



Guide to the Steve Allen photographs of Fairchild Semiconductor

Dates: 1926-1997, bulk 1962-1979

Extent: 2 linear feet, 2 record boxes

Collection number: X4360.2008

Accession number: 102708014

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Abstract

The Steve Allen photographs of Fairchild Semiconductor contains photographs of professional photographer Steve Allen, a Fairchild Semiconductor and National Semiconductor Corporation employee from 1966 through about 1997. The collection documents executive employees, sales force, fabrication facilities, and products of Fairchild Semiconductor. The vast majority of the collection is comprised of photographs, negatives, and slides. There is a small amount of textual material.

Administrative Information

Access Restrictions

The collection is open for research.

Publication Rights

The Computer History Museum (CHM) can only claim physical ownership of the collection. Users are responsible for satisfying any claims of the copyright holder. Permission to copy or publish any portion of the Computer History Museum's collection must be given by the Computer History Museum.

Preferred Citation

[Identification of Item], [Date], Steve Allen photographs of Fairchild Semiconductor, Lot X4360.2008, Box [#], Folder [#], Computer History Museum

Provenance

The Steve Allen photographs of Fairchild Semiconductor was donated by Steve Allen to the Computer History Museum in November of 2007. These are the records Steve Allen collected during his career as a photographer for Fairchild Semiconductor and National Semiconductor.

Repository

Computer History Museum
1401 N. Shoreline Blvd.
Mountain View, CA 94043
USA
650-810-1010
www.computerhistory.org

Biographical and Administrative History

In 1957, New York based Fairchild Camera and Instrument Corporation made a historic business decