103	137	130	136	151	10%
Standalone						
Total Revenue	0	0	16	35	31	ERR
System Shipments	0	0	88	205	246	ERR
Workstation Shipments	0	0	88	205	246	ERR
Workstation Installed Base	0	0	88	289	532	ERR
Host-Dependent						
Total Revenue	30	30	10	2	2	-49%
System Shipments	61	54	16	4	5	-47%
Workstation Shipments	261	232	54	14	18	-49%
Workstation Installed Base	914	1,100	1,099	1,060	1,073	4%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-14
 TITLE: Company History
 COMPANY: Auto-Trol
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	4	4	2	0	0	-100%
System Shipments	9	7	6	0	0	-100%
Workstation Shipments	53	30	4	0	0	-100%
Workstation Installed Base	174	196	194	185	185	2%
North America						
Total Revenue	3	3	2	0	0	-100%
System Shipments	7	5	6	0	0	-100%
Workstation Shipments	44	21	4	0	0	-100%
Workstation Installed Base	149	163	163	155	155	1%
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	1	1	0	0	0	-100%
System Shipments	2	2	0	0	0	-100%
Workstation Shipments	9	9	0	0	0	-100%
Workstation Installed Base	25	33	31	30	30	5%
Standalone						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	5	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	5	5	5	ERR
Host-Dependent						
Total Revenue	4	4	1	0	0	-100%
System Shipments	9	7	1	0	0	-100%
Workstation Shipments	53	30	4	0	0	-100%
Workstation Installed Base	174	196	189	180	180	1%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-15
 TITLE: Company History
 COMPANY: Auto-Trol
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	4	1	0	0	0	-100%
System Shipments	8	2	0	0	0	-100%
Workstation Shipments	34	8	0	0	0	-100%
Workstation Installed Base	164	164	156	148	148	-3%
North America						
Total Revenue	3	1	0	0	0	-100%
System Shipments	7	1	0	0	0	-100%
Workstation Shipments	30	4	0	0	0	-100%
Workstation Installed Base	139	136	129	123	123	-3%
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	1	0	0	0	0	-100%
System Shipments	1	1	0	0	0	-100%
Workstation Shipments	4	4	0	0	0	-100%
Workstation Installed Base	25	28	27	25	25	0%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	4	1	0	0	0	-100%
System Shipments	8	2	0	0	0	-100%
Workstation Shipments	34	8	0	0	0	-100%
Workstation Installed Base	164	164	156	148	148	-3%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-16
 TITLE: Company History
 COMPANY: Cadnetix
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	25	ERR
System Shipments	0	0	0	0	300	ERR
Workstation Shipments	0	0	0	0	300	ERR
Workstation Installed Base	0	0	0	110	410	ERR
North America						
Total Revenue	0	0	0	0	22	ERR
System Shipments	0	0	0	0	250	ERR
Workstation Shipments	0	0	0	0	250	ERR
Workstation Installed Base	0	0	0	110	360	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	25	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	25	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	25	ERR
System Shipments	0	0	0	0	300	ERR
Workstation Shipments	0	0	0	0	300	ERR
Workstation Installed Base	0	0	0	110	410	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-17
 TITLE: Company History
 COMPANY: Cadnetix
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	101	ERR
Workstation Shipments	0	0	0	0	101	ERR
Workstation Installed Base	0	0	0	0	101	ERR
North America						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	86	ERR
Workstation Shipments	0	0	0	0	86	ERR
Workstation Installed Base	0	0	0	0	86	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	8	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	8	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	101	ERR
Workstation Shipments	0	0	0	0	101	ERR
Workstation Installed Base	0	0	0	0	101	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-18
 TITLE: Company History
 COMPANY: Cadnetix
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	199	ERR
Workstation Shipments	0	0	0	0	199	ERR
Workstation Installed Base	0	0	0	110	309	ERR
North America						
Total Revenue	0	0	0	0	15	ERR
System Shipments	0	0	0	0	164	ERR
Workstation Shipments	0	0	0	0	164	ERR
Workstation Installed Base	0	0	0	110	274	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	18	ERR
Workstation Shipments	0	0	0	0	18	ERR
Workstation Installed Base	0	0	0	0	18	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	18	ERR
Workstation Shipments	0	0	0	0	18	ERR
Workstation Installed Base	0	0	0	0	18	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	199	ERR
Workstation Shipments	0	0	0	0	199	ERR
Workstation Installed Base	0	0	0	110	309	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-19
 TITLE: Company History
 COMPANY: Calay
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	103	ERR
Workstation Shipments	0	0	0	0	126	ERR
Workstation Installed Base	0	0	0	150	275	ERR
North America						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	103	ERR
Workstation Shipments	0	0	0	0	126	ERR
Workstation Installed Base	0	0	0	150	275	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	80	ERR
Workstation Shipments	0	0	0	0	80	ERR
Workstation Installed Base	0	0	0	30	110	ERR
Host-Dependent						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	23	ERR
Workstation Shipments	0	0	0	0	45	ERR
Workstation Installed Base	0	0	0	120	165	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-20
 TITLE: Company History
 COMPANY: Calay
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	103	ERR
Workstation Shipments	0	0	0	0	126	ERR
Workstation Installed Base	0	0	0	150	275	ERR
North America						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	103	ERR
Workstation Shipments	0	0	0	0	126	ERR
Workstation Installed Base	0	0	0	150	275	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	80	ERR
Workstation Shipments	0	0	0	0	80	ERR
Workstation Installed Base	0	0	0	30	110	ERR
Host-Dependent						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	23	ERR
Workstation Shipments	0	0	0	0	45	ERR
Workstation Installed Base	0	0	0	120	165	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-21
 TITLE: Company History
 COMPANY: Calcomp
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	33	ERR
System Shipments	0	0	0	0	283	ERR
Workstation Shipments	0	0	0	0	283	ERR
Workstation Installed Base	0	0	0	0	283	ERR
North America						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	174	ERR
Workstation Shipments	0	0	0	0	174	ERR
Workstation Installed Base	0	0	0	0	174	ERR
Europe						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	81	ERR
Workstation Shipments	0	0	0	0	81	ERR
Workstation Installed Base	0	0	0	0	81	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	14	ERR
Workstation Shipments	0	0	0	0	14	ERR
Workstation Installed Base	0	0	0	0	14	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	14	ERR
Workstation Shipments	0	0	0	0	14	ERR
Workstation Installed Base	0	0	0	0	14	ERR
Standalone						
Total Revenue	0	0	0	0	31	ERR
System Shipments	0	0	0	0	190	ERR
Workstation Shipments	0	0	0	0	190	ERR
Workstation Installed Base	0	0	0	0	190	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	93	ERR
Workstation Shipments	0	0	0	0	93	ERR
Workstation Installed Base	0	0	0	0	93	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-22
 TITLE: Company History
 COMPANY: Calcomp
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	33	ERR
System Shipments	0	0	0	0	277	ERR
Workstation Shipments	0	0	0	0	277	ERR
Workstation Installed Base	0	0	0	0	277	ERR
North America						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	171	ERR
Workstation Shipments	0	0	0	0	171	ERR
Workstation Installed Base	0	0	0	0	171	ERR
Europe						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	80	ERR
Workstation Shipments	0	0	0	0	80	ERR
Workstation Installed Base	0	0	0	0	80	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	13	ERR
Workstation Shipments	0	0	0	0	13	ERR
Workstation Installed Base	0	0	0	0	13	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	13	ERR
Workstation Shipments	0	0	0	0	13	ERR
Workstation Installed Base	0	0	0	0	13	ERR
Standalone						
Total Revenue	0	0	0	0	31	ERR
System Shipments	0	0	0	0	187	ERR
Workstation Shipments	0	0	0	0	187	ERR
Workstation Installed Base	0	0	0	0	187	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	91	ERR
Workstation Shipments	0	0	0	0	91	ERR
Workstation Installed Base	0	0	0	0	91	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-23
 TITLE: Company History
 COMPANY: Calcomp
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	6	ERR
Workstation Shipments	0	0	0	0	6	ERR
Workstation Installed Base	0	0	0	0	6	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	4	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-24
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	93	134	210	204	183	19%
System Shipments	180	246	405	756	1,129	58%
Workstation Shipments	773	1,060	1,335	1,299	1,535	19%
Workstation Installed Base	2,137	3,091	4,209	5,242	6,766	33%
North America						
Total Revenue	85	124	148	135	131	12%
System Shipments	166	230	282	508	755	46%
Workstation Shipments	712	991	934	872	1,013	9%
Workstation Installed Base	1,861	2,759	3,510	4,168	5,170	29%
Europe						
Total Revenue	0	0	36	24	37	ERR
System Shipments	0	0	71	88	148	ERR
Workstation Shipments	0	0	234	151	244	ERR
Workstation Installed Base	0	0	221	355	599	ERR
Far East						
Total Revenue	0	0	19	37	7	ERR
System Shipments	0	0	40	133	188	ERR
Workstation Shipments	0	0	118	229	225	ERR
Workstation Installed Base	0	0	119	329	554	ERR
Rest of World						
Total Revenue	8	10	6	8	7	-2%
System Shipments	14	16	12	27	39	29%
Workstation Shipments	61	69	49	47	53	-4%
Workstation Installed Base	276	332	359	390	443	13%
Standalone						
Total Revenue	0	0	7	81	104	ERR
System Shipments	0	0	30	524	951	ERR
Workstation Shipments	0	0	30	524	951	ERR
Workstation Installed Base	0	0	30	552	1,492	ERR
Host-Dependent						
Total Revenue	93	134	203	123	79	-4%
System Shipments	180	246	375	232	151	-4%
Workstation Shipments	773	1,060	1,305	775	556	-8%
Workstation Installed Base	2,137	3,091	4,179	4,690	5,246	25%
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	28	ERR
Workstation Shipments	0	0	0	0	28	ERR
Workstation Installed Base	0	0	0	0	28	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-25
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	37	66	105	83	70	17%
System Shipments	79	131	194	381	412	51%
Workstation Shipments	337	562	798	525	595	15%
Workstation Installed Base	597	1,130	1,783	2,200	2,788	47%
North America						
Total Revenue	30	58	74	55	43	9%
System Shipments	67	118	133	256	239	37%
Workstation Shipments	285	506	556	352	329	4%
Workstation Installed Base	387	874	1,324	1,597	1,919	49%
Europe						
Total Revenue	0	0	18	10	20	ERR
System Shipments	0	0	35	44	78	ERR
Workstation Shipments	0	0	139	61	129	ERR
Workstation Installed Base	0	0	122	175	304	ERR
Far East						
Total Revenue	0	0	8	15	5	ERR
System Shipments	0	0	16	67	80	ERR
Workstation Shipments	0	0	63	93	117	ERR
Workstation Installed Base	0	0	58	143	260	ERR
Rest of World						
Total Revenue	7	8	5	3	3	-21%
System Shipments	12	13	10	14	15	6%
Workstation Shipments	52	56	40	19	20	-21%
Workstation Installed Base	210	256	279	285	305	10%
Standalone						
Total Revenue	0	0	4	50	37	ERR
System Shipments	0	0	14	320	325	ERR
Workstation Shipments	0	0	14	320	325	ERR
Workstation Installed Base	0	0	14	334	652	ERR
Host-Dependent						
Total Revenue	37	66	101	33	32	-4%
System Shipments	79	131	180	61	70	-3%
Workstation Shipments	337	562	784	205	253	-7%
Workstation Installed Base	597	1,130	1,769	1,866	2,119	37%
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	17	ERR
Workstation Shipments	0	0	0	0	17	ERR
Workstation Installed Base	0	0	0	0	17	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-26
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	7	18	23	31	37	54%
System Shipments	14	34	44	175	197	94%
Workstation Shipments	60	146	170	198	277	47%
Workstation Installed Base	110	251	389	570	843	66%
North America						
Total Revenue	6	16	16	21	29	51%
System Shipments	12	31	31	118	161	91%
Workstation Shipments	51	133	120	134	221	44%
Workstation Installed Base	83	212	307	425	643	67%
Europe						
Total Revenue	0	0	4	4	7	ERR
System Shipments	0	0	8	20	27	ERR
Workstation Shipments	0	0	31	22	43	ERR
Workstation Installed Base	0	0	27	49	92	ERR
Far East						
Total Revenue	0	0	2	6	0	ERR
System Shipments	0	0	3	31	2	ERR
Workstation Shipments	0	0	10	36	2	ERR
Workstation Installed Base	0	0	10	45	47	ERR
Rest of World						
Total Revenue	1	2	1	1	1	12%
System Shipments	2	3	2	6	8	41%
Workstation Shipments	9	13	9	6	11	5%
Workstation Installed Base	27	39	45	51	62	23%
Standalone						
Total Revenue	0	0	1	26	20	ERR
System Shipments	0	0	5	165	157	ERR
Workstation Shipments	0	0	5	165	157	ERR
Workstation Installed Base	0	0	5	170	324	ERR
Host-Dependent						
Total Revenue	7	18	22	6	17	27%
System Shipments	14	34	39	10	29	20%
Workstation Shipments	60	146	165	33	109	16%
Workstation Installed Base	110	251	384	400	509	47%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	11	ERR
Workstation Shipments	0	0	0	0	11	ERR
Workstation Installed Base	0	0	0	0	11	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-27
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	2	4	4	ERR
System Shipments	0	0	11	32	31	ERR
Workstation Shipments	0	0	11	32	31	ERR
Workstation Installed Base	0	0	11	41	71	ERR
North America						
Total Revenue	0	0	2	3	4	ERR
System Shipments	0	0	9	21	31	ERR
Workstation Shipments	0	0	9	21	31	ERR
Workstation Installed Base	0	0	9	29	59	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	4	0	ERR
Workstation Shipments	0	0	0	4	0	ERR
Workstation Installed Base	0	0	0	4	4	ERR
Far East						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	2	6	0	ERR
Workstation Shipments	0	0	2	6	0	ERR
Workstation Installed Base	0	0	2	7	7	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	1	1	ERR
Standalone						
Total Revenue	0	0	2	4	4	ERR
System Shipments	0	0	11	32	31	ERR
Workstation Shipments	0	0	11	32	31	ERR
Workstation Installed Base	0	0	11	41	71	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-28
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	42	44	62	65	55	7%
System Shipments	72	69	122	126	287	41%
Workstation Shipments	312	301	278	420	405	7%
Workstation Installed Base	1,019	1,269	1,518	1,822	2,227	22%
North America						
Total Revenue	42	44	44	43	43	1%
System Shipments	72	69	85	84	239	35%
Workstation Shipments	312	301	194	280	329	1%
Workstation Installed Base	1,019	1,269	1,424	1,608	1,937	17%
Europe						
Total Revenue	0	0	11	8	9	ERR
System Shipments	0	0	22	15	36	ERR
Workstation Shipments	0	0	50	50	60	ERR
Workstation Installed Base	0	0	56	97	157	ERR
Far East						
Total Revenue	0	0	7	12	0	ERR
System Shipments	0	0	15	22	0	ERR
Workstation Shipments	0	0	34	73	0	ERR
Workstation Installed Base	0	0	38	102	102	ERR
Rest of World						
Total Revenue	0	0	0	3	2	ERR
System Shipments	0	0	0	5	12	ERR
Workstation Shipments	0	0	0	17	16	ERR
Workstation Installed Base	0	0	0	15	31	ERR
Standalone						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	244	ERR
Workstation Shipments	0	0	0	0	244	ERR
Workstation Installed Base	0	0	0	0	244	ERR
Host-Dependent						
Total Revenue	42	44	62	65	25	-12%
System Shipments	72	69	122	126	43	-12%
Workstation Shipments	312	301	278	420	160	-15%
Workstation Installed Base	1,019	1,269	1,518	1,822	1,982	18%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-29
 TITLE: Company History
 COMPANY: Calma
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	7	6	18	20	18	27%
System Shipments	15	12	34	42	203	92%
Workstation Shipments	64	51	78	124	227	37%
Workstation Installed Base	320	355	426	532	759	24%
North America						
Total Revenue	7	6	12	14	13	17%
System Shipments	15	12	24	29	85	54%
Workstation Shipments	64	51	55	85	103	13%
Workstation Installed Base	320	355	399	465	568	15%
Europe						
Total Revenue	0	0	3	2	2	ERR
System Shipments	0	0	6	5	8	ERR
Workstation Shipments	0	0	14	14	12	ERR
Workstation Installed Base	0	0	16	30	42	ERR
Far East						
Total Revenue	0	0	2	3	3	ERR
System Shipments	0	0	4	7	106	ERR
Workstation Shipments	0	0	9	21	106	ERR
Workstation Installed Base	0	0	11	32	138	ERR
Rest of World						
Total Revenue	0	0	0	1	1	ERR
System Shipments	0	0	0	1	5	ERR
Workstation Shipments	0	0	0	4	5	ERR
Workstation Installed Base	0	0	0	5	10	ERR
Standalone						
Total Revenue	0	0	0	1	13	ERR
System Shipments	0	0	0	7	194	ERR
Workstation Shipments	0	0	0	7	194	ERR
Workstation Installed Base	0	0	0	7	201	ERR
Host-Dependent						
Total Revenue	7	6	18	19	5	-8%
System Shipments	15	12	34	35	9	-12%
Workstation Shipments	64	51	78	117	33	-15%
Workstation Installed Base	320	355	426	525	558	15%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-30
 TITLE: Company History
 COMPANY: Cimline
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	=====
Worldwide						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	397	ERR
Workstation Shipments	0	0	0	0	397	ERR
Workstation Installed Base	0	0	0	0	397	ERR
North America						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	378	ERR
Workstation Shipments	0	0	0	0	378	ERR
Workstation Installed Base	0	0	0	0	378	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	20	ERR
Workstation Shipments	0	0	0	0	20	ERR
Workstation Installed Base	0	0	0	0	20	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	397	ERR
Workstation Shipments	0	0	0	0	397	ERR
Workstation Installed Base	0	0	0	0	397	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-31
 TITLE: Company History
 COMPANY: Cimline
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	397	ERR
Workstation Shipments	0	0	0	0	397	ERR
Workstation Installed Base	0	0	0	0	397	ERR
North America						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	378	ERR
Workstation Shipments	0	0	0	0	378	ERR
Workstation Installed Base	0	0	0	0	378	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	20	ERR
Workstation Shipments	0	0	0	0	20	ERR
Workstation Installed Base	0	0	0	0	20	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	397	ERR
Workstation Shipments	0	0	0	0	397	ERR
Workstation Installed Base	0	0	0	0	397	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-32
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	276	332	400	556	441	12%
System Shipments	562	620	616	936	1,866	35%
Workstation Shipments	2,515	2,794	2,678	2,522	4,794	18%
Workstation Installed Base	6,613	8,989	11,208	13,071	14,497	22%
North America						
Total Revenue	147	177	211	326	289	18%
System Shipments	322	355	326	568	1,402	44%
Workstation Shipments	1,394	1,547	1,417	1,478	3,534	26%
Workstation Installed Base	4,059	5,404	6,548	7,694	11,228	29%
Europe						
Total Revenue	0	0	148	181	109	ERR
System Shipments	0	0	228	287	286	ERR
Workstation Shipments	0	0	992	833	779	ERR
Workstation Installed Base	0	0	987	1,681	2,460	ERR
Far East						
Total Revenue	0	0	29	36	43	ERR
System Shipments	0	0	44	58	178	ERR
Workstation Shipments	0	0	191	152	481	ERR
Workstation Installed Base	0	0	188	328	809	ERR
Rest of World						
Total Revenue	129	155	11	13	0	-100%
System Shipments	240	265	18	23	0	-100%
Workstation Shipments	1,121	1,247	78	59	0	-100%
Workstation Installed Base	2,554	3,585	3,485	3,368	0	-100%
Standalone						
Total Revenue	0	0	0	2	31	ERR
System Shipments	0	0	0	41	553	ERR
Workstation Shipments	0	0	0	128	553	ERR
Workstation Installed Base	0	0	0	39	591	ERR
Host-Dependent						
Total Revenue	276	332	400	554	396	9%
System Shipments	562	620	616	895	578	1%
Workstation Shipments	2,515	2,794	2,678	2,394	3,506	9%
Workstation Installed Base	6,613	8,989	11,208	13,032	13,171	19%
Personal Computer						
Total Revenue	0	0	0	0	15	ERR
System Shipments	0	0	0	0	735	ERR
Workstation Shipments	0	0	0	0	735	ERR
Workstation Installed Base	0	0	0	0	735	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-33
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	125	150	260	415	304	25%
System Shipments	245	270	399	700	1,269	51%
Workstation Shipments	1,065	1,183	1,735	1,817	3,336	33%
Workstation Installed Base	2,922	3,959	5,494	7,034	8,960	32%
North America						
Total Revenue	68	82	138	243	201	31%
System Shipments	143	158	211	425	920	59%
Workstation Shipments	621	692	918	1,103	2,458	41%
Workstation Installed Base	1,902	2,499	3,293	4,231	6,689	37%
Europe						
Total Revenue	0	0	96	135	76	ERR
System Shipments	0	0	148	215	236	ERR
Workstation Shipments	0	0	643	558	572	ERR
Workstation Installed Base	0	0	641	1,166	1,738	ERR
Far East						
Total Revenue	0	0	18	27	27	ERR
System Shipments	0	0	28	43	113	ERR
Workstation Shipments	0	0	122	112	306	ERR
Workstation Installed Base	0	0	121	227	533	ERR
Rest of World						
Total Revenue	57	68	8	10	0	-100%
System Shipments	102	112	12	17	0	-100%
Workstation Shipments	444	491	52	44	0	-100%
Workstation Installed Base	1,020	1,460	1,439	1,410	0	-100%
Standalone						
Total Revenue	0	0	0	2	14	ERR
System Shipments	0	0	0	33	242	ERR
Workstation Shipments	0	0	0	33	242	ERR
Workstation Installed Base	0	0	0	33	274	ERR
Host-Dependent						
Total Revenue	125	150	260	413	278	22%
System Shipments	245	270	399	667	408	14%
Workstation Shipments	1,065	1,183	1,735	1,784	2,475	23%
Workstation Installed Base	2,922	3,959	5,494	7,001	8,067	29%
Personal Computer						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	619	ERR
Workstation Shipments	0	0	0	0	619	ERR
Workstation Installed Base	0	0	0	0	619	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-34
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	41	49	44	47	49	4%
System Shipments	92	100	68	79	219	24%
Workstation Shipments	396	434	296	206	555	9%
Workstation Installed Base	958	1,344	1,573	1,696	1,730	16%
North America						
Total Revenue	22	26	23	27	33	11%
System Shipments	53	57	36	48	163	32%
Workstation Shipments	228	247	156	125	412	16%
Workstation Installed Base	562	781	898	976	1,388	25%
Europe						
Total Revenue	0	0	16	15	8	ERR
System Shipments	0	0	25	24	24	ERR
Workstation Shipments	0	0	109	63	58	ERR
Workstation Installed Base	0	0	109	166	224	ERR
Far East						
Total Revenue	0	0	3	3	8	ERR
System Shipments	0	0	5	5	31	ERR
Workstation Shipments	0	0	22	13	85	ERR
Workstation Installed Base	0	0	22	33	118	ERR
Rest of World						
Total Revenue	19	23	1	1	0	-100%
System Shipments	39	43	2	2	0	-100%
Workstation Shipments	168	187	9	5	0	-100%
Workstation Installed Base	396	563	544	521	0	-100%
Standalone						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	3	53	ERR
Workstation Shipments	0	0	0	3	53	ERR
Workstation Installed Base	0	0	0	3	56	ERR
Host-Dependent						
Total Revenue	41	49	44	47	44	2%
System Shipments	92	100	68	76	67	-8%
Workstation Shipments	396	434	296	203	403	0%
Workstation Installed Base	958	1,344	1,573	1,693	1,575	13%
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	99	ERR
Workstation Shipments	0	0	0	0	99	ERR
Workstation Installed Base	0	0	0	0	99	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-35
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	24	29	8	8	4	-34%
System Shipments	54	59	13	13	17	-25%
Workstation Shipments	312	344	56	36	43	-39%
Workstation Installed Base	680	902	910	900	622	-2%
North America						
Total Revenue	14	17	4	5	1	-44%
System Shipments	34	37	7	8	7	-34%
Workstation Shipments	146	160	30	22	17	-42%
Workstation Installed Base	408	548	549	543	560	8%
Europe						
Total Revenue	0	0	3	3	2	ERR
System Shipments	0	0	5	4	7	ERR
Workstation Shipments	0	0	22	11	16	ERR
Workstation Installed Base	0	0	20	30	46	ERR
Far East						
Total Revenue	0	0	1	1	1	ERR
System Shipments	0	0	1	1	4	ERR
Workstation Shipments	0	0	4	3	11	ERR
Workstation Installed Base	0	0	4	6	17	ERR
Rest of World						
Total Revenue	10	12	0	0	0	-100%
System Shipments	20	22	0	0	0	-100%
Workstation Shipments	166	184	0	0	0	-100%
Workstation Installed Base	272	354	337	321	0	-100%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	4	ERR
Host-Dependent						
Total Revenue	24	29	8	8	4	-36%
System Shipments	54	59	13	13	5	-45%
Workstation Shipments	312	344	56	36	31	-44%
Workstation Installed Base	680	902	910	900	610	-3%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	8	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-36
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	244	ERR
Workstation Shipments	0	0	0	0	244	ERR
Workstation Installed Base	0	0	0	0	244	ERR
North America						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	244	ERR
Workstation Shipments	0	0	0	0	244	ERR
Workstation Installed Base	0	0	0	0	244	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	244	ERR
Workstation Shipments	0	0	0	0	244	ERR
Workstation Installed Base	0	0	0	0	244	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-37
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	13	16	8	16	18	8%
System Shipments	28	33	13	27	28	0%
Workstation Shipments	120	141	56	71	150	6%
Workstation Installed Base	399	520	548	590	489	5%
North America						
Total Revenue	5	6	4	10	9	17%
System Shipments	12	14	7	16	16	7%
Workstation Shipments	51	59	30	43	93	16%
Workstation Installed Base	197	246	262	291	384	18%
Europe						
Total Revenue	0	0	3	5	7	ERR
System Shipments	0	0	5	8	6	ERR
Workstation Shipments	0	0	22	21	39	ERR
Workstation Installed Base	0	0	20	40	79	ERR
Far East						
Total Revenue	0	0	1	1	2	ERR
System Shipments	0	0	1	2	7	ERR
Workstation Shipments	0	0	4	5	19	ERR
Workstation Installed Base	0	0	4	8	27	ERR
Rest of World						
Total Revenue	8	10	0	0	0	-100%
System Shipments	16	19	0	1	0	-100%
Workstation Shipments	69	82	0	2	0	-100%
Workstation Installed Base	202	274	262	251	0	-100%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
Host-Dependent						
Total Revenue	13	16	8	16	17	8%
System Shipments	28	33	13	27	24	-4%
Workstation Shipments	120	141	56	71	145	5%
Workstation Installed Base	399	520	548	590	484	5%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-38
 TITLE: Company History
 COMPANY: Computervision
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	73	88	80	70	53	-8%
System Shipments	143	158	123	117	89	-11%
Workstation Shipments	622	692	535	392	466	-7%
Workstation Installed Base	1,654	2,264	2,683	2,851	2,452	10%
North America						
Total Revenue	38	46	42	41	31	-5%
System Shipments	80	89	65	71	52	-10%
Workstation Shipments	348	389	283	185	310	-3%
Workstation Installed Base	990	1,330	1,546	1,653	1,963	19%
Europe						
Total Revenue	0	0	30	22	16	ERR
System Shipments	0	0	45	36	14	ERR
Workstation Shipments	0	0	196	180	94	ERR
Workstation Installed Base	0	0	197	279	373	ERR
Far East						
Total Revenue	0	0	6	4	5	ERR
System Shipments	0	0	9	7	23	ERR
Workstation Shipments	0	0	39	19	62	ERR
Workstation Installed Base	0	0	37	54	116	ERR
Rest of World						
Total Revenue	35	42	2	2	0	-100%
System Shipments	63	69	4	3	0	-100%
Workstation Shipments	274	303	17	8	0	-100%
Workstation Installed Base	664	934	903	865	0	-100%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	5	7	ERR
Workstation Shipments	0	0	0	92	7	ERR
Workstation Installed Base	0	0	0	3	10	ERR
Host-Dependent						
Total Revenue	73	88	80	70	52	-8%
System Shipments	143	158	123	112	74	-15%
Workstation Shipments	622	692	535	300	451	-8%
Workstation Installed Base	1,654	2,264	2,683	2,848	2,434	10%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	8	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-39
 TITLE: Company History
 COMPANY: Control Data
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	34	50	116	ERR
System Shipments	0	0	40	134	253	ERR
Workstation Shipments	0	0	489	436	856	ERR
Workstation Installed Base	0	0	491	904	1,755	ERR
North America						
Total Revenue	0	0	27	43	86	ERR
System Shipments	0	0	33	115	216	ERR
Workstation Shipments	0	0	403	375	661	ERR
Workstation Installed Base	0	0	404	754	1,415	ERR
Europe						
Total Revenue	0	0	3	4	21	ERR
System Shipments	0	0	3	10	13	ERR
Workstation Shipments	0	0	37	33	128	ERR
Workstation Installed Base	0	0	39	72	195	ERR
Far East						
Total Revenue	0	0	3	2	6	ERR
System Shipments	0	0	3	7	16	ERR
Workstation Shipments	0	0	37	21	46	ERR
Workstation Installed Base	0	0	39	62	108	ERR
Rest of World						
Total Revenue	0	0	1	1	3	ERR
System Shipments	0	0	1	2	8	ERR
Workstation Shipments	0	0	12	7	20	ERR
Workstation Installed Base	0	0	9	16	36	ERR
Standalone						
Total Revenue	0	0	0	5	7	ERR
System Shipments	0	0	0	70	86	ERR
Workstation Shipments	0	0	0	70	86	ERR
Workstation Installed Base	0	0	0	70	151	ERR
Host-Dependent						
Total Revenue	0	0	34	45	107	ERR
System Shipments	0	0	40	64	70	ERR
Workstation Shipments	0	0	489	366	674	ERR
Workstation Installed Base	0	0	491	834	1,508	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	96	ERR
Workstation Shipments	0	0	0	0	96	ERR
Workstation Installed Base	0	0	0	0	96	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-40
 TITLE: Company History
 COMPANY: Control Data
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	30	40	93	ERR
System Shipments	0	0	36	57	61	ERR
Workstation Shipments	0	0	440	324	585	ERR
Workstation Installed Base	0	0	439	740	1,325	ERR
North America						
Total Revenue	0	0	23	33	65	ERR
System Shipments	0	0	29	48	44	ERR
Workstation Shipments	0	0	354	273	418	ERR
Workstation Installed Base	0	0	352	607	1,025	ERR
Europe						
Total Revenue	0	0	3	4	21	ERR
System Shipments	0	0	3	5	13	ERR
Workstation Shipments	0	0	37	28	128	ERR
Workstation Installed Base	0	0	39	64	192	ERR
Far East						
Total Revenue	0	0	3	2	5	ERR
System Shipments	0	0	3	3	3	ERR
Workstation Shipments	0	0	37	17	28	ERR
Workstation Installed Base	0	0	39	55	83	ERR
Rest of World						
Total Revenue	0	0	1	1	2	ERR
System Shipments	0	0	1	1	1	ERR
Workstation Shipments	0	0	12	6	11	ERR
Workstation Installed Base	0	0	9	14	25	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	30	40	93	ERR
System Shipments	0	0	36	57	61	ERR
Workstation Shipments	0	0	440	324	585	ERR
Workstation Installed Base	0	0	439	740	1,325	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-41
 TITLE: Company History
 COMPANY: Control Data
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	98	ERR
Workstation Shipments	0	0	0	0	111	ERR
Workstation Installed Base	0	0	0	0	111	ERR
North America						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	88	ERR
Workstation Shipments	0	0	0	0	100	ERR
Workstation Installed Base	0	0	0	0	100	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	7	ERR
Workstation Shipments	0	0	0	0	7	ERR
Workstation Installed Base	0	0	0	0	7	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	4	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	15	ERR
Workstation Installed Base	0	0	0	0	15	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	96	ERR
Workstation Shipments	0	0	0	0	96	ERR
Workstation Installed Base	0	0	0	0	96	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-42
 TITLE: Company History
 COMPANY: Control Data
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	1	8	14	ERR
System Shipments	0	0	1	59	91	ERR
Workstation Shipments	0	0	12	82	131	ERR
Workstation Installed Base	0	0	12	96	222	ERR
North America						
Total Revenue	0	0	1	8	12	ERR
System Shipments	0	0	1	50	82	ERR
Workstation Shipments	0	0	12	73	118	ERR
Workstation Installed Base	0	0	12	82	200	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	5	0	ERR
Workstation Shipments	0	0	0	5	0	ERR
Workstation Installed Base	0	0	0	7	2	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	3	6	ERR
Workstation Shipments	0	0	0	3	9	ERR
Workstation Installed Base	0	0	0	5	14	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	1	3	ERR
Workstation Shipments	0	0	0	1	4	ERR
Workstation Installed Base	0	0	0	2	6	ERR
Standalone						
Total Revenue	0	0	0	4	7	ERR
System Shipments	0	0	0	54	86	ERR
Workstation Shipments	0	0	0	54	86	ERR
Workstation Installed Base	0	0	0	54	135	ERR
Host-Dependent						
Total Revenue	0	0	1	4	7	ERR
System Shipments	0	0	1	5	5	ERR
Workstation Shipments	0	0	12	28	44	ERR
Workstation Installed Base	0	0	12	42	86	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-43
 TITLE: Company History
 COMPANY: Control Data
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	3	3	5	ERR
System Shipments	0	0	3	18	3	ERR
Workstation Shipments	0	0	37	27	30	ERR
Workstation Installed Base	0	0	40	65	95	ERR
North America						
Total Revenue	0	0	3	3	4	ERR
System Shipments	0	0	3	17	3	ERR
Workstation Shipments	0	0	37	26	27	ERR
Workstation Installed Base	0	0	40	62	89	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	1	1	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	2	ERR
Workstation Installed Base	0	0	0	2	4	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Standalone						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	16	0	ERR
Workstation Shipments	0	0	0	16	0	ERR
Workstation Installed Base	0	0	0	16	16	ERR
Host-Dependent						
Total Revenue	0	0	3	1	5	ERR
System Shipments	0	0	3	2	3	ERR
Workstation Shipments	0	0	37	11	30	ERR
Workstation Installed Base	0	0	40	49	79	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-44
 TITLE: Company History
 COMPANY: Daisy
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	7	28	82	134	ERR
System Shipments	3	106	407	1,440	2,001	408%
Workstation Shipments	3	106	407	1,435	2,001	408%
Workstation Installed Base	3	134	534	1,948	3,893	500%
North America						
Total Revenue	0	4	21	56	93	ERR
System Shipments	3	69	297	1,020	1,423	367%
Workstation Shipments	3	69	297	1,020	1,423	367%
Workstation Installed Base	3	72	365	1,367	2,790	452%
Europe						
Total Revenue	0	0	4	13	28	ERR
System Shipments	0	0	66	266	402	ERR
Workstation Shipments	0	0	66	266	402	ERR
Workstation Installed Base	0	0	66	328	730	ERR
Far East						
Total Revenue	0	0	3	13	13	ERR
System Shipments	0	0	44	154	176	ERR
Workstation Shipments	0	0	44	149	176	ERR
Workstation Installed Base	0	0	44	197	373	ERR
Rest of World						
Total Revenue	0	2	0	0	0	ERR
System Shipments	0	37	0	0	0	ERR
Workstation Shipments	0	37	0	0	0	ERR
Workstation Installed Base	0	62	59	56	0	ERR
Standalone						
Total Revenue	0	0	28	81	114	ERR
System Shipments	0	0	407	1,400	1,368	ERR
Workstation Shipments	0	0	407	1,400	1,368	ERR
Workstation Installed Base	0	0	407	1,787	3,155	ERR
Host-Dependent						
Total Revenue	0	7	0	0	0	ERR
System Shipments	3	106	0	0	0	-100%
Workstation Shipments	3	106	0	0	0	-100%
Workstation Installed Base	3	134	127	0	0	-100%
Personal Computer						
Total Revenue	0	0	0	1	20	ERR
System Shipments	0	0	0	40	632	ERR
Workstation Shipments	0	0	0	35	632	ERR
Workstation Installed Base	0	0	0	40	672	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-45
 TITLE: Company History
 COMPANY: Daisy
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	7	28	64	107	ERR
System Shipments	3	106	407	1,255	1,691	387%
Workstation Shipments	3	106	407	1,250	1,691	387%
Workstation Installed Base	3	134	534	1,763	3,398	480%
North America						
Total Revenue	0	4	21	45	74	ERR
System Shipments	3	69	297	887	1,214	349%
Workstation Shipments	3	69	297	887	1,214	349%
Workstation Installed Base	3	72	365	1,234	2,448	434%
Europe						
Total Revenue	0	0	4	10	23	ERR
System Shipments	0	0	66	239	329	ERR
Workstation Shipments	0	0	66	239	329	ERR
Workstation Installed Base	0	0	66	301	630	ERR
Far East						
Total Revenue	0	0	3	10	11	ERR
System Shipments	0	0	44	129	148	ERR
Workstation Shipments	0	0	44	124	148	ERR
Workstation Installed Base	0	0	44	172	320	ERR
Rest of World						
Total Revenue	0	2	0	0	0	ERR
System Shipments	0	37	0	0	0	ERR
Workstation Shipments	0	37	0	0	0	ERR
Workstation Installed Base	0	62	59	56	0	ERR
Standalone						
Total Revenue	0	0	28	63	88	ERR
System Shipments	0	0	407	1,215	1,084	ERR
Workstation Shipments	0	0	407	1,215	1,084	ERR
Workstation Installed Base	0	0	407	1,602	2,686	ERR
Host-Dependent						
Total Revenue	0	7	0	0	0	ERR
System Shipments	3	106	0	0	0	-100%
Workstation Shipments	3	106	0	0	0	-100%
Workstation Installed Base	3	134	127	121	65	116%
Personal Computer						
Total Revenue	0	0	0	1	19	ERR
System Shipments	0	0	0	40	607	ERR
Workstation Shipments	0	0	0	35	607	ERR
Workstation Installed Base	0	0	0	40	647	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-46
 TITLE: Company History
 COMPANY: Daisy
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	17	27	ERR
System Shipments	0	0	0	185	310	ERR
Workstation Shipments	0	0	0	185	310	ERR
Workstation Installed Base	0	0	0	185	495	ERR
North America						
Total Revenue	0	0	0	11	19	ERR
System Shipments	0	0	0	133	210	ERR
Workstation Shipments	0	0	0	133	210	ERR
Workstation Installed Base	0	0	0	133	343	ERR
Europe						
Total Revenue	0	0	0	3	5	ERR
System Shipments	0	0	0	27	73	ERR
Workstation Shipments	0	0	0	27	73	ERR
Workstation Installed Base	0	0	0	27	100	ERR
Far East						
Total Revenue	0	0	0	3	3	ERR
System Shipments	0	0	0	25	28	ERR
Workstation Shipments	0	0	0	25	28	ERR
Workstation Installed Base	0	0	0	25	53	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	17	26	ERR
System Shipments	0	0	0	185	284	ERR
Workstation Shipments	0	0	0	185	284	ERR
Workstation Installed Base	0	0	0	185	469	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	26	ERR
Workstation Shipments	0	0	0	0	26	ERR
Workstation Installed Base	0	0	0	0	26	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-47
 TITLE: Company History
 COMPANY: Ferranti
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	27	ERR
System Shipments	0	0	0	0	41	ERR
Workstation Shipments	0	0	0	0	141	ERR
Workstation Installed Base	0	0	0	0	141	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	5	ERR
Workstation Installed Base	0	0	0	0	5	ERR
Europe						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	39	ERR
Workstation Shipments	0	0	0	0	136	ERR
Workstation Installed Base	0	0	0	0	136	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	15	ERR
Workstation Shipments	0	0	0	0	15	ERR
Workstation Installed Base	0	0	0	0	15	ERR
Host-Dependent						
Total Revenue	0	0	0	0	23	ERR
System Shipments	0	0	0	0	26	ERR
Workstation Shipments	0	0	0	0	126	ERR
Workstation Installed Base	0	0	0	0	126	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-48
 TITLE: Company History
 COMPANY: Ferranti
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	39	ERR
Workstation Shipments	0	0	0	0	138	ERR
Workstation Installed Base	0	0	0	0	138	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
Europe						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	38	ERR
Workstation Shipments	0	0	0	0	136	ERR
Workstation Installed Base	0	0	0	0	136	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	14	ERR
Workstation Shipments	0	0	0	0	14	ERR
Workstation Installed Base	0	0	0	0	14	ERR
Host-Dependent						
Total Revenue	0	0	0	0	23	ERR
System Shipments	0	0	0	0	26	ERR
Workstation Shipments	0	0	0	0	124	ERR
Workstation Installed Base	0	0	0	0	124	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-49
 TITLE: Company History
 COMPANY: Ferranti
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Host-Dependent						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-50
 TITLE: Company History
 COMPANY: Ferranti
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-51
 TITLE: Company History
 COMPANY: Futurenet
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	33	ERR
Workstation Installed Base	0	0	0	0	33	ERR
North America						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	25	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	5	ERR
Workstation Shipments	0	0	0	0	5	ERR
Workstation Installed Base	0	0	0	0	5	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	4	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	33	ERR
Workstation Installed Base	0	0	0	0	33	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-52
 TITLE: Company History
 COMPANY: Futurenet
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	33	ERR
Workstation Installed Base	0	0	0	0	33	ERR
North America						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	25	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	5	ERR
Workstation Shipments	0	0	0	0	5	ERR
Workstation Installed Base	0	0	0	0	5	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	4	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	33	ERR
Workstation Installed Base	0	0	0	0	33	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-53
 TITLE: Company History
 COMPANY: Gerber Scientific
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	10	11	12	8	6	-12%
System Shipments	125	138	134	89	64	-16%
Workstation Shipments	125	138	134	89	64	-16%
Workstation Installed Base	152	290	333	405	279	16%
North America						
Total Revenue	8	9	10	7	5	-13%
System Shipments	98	111	115	77	53	-14%
Workstation Shipments	98	111	115	77	53	-14%
Workstation Installed Base	98	209	314	375	239	25%
Europe						
Total Revenue	0	0	2	1	1	ERR
System Shipments	0	0	19	11	11	ERR
Workstation Shipments	0	0	19	11	11	ERR
Workstation Installed Base	0	0	19	29	40	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	2	2	0	0	0	-100%
System Shipments	27	27	0	1	0	-100%
Workstation Shipments	27	27	0	1	0	-100%
Workstation Installed Base	54	81	0	1	0	-100%
Standalone						
Total Revenue	0	0	12	8	6	ERR
System Shipments	0	0	134	89	64	ERR
Workstation Shipments	0	0	134	89	64	ERR
Workstation Installed Base	0	0	134	216	279	ERR
Host-Dependent						
Total Revenue	10	11	0	0	0	-100%
System Shipments	125	138	0	0	0	-100%
Workstation Shipments	125	138	0	0	0	-100%
Workstation Installed Base	152	290	199	189	0	-100%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-54
 TITLE: Company History
 COMPANY: Gerber Scientific
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	10	11	12	8	6	-12%
System Shipments	125	138	134	89	64	-16%
Workstation Shipments	125	138	134	89	64	-16%
Workstation Installed Base	152	290	333	405	279	16%
North America						
Total Revenue	8	9	10	7	5	-13%
System Shipments	98	111	115	77	53	-14%
Workstation Shipments	98	111	115	77	53	-14%
Workstation Installed Base	98	209	314	375	239	25%
Europe						
Total Revenue	0	0	2	1	1	ERR
System Shipments	0	0	19	11	11	ERR
Workstation Shipments	0	0	19	11	11	ERR
Workstation Installed Base	0	0	19	29	40	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	2	2	0	0	0	-100%
System Shipments	27	27	0	1	0	-100%
Workstation Shipments	27	27	0	1	0	-100%
Workstation Installed Base	54	81	0	1	0	-100%
Standalone						
Total Revenue	0	0	12	8	6	ERR
System Shipments	0	0	134	89	64	ERR
Workstation Shipments	0	0	134	89	64	ERR
Workstation Installed Base	0	0	134	216	279	ERR
Host-Dependent						
Total Revenue	10	11	0	0	0	-100%
System Shipments	125	138	0	0	0	-100%
Workstation Shipments	125	138	0	0	0	-100%
Workstation Installed Base	152	290	199	189	0	-100%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-55
 TITLE: Company History
 COMPANY: Gerber Systems
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	16	18	25	21	22	9%
System Shipments	37	42	111	200	194	51%
Workstation Shipments	157	140	198	210	194	5%
Workstation Installed Base	601	711	874	1,042	426	-8%
North America						
Total Revenue	16	18	21	14	15	-1%
System Shipments	37	42	89	140	136	38%
Workstation Shipments	157	140	158	149	136	-4%
Workstation Installed Base	601	711	834	942	302	-16%
Europe						
Total Revenue	0	0	2	4	4	ERR
System Shipments	0	0	11	35	34	ERR
Workstation Shipments	0	0	20	36	34	ERR
Workstation Installed Base	0	0	20	55	72	ERR
Far East						
Total Revenue	0	0	0	2	2	ERR
System Shipments	0	0	0	19	19	ERR
Workstation Shipments	0	0	0	19	19	ERR
Workstation Installed Base	0	0	0	19	38	ERR
Rest of World						
Total Revenue	0	0	2	1	1	ERR
System Shipments	0	0	11	6	6	ERR
Workstation Shipments	0	0	20	6	6	ERR
Workstation Installed Base	0	0	20	26	15	ERR
Standalone						
Total Revenue	0	0	3	21	22	ERR
System Shipments	0	0	33	200	194	ERR
Workstation Shipments	0	0	33	200	194	ERR
Workstation Installed Base	0	0	33	232	426	ERR
Host-Dependent						
Total Revenue	16	18	22	0	0	-100%
System Shipments	37	42	78	0	0	-100%
Workstation Shipments	157	140	165	10	0	-100%
Workstation Installed Base	601	711	841	810	0	-100%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-56
 TITLE: Company History
 COMPANY: Gerber Systems
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	16	18	25	21	22	9%
System Shipments	37	42	111	200	194	51%
Workstation Shipments	157	140	198	210	194	5%
Workstation Installed Base	601	711	874	1,042	426	-8%
North America						
Total Revenue	16	18	21	14	15	-1%
System Shipments	37	42	89	140	136	38%
Workstation Shipments	157	140	158	149	136	-4%
Workstation Installed Base	601	711	834	942	302	-16%
Europe						
Total Revenue	0	0	2	4	4	ERR
System Shipments	0	0	11	35	34	ERR
Workstation Shipments	0	0	20	36	34	ERR
Workstation Installed Base	0	0	20	55	72	ERR
Far East						
Total Revenue	0	0	0	2	2	ERR
System Shipments	0	0	0	19	19	ERR
Workstation Shipments	0	0	0	19	19	ERR
Workstation Installed Base	0	0	0	19	38	ERR
Rest of World						
Total Revenue	0	0	2	1	1	ERR
System Shipments	0	0	11	6	6	ERR
Workstation Shipments	0	0	20	6	6	ERR
Workstation Installed Base	0	0	20	26	15	ERR
Standalone						
Total Revenue	0	0	3	21	22	ERR
System Shipments	0	0	33	200	194	ERR
Workstation Shipments	0	0	33	200	194	ERR
Workstation Installed Base	0	0	33	232	426	ERR
Host-Dependent						
Total Revenue	16	18	22	0	0	-100%
System Shipments	37	42	78	0	0	-100%
Workstation Shipments	157	140	165	10	0	-100%
Workstation Installed Base	601	711	841	810	0	-100%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-57
 TITLE: Company History
 COMPANY: Grafter
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	-----	-----	-----	-----	-----
Worldwide						
Total Revenue	0	0	0	0	24	ERR
System Shipments	0	0	0	0	84	ERR
Workstation Shipments	0	0	0	0	222	ERR
Workstation Installed Base	0	0	0	0	222	ERR
North America						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	55	ERR
Workstation Shipments	0	0	0	0	144	ERR
Workstation Installed Base	0	0	0	0	144	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	23	ERR
Workstation Shipments	0	0	0	0	60	ERR
Workstation Installed Base	0	0	0	0	60	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	11	ERR
Workstation Installed Base	0	0	0	0	11	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	7	ERR
Workstation Installed Base	0	0	0	0	7	ERR
Standalone						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	22	ERR
Workstation Shipments	0	0	0	0	22	ERR
Workstation Installed Base	0	0	0	0	22	ERR
Host-Dependent						
Total Revenue	0	0	0	0	22	ERR
System Shipments	0	0	0	0	63	ERR
Workstation Shipments	0	0	0	0	200	ERR
Workstation Installed Base	0	0	0	0	200	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-58
 TITLE: Company History
 COMPANY: Graftek
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	24	ERR
System Shipments	0	0	0	0	84	ERR
Workstation Shipments	0	0	0	0	222	ERR
Workstation Installed Base	0	0	0	0	222	ERR
North America						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	55	ERR
Workstation Shipments	0	0	0	0	144	ERR
Workstation Installed Base	0	0	0	0	144	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	23	ERR
Workstation Shipments	0	0	0	0	60	ERR
Workstation Installed Base	0	0	0	0	60	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	11	ERR
Workstation Installed Base	0	0	0	0	11	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	7	ERR
Workstation Installed Base	0	0	0	0	7	ERR
Standalone						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	22	ERR
Workstation Shipments	0	0	0	0	22	ERR
Workstation Installed Base	0	0	0	0	22	ERR
Host-Dependent						
Total Revenue	0	0	0	0	22	ERR
System Shipments	0	0	0	0	63	ERR
Workstation Shipments	0	0	0	0	200	ERR
Workstation Installed Base	0	0	0	0	200	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-59
 TITLE: Company History
 COMPANY: Holguin-CAD
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	50	ERR
System Shipments	0	0	0	0	521	ERR
Workstation Shipments	0	0	0	0	521	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	44	ERR
System Shipments	0	0	0	0	437	ERR
Workstation Shipments	0	0	0	0	437	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	62	ERR
Workstation Shipments	0	0	0	0	62	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	17	ERR
Workstation Shipments	0	0	0	0	17	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	4	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	50	ERR
System Shipments	0	0	0	0	521	ERR
Workstation Shipments	0	0	0	0	521	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-60
 TITLE: Company History
 COMPANY: Holguin-CAD
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	143	ERR
Workstation Shipments	0	0	0	0	143	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	95	ERR
Workstation Shipments	0	0	0	0	95	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	43	ERR
Workstation Shipments	0	0	0	0	43	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	143	ERR
Workstation Shipments	0	0	0	0	143	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-61
 TITLE: Company History
 COMPANY: Holguin-CAD
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	38	ERR
System Shipments	0	0	0	0	377	ERR
Workstation Shipments	0	0	0	0	377	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	35	ERR
System Shipments	0	0	0	0	342	ERR
Workstation Shipments	0	0	0	0	342	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	19	ERR
Workstation Shipments	0	0	0	0	19	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	13	ERR
Workstation Shipments	0	0	0	0	13	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	38	ERR
System Shipments	0	0	0	0	377	ERR
Workstation Shipments	0	0	0	0	377	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-62
 TITLE: Company History
 COMPANY: Hewlett-Packard
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	90	ERR
System Shipments	0	0	0	0	1,447	ERR
Workstation Shipments	0	0	0	0	1,447	ERR
Workstation Installed Base	0	0	0	0	1,447	ERR
North America						
Total Revenue	0	0	0	0	71	ERR
System Shipments	0	0	0	0	1,130	ERR
Workstation Shipments	0	0	0	0	1,130	ERR
Workstation Installed Base	0	0	0	0	1,130	ERR
Europe						
Total Revenue	0	0	0	0	9	ERR
System Shipments	0	0	0	0	180	ERR
Workstation Shipments	0	0	0	0	180	ERR
Workstation Installed Base	0	0	0	0	180	ERR
Far East						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	108	ERR
Workstation Shipments	0	0	0	0	108	ERR
Workstation Installed Base	0	0	0	0	108	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	29	ERR
Workstation Shipments	0	0	0	0	29	ERR
Workstation Installed Base	0	0	0	0	29	ERR
Standalone						
Total Revenue	0	0	0	0	90	ERR
System Shipments	0	0	0	0	1,447	ERR
Workstation Shipments	0	0	0	0	1,447	ERR
Workstation Installed Base	0	0	0	0	1,447	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-63
 TITLE: Company History
 COMPANY: Hewlett-Packard
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	50	ERR
System Shipments	0	0	0	0	787	ERR
Workstation Shipments	0	0	0	0	787	ERR
Workstation Installed Base	0	0	0	0	787	ERR
North America						
Total Revenue	0	0	0	0	38	ERR
System Shipments	0	0	0	0	573	ERR
Workstation Shipments	0	0	0	0	573	ERR
Workstation Installed Base	0	0	0	0	573	ERR
Europe						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	138	ERR
Workstation Shipments	0	0	0	0	138	ERR
Workstation Installed Base	0	0	0	0	138	ERR
Far East						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	62	ERR
Workstation Shipments	0	0	0	0	62	ERR
Workstation Installed Base	0	0	0	0	62	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	14	ERR
Workstation Shipments	0	0	0	0	14	ERR
Workstation Installed Base	0	0	0	0	14	ERR
Standalone						
Total Revenue	0	0	0	0	50	ERR
System Shipments	0	0	0	0	787	ERR
Workstation Shipments	0	0	0	0	787	ERR
Workstation Installed Base	0	0	0	0	787	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-64
 TITLE: Company History
 COMPANY: Hewlett-Packard
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	161	ERR
Workstation Shipments	0	0	0	0	161	ERR
Workstation Installed Base	0	0	0	0	161	ERR
North America						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	103	ERR
Workstation Shipments	0	0	0	0	103	ERR
Workstation Installed Base	0	0	0	0	103	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	42	ERR
Workstation Shipments	0	0	0	0	42	ERR
Workstation Installed Base	0	0	0	0	42	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	12	ERR
Workstation Shipments	0	0	0	0	12	ERR
Workstation Installed Base	0	0	0	0	12	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Standalone						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	161	ERR
Workstation Shipments	0	0	0	0	161	ERR
Workstation Installed Base	0	0	0	0	161	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-65
 TITLE: Company History
 COMPANY: Hewlett-Packard
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	500	ERR
Workstation Shipments	0	0	0	0	500	ERR
Workstation Installed Base	0	0	0	0	500	ERR
North America						
Total Revenue	0	0	0	0	27	ERR
System Shipments	0	0	0	0	454	ERR
Workstation Shipments	0	0	0	0	454	ERR
Workstation Installed Base	0	0	0	0	454	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	33	ERR
Workstation Installed Base	0	0	0	0	33	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	12	ERR
Workstation Shipments	0	0	0	0	12	ERR
Workstation Installed Base	0	0	0	0	12	ERR
Standalone						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	500	ERR
Workstation Shipments	0	0	0	0	500	ERR
Workstation Installed Base	0	0	0	0	500	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-66
 TITLE: Company History
 COMPANY: IBM
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	170	311	474	700	870	50%
System Shipments	116	216	365	575	1,285	82%
Workstation Shipments	753	1,384	3,863	6,345	8,800	85%
Workstation Installed Base	1,066	2,397	6,135	12,159	20,480	109%
North America						
Total Revenue	92	156	241	435	473	51%
System Shipments	66	122	186	370	432	60%
Workstation Shipments	439	781	1,633	4,079	4,555	79%
Workstation Installed Base	625	1,375	2,939	6,858	11,207	106%
Europe						
Total Revenue	0	0	81	91	198	ERR
System Shipments	0	0	62	71	181	ERR
Workstation Shipments	0	0	773	781	1,904	ERR
Workstation Installed Base	0	0	772	1,508	3,081	ERR
Far East						
Total Revenue	0	0	128	146	182	ERR
System Shipments	0	0	99	113	656	ERR
Workstation Shipments	0	0	1,231	1,251	2,174	ERR
Workstation Installed Base	0	0	1,226	2,415	4,646	ERR
Rest of World						
Total Revenue	78	155	24	27	17	-31%
System Shipments	50	94	18	21	16	-25%
Workstation Shipments	314	603	226	234	168	-15%
Workstation Installed Base	441	1,022	1,198	1,378	1,546	37%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	170	311	474	700	862	50%
System Shipments	116	216	365	575	787	61%
Workstation Shipments	753	1,384	3,863	6,345	8,303	82%
Workstation Installed Base	1,066	2,397	6,135	12,159	19,983	108%
Personal Computer						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	497	ERR
Workstation Shipments	0	0	0	0	497	ERR
Workstation Installed Base	0	0	0	0	497	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-67
 TITLE: Company History
 COMPANY: IBM
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	170	302	452	661	783	47%
System Shipments	116	209	347	530	977	70%
Workstation Shipments	753	1,346	3,644	5,898	7,763	79%
Workstation Installed Base	1,066	2,359	5,890	11,483	18,766	105%
North America						
Total Revenue	92	148	231	410	412	45%
System Shipments	66	116	177	340	376	55%
Workstation Shipments	439	748	1,523	3,785	3,966	73%
Workstation Installed Base	625	1,342	2,801	6,442	10,215	101%
Europe						
Total Revenue	0	0	77	86	194	ERR
System Shipments	0	0	59	65	177	ERR
Workstation Shipments	0	0	736	723	1,866	ERR
Workstation Installed Base	0	0	736	1,420	2,963	ERR
Far East						
Total Revenue	0	0	122	139	162	ERR
System Shipments	0	0	94	105	410	ERR
Workstation Shipments	0	0	1,171	1,168	1,779	ERR
Workstation Installed Base	0	0	1,170	2,275	4,090	ERR
Rest of World						
Total Revenue	78	154	23	26	16	-33%
System Shipments	50	93	17	20	14	-27%
Workstation Shipments	314	598	214	222	151	-17%
Workstation Installed Base	441	1,017	1,183	1,346	1,497	36%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	170	302	452	661	778	46%
System Shipments	116	209	347	530	711	57%
Workstation Shipments	753	1,346	3,644	5,898	7,497	78%
Workstation Installed Base	1,066	2,359	5,890	11,483	18,500	104%
Personal Computer						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	266	ERR
Workstation Shipments	0	0	0	0	266	ERR
Workstation Installed Base	0	0	0	0	266	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-68
 TITLE: Company History
 COMPANY: IBM
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	7	35	ERR
System Shipments	0	0	0	7	260	ERR
Workstation Shipments	0	0	0	73	534	ERR
Workstation Installed Base	0	0	0	73	626	ERR
North America						
Total Revenue	0	0	0	5	22	ERR
System Shipments	0	0	0	5	20	ERR
Workstation Shipments	0	0	0	50	213	ERR
Workstation Installed Base	0	0	0	47	259	ERR
Europe						
Total Revenue	0	0	0	1	2	ERR
System Shipments	0	0	0	1	2	ERR
Workstation Shipments	0	0	0	10	19	ERR
Workstation Installed Base	0	0	0	9	25	ERR
Far East						
Total Revenue	0	0	0	1	10	ERR
System Shipments	0	0	0	1	237	ERR
Workstation Shipments	0	0	0	12	296	ERR
Workstation Installed Base	0	0	0	14	333	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	1	7	ERR
Workstation Installed Base	0	0	0	3	10	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	7	31	ERR
System Shipments	0	0	0	7	29	ERR
Workstation Shipments	0	0	0	73	303	ERR
Workstation Installed Base	0	0	0	73	395	ERR
Personal Computer						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	231	ERR
Workstation Shipments	0	0	0	0	231	ERR
Workstation Installed Base	0	0	0	0	231	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-69
 TITLE: Company History
 COMPANY: IBM
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	3	5	7	26	ERR
System Shipments	0	2	4	6	24	ERR
Workstation Shipments	0	11	48	66	252	ERR
Workstation Installed Base	0	11	56	116	366	ERR
North America						
Total Revenue	0	3	2	5	20	ERR
System Shipments	0	2	2	4	19	ERR
Workstation Shipments	0	11	24	43	197	ERR
Workstation Installed Base	0	11	34	72	267	ERR
Europe						
Total Revenue	0	0	1	1	0	ERR
System Shipments	0	0	1	1	0	ERR
Workstation Shipments	0	0	11	10	0	ERR
Workstation Installed Base	0	0	8	15	15	ERR
Far East						
Total Revenue	0	0	1	1	5	ERR
System Shipments	0	0	1	1	5	ERR
Workstation Shipments	0	0	12	12	49	ERR
Workstation Installed Base	0	0	12	24	74	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	1	1	5	ERR
Workstation Installed Base	0	0	2	5	10	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	3	5	7	26	ERR
System Shipments	0	2	4	6	24	ERR
Workstation Shipments	0	11	48	66	252	ERR
Workstation Installed Base	0	11	56	116	366	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-70
 TITLE: Company History
 COMPANY: IBM
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	6	17	25	26	ERR
System Shipments	0	5	14	32	24	ERR
Workstation Shipments	0	27	171	308	252	ERR
Workstation Installed Base	0	27	189	487	723	ERR
North America						
Total Revenue	0	5	9	16	19	ERR
System Shipments	0	4	7	21	17	ERR
Workstation Shipments	0	22	86	201	178	ERR
Workstation Installed Base	0	22	104	297	466	ERR
Europe						
Total Revenue	0	0	3	3	2	ERR
System Shipments	0	0	2	4	2	ERR
Workstation Shipments	0	0	26	38	19	ERR
Workstation Installed Base	0	0	28	64	78	ERR
Far East						
Total Revenue	0	0	5	5	5	ERR
System Shipments	0	0	4	6	5	ERR
Workstation Shipments	0	0	48	59	49	ERR
Workstation Installed Base	0	0	44	102	150	ERR
Rest of World						
Total Revenue	0	1	1	1	1	ERR
System Shipments	0	1	1	1	0	ERR
Workstation Shipments	0	5	11	10	5	ERR
Workstation Installed Base	0	5	13	24	29	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	6	17	25	26	ERR
System Shipments	0	5	14	32	24	ERR
Workstation Shipments	0	27	171	308	252	ERR
Workstation Installed Base	0	27	189	487	723	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-71
 TITLE: Company History
 COMPANY: Intergraph
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	73	127	250	404	526	64%
System Shipments	165	383	343	568	635	40%
Workstation Shipments	729	1,721	1,845	3,198	5,144	63%
Workstation Installed Base	1,928	3,553	5,269	8,208	13,105	61%
North America						
Total Revenue	47	83	180	316	398	71%
System Shipments	105	250	255	453	462	45%
Workstation Shipments	464	1,124	1,420	2,550	3,756	69%
Workstation Installed Base	1,224	2,287	3,631	6,000	9,576	67%
Europe						
Total Revenue	15	26	38	77	91	58%
System Shipments	42	93	36	100	131	33%
Workstation Shipments	186	418	199	563	1,047	54%
Workstation Installed Base	567	957	1,115	1,623	2,621	47%
Far East						
Total Revenue	0	0	25	7	1	ERR
System Shipments	0	0	39	11	3	ERR
Workstation Shipments	0	0	170	62	23	ERR
Workstation Installed Base	0	0	175	225	241	ERR
Rest of World						
Total Revenue	11	18	7	4	36	34%
System Shipments	18	40	13	4	39	21%
Workstation Shipments	79	179	56	23	317	42%
Workstation Installed Base	137	309	348	360	667	49%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	73	127	250	404	526	64%
System Shipments	165	383	343	568	635	40%
Workstation Shipments	729	1,721	1,845	3,198	5,144	63%
Workstation Installed Base	1,928	3,553	5,269	8,208	13,105	61%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-72
 TITLE: Company History
 COMPANY: Intergraph
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	53	105	165	ERR
System Shipments	0	19	82	148	201	ERR
Workstation Shipments	0	85	355	833	1,627	ERR
Workstation Installed Base	0	85	460	1,269	2,858	ERR
North America						
Total Revenue	0	0	38	82	119	ERR
System Shipments	0	16	58	118	138	ERR
Workstation Shipments	0	72	251	664	1,124	ERR
Workstation Installed Base	0	72	337	983	2,078	ERR
Europe						
Total Revenue	0	0	8	20	33	ERR
System Shipments	0	0	13	26	48	ERR
Workstation Shipments	0	0	56	146	381	ERR
Workstation Installed Base	0	0	61	204	579	ERR
Far East						
Total Revenue	0	0	5	2	1	ERR
System Shipments	0	0	8	3	3	ERR
Workstation Shipments	0	0	35	17	23	ERR
Workstation Installed Base	0	0	38	51	72	ERR
Rest of World						
Total Revenue	0	0	2	1	11	ERR
System Shipments	0	3	3	1	12	ERR
Workstation Shipments	0	13	13	6	99	ERR
Workstation Installed Base	0	13	24	31	129	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	53	105	165	ERR
System Shipments	0	19	82	148	201	ERR
Workstation Shipments	0	85	355	833	1,627	ERR
Workstation Installed Base	0	85	460	1,269	2,858	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-73
 TITLE: Company History
 COMPANY: Intergraph
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	41	72	110	170	204	49%
System Shipments	75	169	162	238	247	35%
Workstation Shipments	331	759	713	1,341	2,000	57%
Workstation Installed Base	740	1,462	2,141	3,379	5,278	63%
North America						
Total Revenue	32	58	78	133	151	47%
System Shipments	63	141	120	190	175	29%
Workstation Shipments	278	634	519	1,070	1,422	50%
Workstation Installed Base	657	1,258	1,752	2,735	4,075	58%
Europe						
Total Revenue	0	0	18	32	39	ERR
System Shipments	0	0	20	42	57	ERR
Workstation Shipments	0	0	98	237	455	ERR
Workstation Installed Base	0	0	99	331	776	ERR
Far East						
Total Revenue	0	0	11	3	0	ERR
System Shipments	0	0	17	4	0	ERR
Workstation Shipments	0	0	74	23	0	ERR
Workstation Installed Base	0	0	73	94	91	ERR
Rest of World						
Total Revenue	9	14	3	2	14	13%
System Shipments	12	28	5	2	15	6%
Workstation Shipments	53	125	22	11	123	23%
Workstation Installed Base	83	204	217	219	336	42%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	41	72	110	170	204	49%
System Shipments	75	169	162	238	247	35%
Workstation Shipments	331	759	713	1,341	2,000	57%
Workstation Installed Base	740	1,462	2,141	3,379	5,278	63%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-74
 TITLE: Company History
 COMPANY: Intergraph
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	32	55	76	109	135	43%
System Shipments	90	195	81	153	161	16%
Workstation Shipments	398	877	699	862	1,302	34%
Workstation Installed Base	1,188	2,006	2,585	3,320	4,522	40%
North America						
Total Revenue	15	26	54	85	108	65%
System Shipments	42	93	62	122	125	31%
Workstation Shipments	186	418	585	687	1,020	53%
Workstation Installed Base	567	957	1,472	2,087	3,044	52%
Europe						
Total Revenue	15	26	12	21	17	4%
System Shipments	42	93	3	27	25	-12%
Workstation Shipments	186	418	45	152	201	2%
Workstation Installed Base	567	957	955	1,060	1,229	21%
Far East						
Total Revenue	0	0	8	2	0	ERR
System Shipments	0	0	12	3	0	ERR
Workstation Shipments	0	0	52	17	0	ERR
Workstation Installed Base	0	0	54	67	65	ERR
Rest of World						
Total Revenue	3	4	2	1	9	36%
System Shipments	6	9	4	1	10	14%
Workstation Shipments	26	41	17	6	81	33%
Workstation Installed Base	54	92	104	106	184	36%
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	32	55	76	109	135	43%
System Shipments	90	195	81	153	161	16%
Workstation Shipments	398	877	699	862	1,302	34%
Workstation Installed Base	1,188	2,006	2,585	3,320	4,522	40%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-75
 TITLE: Company History
 COMPANY: Intergraph
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	12	20	23	ERR
System Shipments	0	0	18	29	26	ERR
Workstation Shipments	0	0	78	162	214	ERR
Workstation Installed Base	0	0	83	240	447	ERR
North America						
Total Revenue	0	0	11	16	20	ERR
System Shipments	0	0	15	23	23	ERR
Workstation Shipments	0	0	65	129	190	ERR
Workstation Installed Base	0	0	70	195	379	ERR
Europe						
Total Revenue	0	0	0	4	1	ERR
System Shipments	0	0	0	5	1	ERR
Workstation Shipments	0	0	0	28	11	ERR
Workstation Installed Base	0	0	0	28	38	ERR
Far East						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	2	1	0	ERR
Workstation Shipments	0	0	9	5	0	ERR
Workstation Installed Base	0	0	10	13	13	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	1	0	2	ERR
Workstation Shipments	0	0	4	0	14	ERR
Workstation Installed Base	0	0	3	4	18	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	12	20	23	ERR
System Shipments	0	0	18	29	26	ERR
Workstation Shipments	0	0	78	162	214	ERR
Workstation Installed Base	0	0	83	240	447	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-76
 TITLE: Company History
 COMPANY: Matra Datavision
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	36	ERR
System Shipments	0	0	0	0	113	ERR
Workstation Shipments	0	0	0	0	431	ERR
Workstation Installed Base	0	0	0	0	431	ERR
North America						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	21	ERR
Workstation Shipments	0	0	0	0	81	ERR
Workstation Installed Base	0	0	0	0	81	ERR
Europe						
Total Revenue	0	0	0	0	28	ERR
System Shipments	0	0	0	0	88	ERR
Workstation Shipments	0	0	0	0	335	ERR
Workstation Installed Base	0	0	0	0	335	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	15	ERR
Workstation Installed Base	0	0	0	0	15	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	36	ERR
System Shipments	0	0	0	0	113	ERR
Workstation Shipments	0	0	0	0	431	ERR
Workstation Installed Base	0	0	0	0	431	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-77
 TITLE: Company History
 COMPANY: Matra Datavision
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	35	ERR
System Shipments	0	0	0	0	111	ERR
Workstation Shipments	0	0	0	0	423	ERR
Workstation Installed Base	0	0	0	0	423	ERR
North America						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	19	ERR
Workstation Shipments	0	0	0	0	73	ERR
Workstation Installed Base	0	0	0	0	73	ERR
Europe						
Total Revenue	0	0	0	0	28	ERR
System Shipments	0	0	0	0	88	ERR
Workstation Shipments	0	0	0	0	335	ERR
Workstation Installed Base	0	0	0	0	335	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	15	ERR
Workstation Installed Base	0	0	0	0	15	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	35	ERR
System Shipments	0	0	0	0	111	ERR
Workstation Shipments	0	0	0	0	423	ERR
Workstation Installed Base	0	0	0	0	423	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-78
 TITLE: Company History
 COMPANY: Matra Datavision
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	7	ERR
Workstation Installed Base	0	0	0	0	7	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-79
 TITLE: Company History
 COMPANY: McAuto
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	23	37	70	129	166	64%
System Shipments	61	54	123	233	367	57%
Workstation Shipments	183	256	562	1,212	2,470	92%
Workstation Installed Base	285	527	1,063	2,111	4,447	99%
North America						
Total Revenue	23	37	49	112	131	55%
System Shipments	61	54	86	202	299	49%
Workstation Shipments	183	256	392	915	2,094	84%
Workstation Installed Base	285	527	894	1,805	3,777	91%
Europe						
Total Revenue	0	0	21	14	24	ERR
System Shipments	0	0	37	24	44	ERR
Workstation Shipments	0	0	170	111	208	ERR
Workstation Installed Base	0	0	169	276	484	ERR
Far East						
Total Revenue	0	0	0	2	11	ERR
System Shipments	0	0	0	5	24	ERR
Workstation Shipments	0	0	0	178	168	ERR
Workstation Installed Base	0	0	0	19	186	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	2	0	ERR
Workstation Shipments	0	0	0	8	0	ERR
Workstation Installed Base	0	0	0	11	0	ERR
Standalone						
Total Revenue	0	0	0	9	0	ERR
System Shipments	0	0	0	81	22	ERR
Workstation Shipments	0	0	0	238	22	ERR
Workstation Installed Base	0	0	0	79	29	ERR
Host-Dependent						
Total Revenue	23	37	70	120	166	64%
System Shipments	61	54	123	152	346	54%
Workstation Shipments	183	256	562	974	2,449	91%
Workstation Installed Base	285	527	1,063	2,032	4,418	98%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-80
 TITLE: Company History
 COMPANY: McAuto
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	23	37	65	107	136	56%
System Shipments	61	54	114	120	304	49%
Workstation Shipments	183	256	521	791	2,022	82%
Workstation Installed Base	285	527	1,024	1,813	3,780	91%
North America						
Total Revenue	23	37	46	92	107	47%
System Shipments	61	54	80	104	243	41%
Workstation Shipments	183	256	365	685	1,704	75%
Workstation Installed Base	285	527	867	1,551	3,208	83%
Europe						
Total Revenue	0	0	19	12	20	ERR
System Shipments	0	0	34	13	41	ERR
Workstation Shipments	0	0	156	85	180	ERR
Workstation Installed Base	0	0	157	238	418	ERR
Far East						
Total Revenue	0	0	0	2	9	ERR
System Shipments	0	0	0	2	20	ERR
Workstation Shipments	0	0	0	14	138	ERR
Workstation Installed Base	0	0	0	16	153	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	7	0	ERR
Workstation Installed Base	0	0	0	8	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	22	ERR
Workstation Shipments	0	0	0	0	22	ERR
Workstation Installed Base	0	0	0	0	22	ERR
Host-Dependent						
Total Revenue	23	37	65	107	136	56%
System Shipments	61	54	114	120	282	47%
Workstation Shipments	183	256	521	791	2,000	82%
Workstation Installed Base	285	527	1,024	1,813	3,758	91%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-81
 TITLE: Company History
 COMPANY: McAuto
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	5	20	30	ERR
System Shipments	0	0	9	110	63	ERR
Workstation Shipments	0	0	41	406	449	ERR
Workstation Installed Base	0	0	39	284	655	ERR
North America						
Total Revenue	0	0	4	18	25	ERR
System Shipments	0	0	6	95	56	ERR
Workstation Shipments	0	0	27	216	390	ERR
Workstation Installed Base	0	0	27	241	557	ERR
Europe						
Total Revenue	0	0	1	2	4	ERR
System Shipments	0	0	3	11	3	ERR
Workstation Shipments	0	0	14	25	28	ERR
Workstation Installed Base	0	0	12	37	65	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	3	4	ERR
Workstation Shipments	0	0	0	164	30	ERR
Workstation Installed Base	0	0	0	3	33	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	3	0	ERR
Standalone						
Total Revenue	0	0	0	9	0	ERR
System Shipments	0	0	0	80	0	ERR
Workstation Shipments	0	0	0	237	0	ERR
Workstation Installed Base	0	0	0	78	8	ERR
Host-Dependent						
Total Revenue	0	0	5	11	30	ERR
System Shipments	0	0	9	30	63	ERR
Workstation Shipments	0	0	41	169	449	ERR
Workstation Installed Base	0	0	39	206	647	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-82
 TITLE: Company History
 COMPANY: McAuto
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	3	0	ERR
Workstation Shipments	0	0	0	15	0	ERR
Workstation Installed Base	0	0	0	14	13	ERR
North America						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	3	0	ERR
Workstation Shipments	0	0	0	14	0	ERR
Workstation Installed Base	0	0	0	13	12	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	1	1	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	1	0	ERR
Host-Dependent						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	2	0	ERR
Workstation Shipments	0	0	0	14	0	ERR
Workstation Installed Base	0	0	0	13	13	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-83
 TITLE: Company History
 COMPANY: MacNeal Schwendler
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	21	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
North America						
Total Revenue	0	0	0	0	17	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Europe						
Total Revenue	0	0	0	0	3	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Far East						
Total Revenue	0	0	0	0	1	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Rest of World						
Total Revenue	0	0	0	0	0	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Standalone						
Total Revenue	0	0	0	0	5	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Host-Dependent						
Total Revenue	0	0	0	0	15	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	
Personal Computer						
Total Revenue	0	0	0	0	1	
System Shipments	0	0	0	0	0	
Workstation Shipments	0	0	0	0	0	
Workstation Installed Base	0	0	0	0	0	

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-84
 TITLE: Company History
 COMPANY: MacNeal Schwendler
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	14	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-85
 TITLE: Company History
 COMPANY: MacNeal Schwendler
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-86
 TITLE: Company History
 COMPANY: Mentor
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	2	26	88	137	ERR
System Shipments	0	35	462	1,347	1,382	ERR
Workstation Shipments	0	35	462	1,347	1,382	ERR
Workstation Installed Base	0	35	495	1,819	3,112	ERR
North America						
Total Revenue	0	2	22	69	86	ERR
System Shipments	0	35	393	1,053	879	ERR
Workstation Shipments	0	35	393	1,053	879	ERR
Workstation Installed Base	0	35	426	1,459	2,263	ERR
Europe						
Total Revenue	0	0	4	9	30	ERR
System Shipments	0	0	69	123	271	ERR
Workstation Shipments	0	0	69	123	271	ERR
Workstation Installed Base	0	0	69	189	460	ERR
Far East						
Total Revenue	0	0	0	9	21	ERR
System Shipments	0	0	0	157	233	ERR
Workstation Shipments	0	0	0	157	233	ERR
Workstation Installed Base	0	0	0	157	390	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	14	0	ERR
Workstation Shipments	0	0	0	14	0	ERR
Workstation Installed Base	0	0	0	14	0	ERR
Standalone						
Total Revenue	0	0	26	88	137	ERR
System Shipments	0	0	462	1,347	1,382	ERR
Workstation Shipments	0	0	462	1,347	1,382	ERR
Workstation Installed Base	0	0	462	1,787	3,112	ERR
Host-Dependent						
Total Revenue	0	2	0	0	0	ERR
System Shipments	0	35	0	0	0	ERR
Workstation Shipments	0	35	0	0	0	ERR
Workstation Installed Base	0	35	33	32	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-87
 TITLE: Company History
 COMPANY: Mentor
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	2	26	86	127	ERR
System Shipments	0	35	462	1,329	1,276	ERR
Workstation Shipments	0	35	462	1,329	1,276	ERR
Workstation Installed Base	0	35	495	1,801	2,988	ERR
North America						
Total Revenue	0	2	22	67	83	ERR
System Shipments	0	35	393	1,039	860	ERR
Workstation Shipments	0	35	393	1,039	860	ERR
Workstation Installed Base	0	35	426	1,445	2,231	ERR
Europe						
Total Revenue	0	0	4	9	25	ERR
System Shipments	0	0	69	121	222	ERR
Workstation Shipments	0	0	69	121	222	ERR
Workstation Installed Base	0	0	69	187	409	ERR
Far East						
Total Revenue	0	0	0	9	19	ERR
System Shipments	0	0	0	155	194	ERR
Workstation Shipments	0	0	0	155	194	ERR
Workstation Installed Base	0	0	0	155	349	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	14	0	ERR
Workstation Shipments	0	0	0	14	0	ERR
Workstation Installed Base	0	0	0	14	0	ERR
Standalone						
Total Revenue	0	0	26	86	127	ERR
System Shipments	0	0	462	1,329	1,276	ERR
Workstation Shipments	0	0	462	1,329	1,276	ERR
Workstation Installed Base	0	0	462	1,769	2,988	ERR
Host-Dependent						
Total Revenue	0	2	0	0	0	ERR
System Shipments	0	35	0	0	0	ERR
Workstation Shipments	0	35	0	0	0	ERR
Workstation Installed Base	0	35	33	32	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-88
 TITLE: Company History
 COMPANY: Mentor
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	2	10	ERR
System Shipments	0	0	0	18	106	ERR
Workstation Shipments	0	0	0	18	106	ERR
Workstation Installed Base	0	0	0	18	124	ERR
North America						
Total Revenue	0	0	0	2	3	ERR
System Shipments	0	0	0	14	19	ERR
Workstation Shipments	0	0	0	14	19	ERR
Workstation Installed Base	0	0	0	14	32	ERR
Europe						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	2	49	ERR
Workstation Shipments	0	0	0	2	49	ERR
Workstation Installed Base	0	0	0	2	51	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	2	39	ERR
Workstation Shipments	0	0	0	2	39	ERR
Workstation Installed Base	0	0	0	2	41	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	2	10	ERR
System Shipments	0	0	0	18	106	ERR
Workstation Shipments	0	0	0	18	106	ERR
Workstation Installed Base	0	0	0	18	124	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-89
 TITLE: Company History
 COMPANY: Prime
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	18	51	79	105	140	67%
System Shipments	37	89	189	252	346	75%
Workstation Shipments	88	320	714	974	1,227	93%
Workstation Installed Base	104	416	1,105	2,014	3,149	135%
North America						
Total Revenue	14	38	47	64	103	65%
System Shipments	32	73	109	159	266	70%
Workstation Shipments	81	261	421	614	937	84%
Workstation Installed Base	97	350	756	1,332	2,209	118%
Europe						
Total Revenue	0	0	23	30	28	ERR
System Shipments	0	0	56	69	56	ERR
Workstation Shipments	0	0	203	267	207	ERR
Workstation Installed Base	0	0	202	453	637	ERR
Far East						
Total Revenue	0	0	7	9	7	ERR
System Shipments	0	0	18	19	17	ERR
Workstation Shipments	0	0	66	74	59	ERR
Workstation Installed Base	0	0	63	131	185	ERR
Rest of World						
Total Revenue	4	13	2	1	3	-8%
System Shipments	5	16	6	5	7	8%
Workstation Shipments	7	59	24	19	24	36%
Workstation Installed Base	7	66	84	98	118	103%
Standalone						
Total Revenue	0	0	4	0	0	ERR
System Shipments	0	0	41	0	0	ERR
Workstation Shipments	0	0	41	0	0	ERR
Workstation Installed Base	0	0	41	33	0	ERR
Host-Dependent						
Total Revenue	18	51	75	105	140	67%
System Shipments	37	89	148	252	346	75%
Workstation Shipments	88	320	673	974	1,227	93%
Workstation Installed Base	104	416	1,064	1,981	3,149	135%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-90
 TITLE: Company History
 COMPANY: Prime
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	13	38	45	63	112	71%
System Shipments	29	70	108	150	275	76%
Workstation Shipments	75	238	415	581	978	90%
Workstation Installed Base	91	322	717	1,260	2,182	121%
North America						
Total Revenue	10	30	27	39	78	67%
System Shipments	26	60	64	95	203	67%
Workstation Shipments	68	205	246	367	716	80%
Workstation Installed Base	84	282	514	856	1,534	107%
Europe						
Total Revenue	0	0	13	18	25	ERR
System Shipments	0	0	30	41	50	ERR
Workstation Shipments	0	0	116	159	187	ERR
Workstation Installed Base	0	0	115	268	441	ERR
Far East						
Total Revenue	0	0	4	5	7	ERR
System Shipments	0	0	10	11	16	ERR
Workstation Shipments	0	0	38	43	57	ERR
Workstation Installed Base	0	0	37	77	132	ERR
Rest of World						
Total Revenue	3	8	1	1	2	-7%
System Shipments	3	10	4	3	5	16%
Workstation Shipments	7	33	15	12	19	29%
Workstation Installed Base	7	40	51	59	75	81%
Standalone						
Total Revenue	0	0	2	0	0	ERR
System Shipments	0	0	22	0	0	ERR
Workstation Shipments	0	0	22	0	0	ERR
Workstation Installed Base	0	0	22	19	0	ERR
Host-Dependent						
Total Revenue	13	38	43	63	112	71%
System Shipments	29	70	86	150	275	76%
Workstation Shipments	75	238	393	581	978	90%
Workstation Installed Base	91	322	695	1,241	2,182	121%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-91
 TITLE: Company History
 COMPANY: Prime
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	23	31	28	ERR
System Shipments	0	0	52	76	70	ERR
Workstation Shipments	0	0	202	293	249	ERR
Workstation Installed Base	0	0	202	484	710	ERR
North America						
Total Revenue	0	0	14	19	24	ERR
System Shipments	0	0	31	48	63	ERR
Workstation Shipments	0	0	121	185	222	ERR
Workstation Installed Base	0	0	122	301	508	ERR
Europe						
Total Revenue	0	0	6	9	3	ERR
System Shipments	0	0	15	21	6	ERR
Workstation Shipments	0	0	58	81	21	ERR
Workstation Installed Base	0	0	57	134	148	ERR
Far East						
Total Revenue	0	0	2	3	0	ERR
System Shipments	0	0	5	6	0	ERR
Workstation Shipments	0	0	18	23	2	ERR
Workstation Installed Base	0	0	17	38	39	ERR
Rest of World						
Total Revenue	0	0	1	0	1	ERR
System Shipments	0	0	1	1	1	ERR
Workstation Shipments	0	0	5	4	5	ERR
Workstation Installed Base	0	0	6	11	15	ERR
Standalone						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	9	0	0	ERR
Workstation Shipments	0	0	9	0	0	ERR
Workstation Installed Base	0	0	9	9	0	ERR
Host-Dependent						
Total Revenue	0	0	21	31	28	ERR
System Shipments	0	0	43	76	70	ERR
Workstation Shipments	0	0	193	293	249	ERR
Workstation Installed Base	0	0	193	475	710	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-92
 TITLE: Company History
 COMPANY: Prime
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	5	0	0	ERR
Workstation Shipments	0	0	5	0	0	ERR
Workstation Installed Base	0	0	5	0	0	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	5	0	0	ERR
Workstation Shipments	0	0	5	0	0	ERR
Workstation Installed Base	0	0	5	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	5	0	0	ERR
Workstation Shipments	0	0	5	0	0	ERR
Workstation Installed Base	0	0	5	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-93
 TITLE: Company History
 COMPANY: Prime
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	5	13	10	11	0	-100%
System Shipments	8	19	24	26	0	-100%
Workstation Shipments	13	82	92	100	0	-100%
Workstation Installed Base	13	94	181	270	257	111%
North America						
Total Revenue	4	8	6	6	0	-100%
System Shipments	6	13	14	16	0	-100%
Workstation Shipments	13	56	54	62	0	-100%
Workstation Installed Base	13	68	120	175	167	89%
Europe						
Total Revenue	0	0	3	3	0	ERR
System Shipments	0	0	6	7	0	ERR
Workstation Shipments	0	0	24	27	0	ERR
Workstation Installed Base	0	0	25	51	49	ERR
Far East						
Total Revenue	0	0	1	1	0	ERR
System Shipments	0	0	3	2	0	ERR
Workstation Shipments	0	0	10	8	0	ERR
Workstation Installed Base	0	0	9	16	15	ERR
Rest of World						
Total Revenue	1	5	0	0	0	-100%
System Shipments	2	6	1	1	0	-100%
Workstation Shipments	0	26	4	3	0	ERR
Workstation Installed Base	0	26	27	28	27	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	5	0	0	ERR
Workstation Shipments	0	0	5	0	0	ERR
Workstation Installed Base	0	0	5	5	0	ERR
Host-Dependent						
Total Revenue	5	13	10	11	0	-100%
System Shipments	8	19	19	26	0	-100%
Workstation Shipments	13	82	87	100	0	-100%
Workstation Installed Base	13	94	176	265	257	111%
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-94
 TITLE: Company History
 COMPANY: Racal-Redac
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	26	33	45	32	51	18%
System Shipments	202	263	427	652	229	3%
Workstation Shipments	208	271	648	674	228	2%
Workstation Installed Base	734	1,035	1,579	2,154	1,411	18%
North America						
Total Revenue	6	8	10	11	14	23%
System Shipments	49	64	103	215	93	17%
Workstation Shipments	50	66	156	216	93	17%
Workstation Installed Base	177	250	382	578	377	21%
Europe						
Total Revenue	0	0	34	21	33	ERR
System Shipments	0	0	316	430	91	ERR
Workstation Shipments	0	0	480	451	93	ERR
Workstation Installed Base	0	0	440	850	975	ERR
Far East						
Total Revenue	0	0	1	0	3	ERR
System Shipments	0	0	8	7	41	ERR
Workstation Shipments	0	0	12	7	39	ERR
Workstation Installed Base	0	0	11	17	56	ERR
Rest of World						
Total Revenue	20	25	0	0	0	-60%
System Shipments	153	199	0	0	3	-63%
Workstation Shipments	158	205	0	0	3	-63%
Workstation Installed Base	557	785	746	709	3	-73%
Standalone						
Total Revenue	0	0	27	29	32	ERR
System Shipments	0	0	322	575	190	ERR
Workstation Shipments	0	0	322	575	190	ERR
Workstation Installed Base	0	0	322	880	1,062	ERR
Host-Dependent						
Total Revenue	26	33	18	3	3	-42%
System Shipments	202	263	105	69	6	-58%
Workstation Shipments	208	271	326	71	6	-58%
Workstation Installed Base	734	1,035	1,257	1,266	251	-24%
Personal Computer						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	8	32	ERR
Workstation Shipments	0	0	0	28	32	ERR
Workstation Installed Base	0	0	0	8	97	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-95
 TITLE: Company History
 COMPANY: Racal-Redac
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	14	7	ERR
Workstation Shipments	0	0	0	14	7	ERR
Workstation Installed Base	0	0	0	14	23	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	5	1	ERR
Workstation Shipments	0	0	0	5	1	ERR
Workstation Installed Base	0	0	0	5	6	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	9	3	ERR
Workstation Shipments	0	0	0	9	3	ERR
Workstation Installed Base	0	0	0	9	13	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	12	7	ERR
Workstation Shipments	0	0	0	12	7	ERR
Workstation Installed Base	0	0	0	12	19	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	2	0	ERR
Workstation Shipments	0	0	0	2	0	ERR
Workstation Installed Base	0	0	0	2	1	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	3	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-96
 TITLE: Company History
 COMPANY: Racal-Redac
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-97
 TITLE: Company History
 COMPANY: Racal-Redac
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	26	33	45	32	49	17%
System Shipments	202	263	427	638	219	2%
Workstation Shipments	208	271	648	660	219	1%
Workstation Installed Base	734	1,035	1,579	2,140	1,386	17%
North America						
Total Revenue	6	8	10	11	14	23%
System Shipments	49	64	103	210	91	17%
Workstation Shipments	50	66	156	211	91	16%
Workstation Installed Base	177	250	382	573	370	20%
Europe						
Total Revenue	0	0	34	21	31	ERR
System Shipments	0	0	316	421	87	ERR
Workstation Shipments	0	0	480	442	89	ERR
Workstation Installed Base	0	0	440	841	960	ERR
Far East						
Total Revenue	0	0	1	0	3	ERR
System Shipments	0	0	8	7	38	ERR
Workstation Shipments	0	0	12	7	36	ERR
Workstation Installed Base	0	0	11	17	53	ERR
Rest of World						
Total Revenue	20	25	0	0	0	-60%
System Shipments	153	199	0	0	3	-63%
Workstation Shipments	158	205	0	0	3	-63%
Workstation Installed Base	557	785	746	709	3	-73%
Standalone						
Total Revenue	0	0	27	29	30	ERR
System Shipments	0	0	322	563	181	ERR
Workstation Shipments	0	0	322	563	181	ERR
Workstation Installed Base	0	0	322	868	1,041	ERR
Host-Dependent						
Total Revenue	26	33	18	3	3	-43%
System Shipments	202	263	105	67	6	-58%
Workstation Shipments	208	271	326	69	6	-59%
Workstation Installed Base	734	1,035	1,257	1,264	250	-24%
Personal Computer						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	8	32	ERR
Workstation Shipments	0	0	0	28	32	ERR
Workstation Installed Base	0	0	0	8	95	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-98
 TITLE: Company History
 COMPANY: Scientific Calculations
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	41	48	ERR
System Shipments	0	0	0	70	181	ERR
Workstation Shipments	0	0	0	253	436	ERR
Workstation Installed Base	0	0	0	257	691	ERR
North America						
Total Revenue	0	0	0	32	17	ERR
System Shipments	0	0	0	55	94	ERR
Workstation Shipments	0	0	0	197	262	ERR
Workstation Installed Base	0	0	0	197	459	ERR
Europe						
Total Revenue	0	0	0	5	12	ERR
System Shipments	0	0	0	9	34	ERR
Workstation Shipments	0	0	0	32	83	ERR
Workstation Installed Base	0	0	0	33	115	ERR
Far East						
Total Revenue	0	0	0	4	18	ERR
System Shipments	0	0	0	6	53	ERR
Workstation Shipments	0	0	0	23	92	ERR
Workstation Installed Base	0	0	0	25	116	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	2	0	ERR
Standalone						
Total Revenue	0	0	0	10	26	ERR
System Shipments	0	0	0	45	94	ERR
Workstation Shipments	0	0	0	45	94	ERR
Workstation Installed Base	0	0	0	45	139	ERR
Host-Dependent						
Total Revenue	0	0	0	31	22	ERR
System Shipments	0	0	0	25	87	ERR
Workstation Shipments	0	0	0	208	343	ERR
Workstation Installed Base	0	0	0	212	553	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-99
 TITLE: Company History
 COMPANY: Scientific Calculations
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	2	3	ERR
System Shipments	0	0	0	1	19	ERR
Workstation Shipments	0	0	0	12	73	ERR
Workstation Installed Base	0	0	0	14	87	ERR
North America						
Total Revenue	0	0	0	2	3	ERR
System Shipments	0	0	0	1	19	ERR
Workstation Shipments	0	0	0	10	73	ERR
Workstation Installed Base	0	0	0	10	83	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	2	2	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	2	2	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	2	3	ERR
System Shipments	0	0	0	1	19	ERR
Workstation Shipments	0	0	0	12	73	ERR
Workstation Installed Base	0	0	0	14	87	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-100
 TITLE: Company History
 COMPANY: Scientific Calculations
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	39	45	ERR
System Shipments	0	0	0	69	161	ERR
Workstation Shipments	0	0	0	241	364	ERR
Workstation Installed Base	0	0	0	243	604	ERR
North America						
Total Revenue	0	0	0	30	14	ERR
System Shipments	0	0	0	54	74	ERR
Workstation Shipments	0	0	0	187	190	ERR
Workstation Installed Base	0	0	0	187	377	ERR
Europe						
Total Revenue	0	0	0	5	12	ERR
System Shipments	0	0	0	9	34	ERR
Workstation Shipments	0	0	0	31	83	ERR
Workstation Installed Base	0	0	0	31	113	ERR
Far East						
Total Revenue	0	0	0	4	18	ERR
System Shipments	0	0	0	6	53	ERR
Workstation Shipments	0	0	0	22	92	ERR
Workstation Installed Base	0	0	0	23	114	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	2	0	ERR
Standalone						
Total Revenue	0	0	0	10	26	ERR
System Shipments	0	0	0	45	94	ERR
Workstation Shipments	0	0	0	45	94	ERR
Workstation Installed Base	0	0	0	45	139	ERR
Host-Dependent						
Total Revenue	0	0	0	29	19	ERR
System Shipments	0	0	0	24	68	ERR
Workstation Shipments	0	0	0	196	270	ERR
Workstation Installed Base	0	0	0	198	466	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-101
 TITLE: Company History
 COMPANY: SDRC
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	15	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	9	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-102
 TITLE: Company History
 COMPANY: SDRC
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	13	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	9	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-103
 TITLE: Company History
 COMPANY: SDRC
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-104
 TITLE: Company History
 COMPANY: SDRC
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-105
 TITLE: Company History
 COMPANY: Silver-Lisco
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	18	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	15	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-106
 TITLE: Company History
 COMPANY: Silver-Lisco
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-107
 TITLE: Company History
 COMPANY: Silver-Lisco
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-108
 TITLE: Company History
 COMPANY: Synercom
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-109
 TITLE: Company History
 COMPANY: Synercom
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-110
 TITLE: Company History
 COMPANY: Tektronix
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	229	ERR
Workstation Shipments	0	0	0	0	283	ERR
Workstation Installed Base	0	0	0	0	283	ERR
North America						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	205	ERR
Workstation Shipments	0	0	0	0	252	ERR
Workstation Installed Base	0	0	0	0	252	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	24	ERR
Workstation Shipments	0	0	0	0	30	ERR
Workstation Installed Base	0	0	0	0	30	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	100	ERR
Workstation Shipments	0	0	0	0	100	ERR
Workstation Installed Base	0	0	0	0	100	ERR
Host-Dependent						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	18	ERR
Workstation Shipments	0	0	0	0	72	ERR
Workstation Installed Base	0	0	0	0	72	ERR
Personal Computer						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	111	ERR
Workstation Shipments	0	0	0	0	111	ERR
Workstation Installed Base	0	0	0	0	111	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-111
 TITLE: Company History
 COMPANY: Tektronix
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	208	ERR
Workstation Shipments	0	0	0	0	208	ERR
Workstation Installed Base	0	0	0	0	208	ERR
North America						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	189	ERR
Workstation Shipments	0	0	0	0	189	ERR
Workstation Installed Base	0	0	0	0	189	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	19	ERR
Workstation Shipments	0	0	0	0	19	ERR
Workstation Installed Base	0	0	0	0	19	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	97	ERR
Workstation Shipments	0	0	0	0	97	ERR
Workstation Installed Base	0	0	0	0	97	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	111	ERR
Workstation Shipments	0	0	0	0	111	ERR
Workstation Installed Base	0	0	0	0	111	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-112
 TITLE: Company History
 COMPANY: Tektronix
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	7	ERR
Workstation Shipments	0	0	0	0	28	ERR
Workstation Installed Base	0	0	0	0	28	ERR
North America						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	6	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	7	ERR
Workstation Shipments	0	0	0	0	28	ERR
Workstation Installed Base	0	0	0	0	28	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-113
 TITLE: Company History
 COMPANY: Tektronix
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	=====
Worldwide						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	14	ERR
Workstation Shipments	0	0	0	0	46	ERR
Workstation Installed Base	0	0	0	0	46	ERR
North America						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	10	ERR
Workstation Shipments	0	0	0	0	38	ERR
Workstation Installed Base	0	0	0	0	38	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	4	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	3	ERR
Workstation Shipments	0	0	0	0	3	ERR
Workstation Installed Base	0	0	0	0	3	ERR
Host-Dependent						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	11	ERR
Workstation Shipments	0	0	0	0	43	ERR
Workstation Installed Base	0	0	0	0	43	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-114
 TITLE: Company History
 COMPANY: Telesis
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	20	15	ERR
System Shipments	0	0	0	230	179	ERR
Workstation Shipments	0	0	0	230	179	ERR
Workstation Installed Base	0	0	0	230	409	ERR
North America						
Total Revenue	0	0	0	17	14	ERR
System Shipments	0	0	0	205	163	ERR
Workstation Shipments	0	0	0	205	163	ERR
Workstation Installed Base	0	0	0	205	368	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	4	6	ERR
Workstation Shipments	0	0	0	4	6	ERR
Workstation Installed Base	0	0	0	4	10	ERR
Far East						
Total Revenue	0	0	0	1	1	ERR
System Shipments	0	0	0	9	8	ERR
Workstation Shipments	0	0	0	9	8	ERR
Workstation Installed Base	0	0	0	9	17	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	12	2	ERR
Workstation Shipments	0	0	0	12	2	ERR
Workstation Installed Base	0	0	0	12	14	ERR
Standalone						
Total Revenue	0	0	0	20	13	ERR
System Shipments	0	0	0	230	104	ERR
Workstation Shipments	0	0	0	230	104	ERR
Workstation Installed Base	0	0	0	230	334	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	76	ERR
Workstation Shipments	0	0	0	0	76	ERR
Workstation Installed Base	0	0	0	0	76	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-115
 TITLE: Company History
 COMPANY: Telesis
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	23	0	ERR
Workstation Shipments	0	0	0	23	0	ERR
Workstation Installed Base	0	0	0	23	23	ERR
North America						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	21	0	ERR
Workstation Shipments	0	0	0	21	0	ERR
Workstation Installed Base	0	0	0	21	21	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	1	1	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	1	0	ERR
Workstation Shipments	0	0	0	1	0	ERR
Workstation Installed Base	0	0	0	1	1	ERR
Standalone						
Total Revenue	0	0	0	2	0	ERR
System Shipments	0	0	0	23	0	ERR
Workstation Shipments	0	0	0	23	0	ERR
Workstation Installed Base	0	0	0	23	23	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-116
 TITLE: Company History
 COMPANY: Telesis
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	29	ERR
Workstation Shipments	0	0	0	0	29	ERR
Workstation Installed Base	0	0	0	0	29	ERR
North America						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	27	ERR
Workstation Shipments	0	0	0	0	27	ERR
Workstation Installed Base	0	0	0	0	27	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	16	ERR
Workstation Shipments	0	0	0	0	16	ERR
Workstation Installed Base	0	0	0	0	16	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	13	ERR
Workstation Shipments	0	0	0	0	13	ERR
Workstation Installed Base	0	0	0	0	13	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-117
 TITLE: Company History
 COMPANY: Telesis
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	18	13	ERR
System Shipments	0	0	0	207	150	ERR
Workstation Shipments	0	0	0	207	150	ERR
Workstation Installed Base	0	0	0	207	357	ERR
North America						
Total Revenue	0	0	0	15	11	ERR
System Shipments	0	0	0	184	136	ERR
Workstation Shipments	0	0	0	184	136	ERR
Workstation Installed Base	0	0	0	184	320	ERR
Europe						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	4	6	ERR
Workstation Shipments	0	0	0	4	6	ERR
Workstation Installed Base	0	0	0	4	10	ERR
Far East						
Total Revenue	0	0	0	1	1	ERR
System Shipments	0	0	0	8	7	ERR
Workstation Shipments	0	0	0	8	7	ERR
Workstation Installed Base	0	0	0	8	15	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	11	1	ERR
Workstation Shipments	0	0	0	11	1	ERR
Workstation Installed Base	0	0	0	11	12	ERR
Standalone						
Total Revenue	0	0	0	18	11	ERR
System Shipments	0	0	0	207	87	ERR
Workstation Shipments	0	0	0	207	87	ERR
Workstation Installed Base	0	0	0	207	294	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	63	ERR
Workstation Shipments	0	0	0	0	63	ERR
Workstation Installed Base	0	0	0	0	63	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-118
 TITLE: Company History
 COMPANY: Valid
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	3	16	48	57	ERR
System Shipments	0	53	325	1,020	990	ERR
Workstation Shipments	0	53	325	1,020	990	ERR
Workstation Installed Base	0	53	355	1,376	2,288	ERR
North America						
Total Revenue	0	3	13	36	26	ERR
System Shipments	0	53	260	774	696	ERR
Workstation Shipments	0	53	260	774	696	ERR
Workstation Installed Base	0	53	310	1,069	1,686	ERR
Europe						
Total Revenue	0	0	2	10	20	ERR
System Shipments	0	0	49	197	248	ERR
Workstation Shipments	0	0	49	197	248	ERR
Workstation Installed Base	0	0	29	243	491	ERR
Far East						
Total Revenue	0	0	1	2	10	ERR
System Shipments	0	0	16	49	47	ERR
Workstation Shipments	0	0	16	49	47	ERR
Workstation Installed Base	0	0	16	64	111	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	16	48	55	ERR
System Shipments	0	0	325	1,020	923	ERR
Workstation Shipments	0	0	325	1,020	923	ERR
Workstation Installed Base	0	0	305	1,328	2,221	ERR
Host-Dependent						
Total Revenue	0	3	0	0	0	ERR
System Shipments	0	53	0	0	0	ERR
Workstation Shipments	0	53	0	0	0	ERR
Workstation Installed Base	0	53	50	48	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	67	ERR
Workstation Shipments	0	0	0	0	67	ERR
Workstation Installed Base	0	0	0	0	67	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-119
 TITLE: Company History
 COMPANY: Valid
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	3	16	43	49	ERR
System Shipments	0	53	325	933	888	ERR
Workstation Shipments	0	53	325	933	888	ERR
Workstation Installed Base	0	53	355	1,289	2,100	ERR
North America						
Total Revenue	0	3	13	32	22	ERR
System Shipments	0	53	260	708	623	ERR
Workstation Shipments	0	53	260	708	623	ERR
Workstation Installed Base	0	53	310	1,003	1,550	ERR
Europe						
Total Revenue	0	0	2	9	18	ERR
System Shipments	0	0	49	180	223	ERR
Workstation Shipments	0	0	49	180	223	ERR
Workstation Installed Base	0	0	29	226	449	ERR
Far East						
Total Revenue	0	0	1	2	9	ERR
System Shipments	0	0	16	45	42	ERR
Workstation Shipments	0	0	16	45	42	ERR
Workstation Installed Base	0	0	16	60	102	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	16	43	47	ERR
System Shipments	0	0	325	933	832	ERR
Workstation Shipments	0	0	325	933	832	ERR
Workstation Installed Base	0	0	305	1,241	2,045	ERR
Host-Dependent						
Total Revenue	0	3	0	0	0	ERR
System Shipments	0	53	0	0	0	ERR
Workstation Shipments	0	53	0	0	0	ERR
Workstation Installed Base	0	53	50	48	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	56	ERR
Workstation Shipments	0	0	0	0	56	ERR
Workstation Installed Base	0	0	0	0	56	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-120
 TITLE: Company History
 COMPANY: Valid
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	5	8	ERR
System Shipments	0	0	0	87	102	ERR
Workstation Shipments	0	0	0	87	102	ERR
Workstation Installed Base	0	0	0	87	187	ERR
North America						
Total Revenue	0	0	0	4	5	ERR
System Shipments	0	0	0	66	72	ERR
Workstation Shipments	0	0	0	66	72	ERR
Workstation Installed Base	0	0	0	66	136	ERR
Europe						
Total Revenue	0	0	0	1	2	ERR
System Shipments	0	0	0	17	25	ERR
Workstation Shipments	0	0	0	17	25	ERR
Workstation Installed Base	0	0	0	17	42	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	4	5	ERR
Workstation Shipments	0	0	0	4	5	ERR
Workstation Installed Base	0	0	0	4	9	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	5	8	ERR
System Shipments	0	0	0	87	91	ERR
Workstation Shipments	0	0	0	87	91	ERR
Workstation Installed Base	0	0	0	87	176	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	11	ERR
Workstation Shipments	0	0	0	0	11	ERR
Workstation Installed Base	0	0	0	0	11	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-121
 TITLE: Company History
 COMPANY: Zycad
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	36	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	24	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	36	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-122
 TITLE: Company History
 COMPANY: Zycad
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	36	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
North America						
Total Revenue	0	0	0	0	24	ERR
System Shipments	0	0	0	0	33	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	26	ERR
System Shipments	0	0	0	0	36	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-123
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	229	ERR
System Shipments	0	0	0	0	36,723	ERR
Workstation Shipments	0	0	0	0	36,723	ERR
Workstation Installed Base	0	0	0	0	36,723	ERR
North America						
Total Revenue	0	0	0	0	158	ERR
System Shipments	0	0	0	0	24,702	ERR
Workstation Shipments	0	0	0	0	24,702	ERR
Workstation Installed Base	0	0	0	0	24,702	ERR
Europe						
Total Revenue	0	0	0	0	59	ERR
System Shipments	0	0	0	0	10,523	ERR
Workstation Shipments	0	0	0	0	10,523	ERR
Workstation Installed Base	0	0	0	0	10,523	ERR
Far East						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	1,111	ERR
Workstation Shipments	0	0	0	0	1,111	ERR
Workstation Installed Base	0	0	0	0	1,111	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	387	ERR
Workstation Shipments	0	0	0	0	387	ERR
Workstation Installed Base	0	0	0	0	387	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	229	ERR
System Shipments	0	0	0	0	36,723	ERR
Workstation Shipments	0	0	0	0	36,723	ERR
Workstation Installed Base	0	0	0	0	36,723	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-124
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	75	ERR
System Shipments	0	0	0	0	15,783	ERR
Workstation Shipments	0	0	0	0	15,783	ERR
Workstation Installed Base	0	0	0	0	15,783	ERR
North America						
Total Revenue	0	0	0	0	43	ERR
System Shipments	0	0	0	0	9,256	ERR
Workstation Shipments	0	0	0	0	9,256	ERR
Workstation Installed Base	0	0	0	0	9,256	ERR
Europe						
Total Revenue	0	0	0	0	28	ERR
System Shipments	0	0	0	0	6,025	ERR
Workstation Shipments	0	0	0	0	6,025	ERR
Workstation Installed Base	0	0	0	0	6,025	ERR
Far East						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	444	ERR
Workstation Shipments	0	0	0	0	444	ERR
Workstation Installed Base	0	0	0	0	444	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	59	ERR
Workstation Shipments	0	0	0	0	59	ERR
Workstation Installed Base	0	0	0	0	59	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	75	ERR
System Shipments	0	0	0	0	15,783	ERR
Workstation Shipments	0	0	0	0	15,783	ERR
Workstation Installed Base	0	0	0	0	15,783	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-125
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	63	ERR
System Shipments	0	0	0	0	10,766	ERR
Workstation Shipments	0	0	0	0	10,766	ERR
Workstation Installed Base	0	0	0	0	10,766	ERR
North America						
Total Revenue	0	0	0	0	41	ERR
System Shipments	0	0	0	0	7,231	ERR
Workstation Shipments	0	0	0	0	7,231	ERR
Workstation Installed Base	0	0	0	0	7,231	ERR
Europe						
Total Revenue	0	0	0	0	16	ERR
System Shipments	0	0	0	0	2,782	ERR
Workstation Shipments	0	0	0	0	2,782	ERR
Workstation Installed Base	0	0	0	0	2,782	ERR
Far East						
Total Revenue	0	0	0	0	4	ERR
System Shipments	0	0	0	0	444	ERR
Workstation Shipments	0	0	0	0	444	ERR
Workstation Installed Base	0	0	0	0	444	ERR
Rest of World						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	309	ERR
Workstation Shipments	0	0	0	0	309	ERR
Workstation Installed Base	0	0	0	0	309	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	63	ERR
System Shipments	0	0	0	0	10,766	ERR
Workstation Shipments	0	0	0	0	10,766	ERR
Workstation Installed Base	0	0	0	0	10,766	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-126
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	90	ERR
Workstation Shipments	0	0	0	0	90	ERR
Workstation Installed Base	0	0	0	0	90	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	47	ERR
Workstation Shipments	0	0	0	0	47	ERR
Workstation Installed Base	0	0	0	0	47	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	42	ERR
Workstation Shipments	0	0	0	0	42	ERR
Workstation Installed Base	0	0	0	0	42	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	90	ERR
Workstation Shipments	0	0	0	0	90	ERR
Workstation Installed Base	0	0	0	0	90	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-127
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	79	ERR
System Shipments	0	0	0	0	8,785	ERR
Workstation Shipments	0	0	0	0	8,785	ERR
Workstation Installed Base	0	0	0	0	8,785	ERR
North America						
Total Revenue	0	0	0	0	65	ERR
System Shipments	0	0	0	0	7,234	ERR
Workstation Shipments	0	0	0	0	7,234	ERR
Workstation Installed Base	0	0	0	0	7,234	ERR
Europe						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	1,328	ERR
Workstation Shipments	0	0	0	0	1,328	ERR
Workstation Installed Base	0	0	0	0	1,328	ERR
Far East						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	222	ERR
Workstation Shipments	0	0	0	0	222	ERR
Workstation Installed Base	0	0	0	0	222	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	79	ERR
System Shipments	0	0	0	0	8,785	ERR
Workstation Shipments	0	0	0	0	8,785	ERR
Workstation Installed Base	0	0	0	0	8,785	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-128
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	70	ERR
Workstation Shipments	0	0	0	0	70	ERR
Workstation Installed Base	0	0	0	0	70	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	50	ERR
Workstation Shipments	0	0	0	0	50	ERR
Workstation Installed Base	0	0	0	0	50	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	13	ERR
Workstation Shipments	0	0	0	0	13	ERR
Workstation Installed Base	0	0	0	0	13	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	8	ERR
Workstation Shipments	0	0	0	0	8	ERR
Workstation Installed Base	0	0	0	0	8	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	70	ERR
Workstation Shipments	0	0	0	0	70	ERR
Workstation Installed Base	0	0	0	0	70	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-129
 TITLE: Company History
 COMPANY: Other Computer Companies
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	1,229	ERR
Workstation Shipments	0	0	0	0	1,229	ERR
Workstation Installed Base	0	0	0	0	1,229	ERR
North America						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	886	ERR
Workstation Shipments	0	0	0	0	886	ERR
Workstation Installed Base	0	0	0	0	886	ERR
Europe						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	334	ERR
Workstation Shipments	0	0	0	0	334	ERR
Workstation Installed Base	0	0	0	0	334	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	9	ERR
Workstation Shipments	0	0	0	0	9	ERR
Workstation Installed Base	0	0	0	0	9	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Personal Computer						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	1,229	ERR
Workstation Shipments	0	0	0	0	1,229	ERR
Workstation Installed Base	0	0	0	0	1,229	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-130
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	1	0	570	ERR
System Shipments	0	0	1	0	5,238	ERR
Workstation Shipments	0	0	8	0	7,498	ERR
Workstation Installed Base	0	0	6	8	9,222	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	1	0	0	ERR
Workstation Shipments	0	0	8	0	0	ERR
Workstation Installed Base	0	0	6	8	0	ERR
Far East						
Total Revenue	0	0	0	0	570	ERR
System Shipments	0	0	0	0	5,238	ERR
Workstation Shipments	0	0	0	0	7,498	ERR
Workstation Installed Base	0	0	0	0	9,222	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	42	ERR
System Shipments	0	0	0	0	403	ERR
Workstation Shipments	0	0	0	0	403	ERR
Workstation Installed Base	0	0	0	0	549	ERR
Host-Dependent						
Total Revenue	0	0	1	0	424	ERR
System Shipments	0	0	1	0	1,150	ERR
Workstation Shipments	0	0	8	0	3,410	ERR
Workstation Installed Base	0	0	6	8	4,524	ERR
Personal Computer						
Total Revenue	0	0	0	0	104	ERR
System Shipments	0	0	0	0	3,685	ERR
Workstation Shipments	0	0	0	0	3,685	ERR
Workstation Installed Base	0	0	0	0	4,149	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-131
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	1	0	344	ERR
System Shipments	0	0	1	0	3,539	ERR
Workstation Shipments	0	0	8	0	4,960	ERR
Workstation Installed Base	0	0	6	8	6,441	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	1	0	0	ERR
System Shipments	0	0	1	0	0	ERR
Workstation Shipments	0	0	8	0	0	ERR
Workstation Installed Base	0	0	6	8	0	ERR
Far East						
Total Revenue	0	0	0	0	344	ERR
System Shipments	0	0	0	0	3,539	ERR
Workstation Shipments	0	0	0	0	4,960	ERR
Workstation Installed Base	0	0	0	0	6,441	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	19	ERR
System Shipments	0	0	0	0	240	ERR
Workstation Shipments	0	0	0	0	240	ERR
Workstation Installed Base	0	0	0	0	285	ERR
Host-Dependent						
Total Revenue	0	0	1	0	247	ERR
System Shipments	0	0	1	0	657	ERR
Workstation Shipments	0	0	8	0	2,079	ERR
Workstation Installed Base	0	0	6	8	3,207	ERR
Personal Computer						
Total Revenue	0	0	0	0	78	ERR
System Shipments	0	0	0	0	2,642	ERR
Workstation Shipments	0	0	0	0	2,642	ERR
Workstation Installed Base	0	0	0	0	2,949	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-132
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	77	ERR
System Shipments	0	0	0	0	618	ERR
Workstation Shipments	0	0	0	0	955	ERR
Workstation Installed Base	0	0	0	0	1,145	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	77	ERR
System Shipments	0	0	0	0	618	ERR
Workstation Shipments	0	0	0	0	955	ERR
Workstation Installed Base	0	0	0	0	1,145	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	10	ERR
Workstation Shipments	0	0	0	0	10	ERR
Workstation Installed Base	0	0	0	0	10	ERR
Host-Dependent						
Total Revenue	0	0	0	0	66	ERR
System Shipments	0	0	0	0	200	ERR
Workstation Shipments	0	0	0	0	537	ERR
Workstation Installed Base	0	0	0	0	579	ERR
Personal Computer						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	408	ERR
Workstation Shipments	0	0	0	0	408	ERR
Workstation Installed Base	0	0	0	0	556	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-133
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	29	ERR
Workstation Shipments	0	0	0	0	90	ERR
Workstation Installed Base	0	0	0	0	143	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	29	ERR
Workstation Shipments	0	0	0	0	90	ERR
Workstation Installed Base	0	0	0	0	143	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Host-Dependent						
Total Revenue	0	0	0	0	12	ERR
System Shipments	0	0	0	0	27	ERR
Workstation Shipments	0	0	0	0	88	ERR
Workstation Installed Base	0	0	0	0	132	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	11	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-134
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	287	ERR
Workstation Shipments	0	0	0	0	322	ERR
Workstation Installed Base	0	0	0	0	382	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	20	ERR
System Shipments	0	0	0	0	287	ERR
Workstation Shipments	0	0	0	0	322	ERR
Workstation Installed Base	0	0	0	0	382	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	38	ERR
Workstation Shipments	0	0	0	0	38	ERR
Workstation Installed Base	0	0	0	0	98	ERR
Host-Dependent						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	16	ERR
Workstation Shipments	0	0	0	0	51	ERR
Workstation Installed Base	0	0	0	0	51	ERR
Personal Computer						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	233	ERR
Workstation Shipments	0	0	0	0	233	ERR
Workstation Installed Base	0	0	0	0	233	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-135
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	21	ERR
System Shipments	0	0	0	0	74	ERR
Workstation Shipments	0	0	0	0	178	ERR
Workstation Installed Base	0	0	0	0	178	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	21	ERR
System Shipments	0	0	0	0	74	ERR
Workstation Shipments	0	0	0	0	178	ERR
Workstation Installed Base	0	0	0	0	178	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	25	ERR
Workstation Shipments	0	0	0	0	25	ERR
Workstation Installed Base	0	0	0	0	25	ERR
Host-Dependent						
Total Revenue	0	0	0	0	19	ERR
System Shipments	0	0	0	0	47	ERR
Workstation Shipments	0	0	0	0	151	ERR
Workstation Installed Base	0	0	0	0	151	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	2	ERR
Workstation Shipments	0	0	0	0	2	ERR
Workstation Installed Base	0	0	0	0	2	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-136
 TITLE: Company History
 COMPANY: Other Far East Companies
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	96	ERR
System Shipments	0	0	0	0	690	ERR
Workstation Shipments	0	0	0	0	992	ERR
Workstation Installed Base	0	0	0	0	932	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Far East						
Total Revenue	0	0	0	0	96	ERR
System Shipments	0	0	0	0	690	ERR
Workstation Shipments	0	0	0	0	992	ERR
Workstation Installed Base	0	0	0	0	932	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	19	ERR
System Shipments	0	0	0	0	90	ERR
Workstation Shipments	0	0	0	0	90	ERR
Workstation Installed Base	0	0	0	0	130	ERR
Host-Dependent						
Total Revenue	0	0	0	0	72	ERR
System Shipments	0	0	0	0	202	ERR
Workstation Shipments	0	0	0	0	504	ERR
Workstation Installed Base	0	0	0	0	404	ERR
Personal Computer						
Total Revenue	0	0	0	0	5	ERR
System Shipments	0	0	0	0	398	ERR
Workstation Shipments	0	0	0	0	398	ERR
Workstation Installed Base	0	0	0	0	398	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-137
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	228	ERR
System Shipments	0	0	0	0	6,079	ERR
Workstation Shipments	0	0	0	0	7,105	ERR
Workstation Installed Base	0	0	0	0	7,105	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	228	ERR
System Shipments	0	0	0	0	6,079	ERR
Workstation Shipments	0	0	0	0	7,105	ERR
Workstation Installed Base	0	0	0	0	7,105	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	61	ERR
System Shipments	0	0	0	0	1,005	ERR
Workstation Shipments	0	0	0	0	1,005	ERR
Workstation Installed Base	0	0	0	0	1,005	ERR
Host-Dependent						
Total Revenue	0	0	0	0	131	ERR
System Shipments	0	0	0	0	385	ERR
Workstation Shipments	0	0	0	0	1,411	ERR
Workstation Installed Base	0	0	0	0	1,411	ERR
Personal Computer						
Total Revenue	0	0	0	0	35	ERR
System Shipments	0	0	0	0	4,689	ERR
Workstation Shipments	0	0	0	0	4,689	ERR
Workstation Installed Base	0	0	0	0	4,689	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-138
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	130	ERR
System Shipments	0	0	0	0	3,766	ERR
Workstation Shipments	0	0	0	0	4,447	ERR
Workstation Installed Base	0	0	0	0	4,447	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	130	ERR
System Shipments	0	0	0	0	3,766	ERR
Workstation Shipments	0	0	0	0	4,447	ERR
Workstation Installed Base	0	0	0	0	4,447	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	30	ERR
System Shipments	0	0	0	0	599	ERR
Workstation Shipments	0	0	0	0	599	ERR
Workstation Installed Base	0	0	0	0	599	ERR
Host-Dependent						
Total Revenue	0	0	0	0	76	ERR
System Shipments	0	0	0	0	238	ERR
Workstation Shipments	0	0	0	0	919	ERR
Workstation Installed Base	0	0	0	0	919	ERR
Personal Computer						
Total Revenue	0	0	0	0	23	ERR
System Shipments	0	0	0	0	2,930	ERR
Workstation Shipments	0	0	0	0	2,930	ERR
Workstation Installed Base	0	0	0	0	2,930	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-139
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	=====
Worldwide						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	1,316	ERR
Workstation Shipments	0	0	0	0	1,495	ERR
Workstation Installed Base	0	0	0	0	1,495	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	32	ERR
System Shipments	0	0	0	0	1,316	ERR
Workstation Shipments	0	0	0	0	1,495	ERR
Workstation Installed Base	0	0	0	0	1,495	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	7	ERR
System Shipments	0	0	0	0	137	ERR
Workstation Shipments	0	0	0	0	137	ERR
Workstation Installed Base	0	0	0	0	137	ERR
Host-Dependent						
Total Revenue	0	0	0	0	17	ERR
System Shipments	0	0	0	0	57	ERR
Workstation Shipments	0	0	0	0	236	ERR
Workstation Installed Base	0	0	0	0	236	ERR
Personal Computer						
Total Revenue	0	0	0	0	8	ERR
System Shipments	0	0	0	0	1,123	ERR
Workstation Shipments	0	0	0	0	1,123	ERR
Workstation Installed Base	0	0	0	0	1,123	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-140
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	22	ERR
System Shipments	0	0	0	0	107	ERR
Workstation Shipments	0	0	0	0	150	ERR
Workstation Installed Base	0	0	0	0	150	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	22	ERR
System Shipments	0	0	0	0	107	ERR
Workstation Shipments	0	0	0	0	150	ERR
Workstation Installed Base	0	0	0	0	150	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	18	ERR
Workstation Shipments	0	0	0	0	18	ERR
Workstation Installed Base	0	0	0	0	18	ERR
Host-Dependent						
Total Revenue	0	0	0	0	21	ERR
System Shipments	0	0	0	0	40	ERR
Workstation Shipments	0	0	0	0	83	ERR
Workstation Installed Base	0	0	0	0	83	ERR
Personal Computer						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	48	ERR
Workstation Shipments	0	0	0	0	48	ERR
Workstation Installed Base	0	0	0	0	48	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-141
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	----	----	----	----	----	----
Worldwide						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	281	ERR
Workstation Shipments	0	0	0	0	328	ERR
Workstation Installed Base	0	0	0	0	328	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	10	ERR
System Shipments	0	0	0	0	281	ERR
Workstation Shipments	0	0	0	0	328	ERR
Workstation Installed Base	0	0	0	0	328	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	3	ERR
System Shipments	0	0	0	0	45	ERR
Workstation Shipments	0	0	0	0	45	ERR
Workstation Installed Base	0	0	0	0	45	ERR
Host-Dependent						
Total Revenue	0	0	0	0	6	ERR
System Shipments	0	0	0	0	19	ERR
Workstation Shipments	0	0	0	0	65	ERR
Workstation Installed Base	0	0	0	0	65	ERR
Personal Computer						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	218	ERR
Workstation Shipments	0	0	0	0	218	ERR
Workstation Installed Base	0	0	0	0	218	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-142
 TITLE: Company History
 COMPANY: Other Europe Companies
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	0	0	0	34	ERR
System Shipments	0	0	0	0	609	ERR
Workstation Shipments	0	0	0	0	686	ERR
Workstation Installed Base	0	0	0	0	686	ERR
North America						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Europe						
Total Revenue	0	0	0	0	34	ERR
System Shipments	0	0	0	0	609	ERR
Workstation Shipments	0	0	0	0	686	ERR
Workstation Installed Base	0	0	0	0	686	ERR
Far East						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Rest of World						
Total Revenue	0	0	0	0	0	ERR
System Shipments	0	0	0	0	0	ERR
Workstation Shipments	0	0	0	0	0	ERR
Workstation Installed Base	0	0	0	0	0	ERR
Standalone						
Total Revenue	0	0	0	0	21	ERR
System Shipments	0	0	0	0	207	ERR
Workstation Shipments	0	0	0	0	207	ERR
Workstation Installed Base	0	0	0	0	207	ERR
Host-Dependent						
Total Revenue	0	0	0	0	11	ERR
System Shipments	0	0	0	0	31	ERR
Workstation Shipments	0	0	0	0	108	ERR
Workstation Installed Base	0	0	0	0	108	ERR
Personal Computer						
Total Revenue	0	0	0	0	2	ERR
System Shipments	0	0	0	0	371	ERR
Workstation Shipments	0	0	0	0	371	ERR
Workstation Installed Base	0	0	0	0	371	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-143
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: All Applications
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	134	215	234	870	184	8%
System Shipments	314	723	1,766	32,620	1,102	37%
Workstation Shipments	654	1,345	1,954	34,119	2,099	34%
Workstation Installed Base	1,683	2,947	4,771	38,636	2,099	6%
North America						
Total Revenue	98	163	181	387	149	11%
System Shipments	184	532	1,330	24,049	946	51%
Workstation Shipments	384	948	1,440	24,467	948	25%
Workstation Installed Base	1,160	2,053	3,407	27,695	948	-5%
Europe						
Total Revenue	0	0	30	94	24	ERR
System Shipments	0	0	257	3,884	106	ERR
Workstation Shipments	0	0	303	3,955	111	ERR
Workstation Installed Base	0	0	303	4,243	111	ERR
Far East						
Total Revenue	0	0	22	363	10	ERR
System Shipments	0	0	175	4,082	23	ERR
Workstation Shipments	0	0	206	5,078	1,012	ERR
Workstation Installed Base	0	0	206	5,269	1,012	ERR
Rest of World						
Total Revenue	37	52	0	26	2	-54%
System Shipments	130	191	4	605	27	-32%
Workstation Shipments	270	397	5	619	27	-44%
Workstation Installed Base	523	894	855	1,429	27	-52%
Standalone						
Total Revenue	0	0	198	134	75	ERR
System Shipments	0	0	1,604	1,430	813	ERR
Workstation Shipments	0	0	1,604	1,430	813	ERR
Workstation Installed Base	0	0	1,624	2,971	813	ERR
Host-Dependent						
Total Revenue	134	215	36	416	79	-12%
System Shipments	314	723	162	564	58	-35%
Workstation Shipments	654	1,345	350	2,063	1,054	13%
Workstation Installed Base	1,683	2,947	3,147	5,039	1,054	-11%
Personal Computer						
Total Revenue	0	0	0	320	30	ERR
System Shipments	0	0	0	30,626	232	ERR
Workstation Shipments	0	0	0	30,626	232	ERR
Workstation Installed Base	0	0	0	30,626	232	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-144
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: Mechanical
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	23	39	31	348	70	32%
System Shipments	96	160	633	15,486	390	42%
Workstation Shipments	200	333	633	16,358	868	44%
Workstation Installed Base	789	1,083	1,662	17,943	868	2%
North America						
Total Revenue	18	31	25	120	52	31%
System Shipments	79	135	520	11,583	313	41%
Workstation Shipments	165	281	520	11,774	329	19%
Workstation Installed Base	630	880	1,356	13,063	329	-15%
Europe						
Total Revenue	0	0	3	40	12	ERR
System Shipments	0	0	60	1,520	47	ERR
Workstation Shipments	0	0	60	1,573	51	ERR
Workstation Installed Base	0	0	60	1,629	51	ERR
Far East						
Total Revenue	0	0	3	183	5	ERR
System Shipments	0	0	53	2,154	12	ERR
Workstation Shipments	0	0	53	2,779	469	ERR
Workstation Installed Base	0	0	53	2,835	469	ERR
Rest of World						
Total Revenue	5	8	0	6	1	-39%
System Shipments	17	25	0	229	18	2%
Workstation Shipments	35	52	0	232	18	-15%
Workstation Installed Base	159	203	193	416	18	-42%
Standalone						
Total Revenue	0	0	31	20	22	ERR
System Shipments	0	0	633	333	208	ERR
Workstation Shipments	0	0	633	333	208	ERR
Workstation Installed Base	0	0	633	934	208	ERR
Host-Dependent						
Total Revenue	23	39	0	179	39	14%
System Shipments	96	160	0	319	15	-37%
Workstation Shipments	200	333	0	1,191	493	25%
Workstation Installed Base	789	1,083	1,029	2,175	493	-11%
Personal Computer						
Total Revenue	0	0	0	150	9	ERR
System Shipments	0	0	0	14,834	167	ERR
Workstation Shipments	0	0	0	14,834	167	ERR
Workstation Installed Base	0	0	0	14,834	167	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-145
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: AEC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	15	20	24	191	32	21%
System Shipments	60	206	406	10,552	372	58%
Workstation Shipments	125	418	406	10,710	508	42%
Workstation Installed Base	476	870	1,232	11,882	508	2%
North America						
Total Revenue	11	15	20	105	27	26%
System Shipments	46	189	338	7,475	309	61%
Workstation Shipments	96	383	338	7,536	311	34%
Workstation Installed Base	392	755	1,055	8,539	311	-6%
Europe						
Total Revenue	0	0	2	26	3	ERR
System Shipments	0	0	37	1,569	49	ERR
Workstation Shipments	0	0	37	1,572	49	ERR
Workstation Installed Base	0	0	37	1,608	49	ERR
Far East						
Total Revenue	0	0	2	53	1	ERR
System Shipments	0	0	31	1,233	7	ERR
Workstation Shipments	0	0	31	1,327	140	ERR
Workstation Installed Base	0	0	31	1,355	140	ERR
Rest of World						
Total Revenue	4	5	0	8	0	-47%
System Shipments	14	17	0	275	8	-14%
Workstation Shipments	29	35	0	275	8	-29%
Workstation Installed Base	84	115	109	380	8	-45%
Standalone						
Total Revenue	0	0	24	47	21	ERR
System Shipments	0	0	406	462	321	ERR
Workstation Shipments	0	0	406	462	321	ERR
Workstation Installed Base	0	0	406	848	321	ERR
Host-Dependent						
Total Revenue	15	20	0	42	6	-19%
System Shipments	60	206	0	103	19	-25%
Workstation Shipments	125	418	0	261	155	6%
Workstation Installed Base	476	870	826	1,047	155	-24%
Personal Computer						
Total Revenue	0	0	0	103	5	ERR
System Shipments	0	0	0	9,987	32	ERR
Workstation Shipments	0	0	0	9,987	32	ERR
Workstation Installed Base	0	0	0	9,987	32	ERR

Source: Dataquest
June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-146
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: Mapping
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	73	108	106	151	1	-71%
System Shipments	56	75	238	100	0	-100%
Workstation Shipments	116	156	238	304	16	-39%
Workstation Installed Base	116	267	492	752	16	-39%
North America						
Total Revenue	67	102	91	62	0	-72%
System Shipments	53	70	197	35	0	-100%
Workstation Shipments	110	146	197	154	0	-100%
Workstation Installed Base	110	251	436	559	0	-100%
Europe						
Total Revenue	0	0	8	6	0	ERR
System Shipments	0	0	22	1	0	ERR
Workstation Shipments	0	0	22	5	0	ERR
Workstation Installed Base	0	0	22	25	0	ERR
Far East						
Total Revenue	0	0	8	73	0	ERR
System Shipments	0	0	19	61	0	ERR
Workstation Shipments	0	0	19	131	16	ERR
Workstation Installed Base	0	0	19	142	16	ERR
Rest of World						
Total Revenue	6	6	0	11	0	-100%
System Shipments	3	5	0	3	0	-100%
Workstation Shipments	6	10	0	14	0	-100%
Workstation Installed Base	6	16	15	26	0	-100%
Standalone						
Total Revenue	0	0	106	0	0	ERR
System Shipments	0	0	238	1	0	ERR
Workstation Shipments	0	0	238	1	0	ERR
Workstation Installed Base	0	0	238	227	0	ERR
Host-Dependent						
Total Revenue	73	108	0	146	0	-100%
System Shipments	56	75	0	58	0	-100%
Workstation Shipments	116	156	0	262	16	-39%
Workstation Installed Base	116	267	254	484	16	-39%
Personal Computer						
Total Revenue	0	0	0	6	1	ERR
System Shipments	0	0	0	41	0	ERR
Workstation Shipments	0	0	0	41	0	ERR
Workstation Installed Base	0	0	0	41	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-147
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: EDA
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	====	====	====	====	====	====
Worldwide						
Total Revenue	0	10	14	71	29	ERR
System Shipments	0	83	76	4,972	47	ERR
Workstation Shipments	0	83	76	4,996	39	ERR
Workstation Installed Base	0	83	155	5,142	39	ERR
North America						
Total Revenue	0	10	10	53	24	ERR
System Shipments	0	83	43	3,909	42	ERR
Workstation Shipments	0	83	43	3,922	34	ERR
Workstation Installed Base	0	83	122	4,036	34	ERR
Europe						
Total Revenue	0	0	4	8	5	ERR
System Shipments	0	0	33	608	4	ERR
Workstation Shipments	0	0	33	608	4	ERR
Workstation Installed Base	0	0	33	641	4	ERR
Far East						
Total Revenue	0	0	0	9	1	ERR
System Shipments	0	0	0	366	1	ERR
Workstation Shipments	0	0	0	377	1	ERR
Workstation Installed Base	0	0	0	376	1	ERR
Rest of World						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	89	0	ERR
Workstation Shipments	0	0	0	89	0	ERR
Workstation Installed Base	0	0	0	89	0	ERR
Standalone						
Total Revenue	0	0	14	19	6	ERR
System Shipments	0	0	76	212	5	ERR
Workstation Shipments	0	0	76	212	5	ERR
Workstation Installed Base	0	0	76	284	5	ERR
Host-Dependent						
Total Revenue	0	10	0	6	15	ERR
System Shipments	0	83	0	15	8	ERR
Workstation Shipments	0	83	0	39	0	ERR
Workstation Installed Base	0	83	79	113	0	ERR
Personal Computer						
Total Revenue	0	0	0	46	7	ERR
System Shipments	0	0	0	4,745	34	ERR
Workstation Shipments	0	0	0	4,745	34	ERR
Workstation Installed Base	0	0	0	4,745	34	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-148
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: IC
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
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Worldwide						
Total Revenue	1	3	7	20	35	124%
System Shipments	6	23	35	121	177	133%
Workstation Shipments	13	23	49	146	169	90%
Workstation Installed Base	28	52	96	237	169	57%
North America						
Total Revenue	1	3	7	9	29	114%
System Shipments	6	23	33	63	166	129%
Workstation Shipments	13	23	47	70	158	87%
Workstation Installed Base	28	52	93	159	158	54%
Europe						
Total Revenue	0	0	0	4	3	ERR
System Shipments	0	0	1	21	7	ERR
Workstation Shipments	0	0	1	23	7	ERR
Workstation Installed Base	0	0	2	25	7	ERR
Far East						
Total Revenue	0	0	0	8	2	ERR
System Shipments	0	0	1	37	3	ERR
Workstation Shipments	0	0	1	53	3	ERR
Workstation Installed Base	0	0	1	53	3	ERR
Rest of World						
Total Revenue	0	0	0	0	1	ERR
System Shipments	0	0	0	0	1	ERR
Workstation Shipments	0	0	0	0	1	ERR
Workstation Installed Base	0	0	0	0	1	ERR
Standalone						
Total Revenue	0	0	4	11	20	ERR
System Shipments	0	0	29	86	162	ERR
Workstation Shipments	0	0	29	86	162	ERR
Workstation Installed Base	0	0	29	114	162	ERR
Host-Dependent						
Total Revenue	1	3	4	9	16	83%
System Shipments	6	23	6	14	15	26%
Workstation Shipments	13	23	20	39	7	-14%
Workstation Installed Base	28	52	67	102	7	-29%
Personal Computer						
Total Revenue	0	0	0	1	0	ERR
System Shipments	0	0	0	21	0	ERR
Workstation Shipments	0	0	0	21	0	ERR
Workstation Installed Base	0	0	0	21	0	ERR

Source: Dataquest
 June 1986

C.1 Historical Data — By Company

TABLE NUMBER: C-149
 TITLE: Company History
 COMPANY: Other Turnkey and Software
 APPLICATION: PCB
 UNITS: Millions of Dollars and Actual Units

	1981	1982	1983	1984	1985	CAGR
	=====	=====	=====	=====	=====	=====
Worldwide						
Total Revenue	22	36	52	88	18	-5%
System Shipments	96	176	378	1,389	116	5%
Workstation Shipments	200	332	552	1,605	499	26%
Workstation Installed Base	274	592	1,134	2,680	499	16%
North America						
Total Revenue	0	3	28	39	16	ERR
System Shipments	0	32	199	984	116	ERR
Workstation Shipments	0	32	295	1,011	116	ERR
Workstation Installed Base	0	32	345	1,339	116	ERR
Europe						
Total Revenue	0	0	14	11	2	ERR
System Shipments	0	0	104	165	0	ERR
Workstation Shipments	0	0	150	174	0	ERR
Workstation Installed Base	0	0	149	315	0	ERR
Far East						
Total Revenue	0	0	10	38	1	ERR
System Shipments	0	0	71	231	0	ERR
Workstation Shipments	0	0	102	411	383	ERR
Workstation Installed Base	0	0	102	508	383	ERR
Rest of World						
Total Revenue	22	33	0	0	0	-100%
System Shipments	96	144	4	9	0	-100%
Workstation Shipments	200	300	5	9	0	-100%
Workstation Installed Base	274	560	538	518	0	-100%
Standalone						
Total Revenue	0	0	20	38	7	ERR
System Shipments	0	0	222	336	116	ERR
Workstation Shipments	0	0	222	336	116	ERR
Workstation Installed Base	0	0	242	564	116	ERR
Host-Dependent						
Total Revenue	22	36	32	35	2	-44%
System Shipments	96	176	156	55	0	-100%
Workstation Shipments	200	332	330	271	383	18%
Workstation Installed Base	274	592	892	1,118	383	9%
Personal Computer						
Total Revenue	0	0	0	15	9	ERR
System Shipments	0	0	0	998	0	ERR
Workstation Shipments	0	0	0	998	0	ERR
Workstation Installed Base	0	0	0	998	0	ERR

Source: Dataquest
June 1986

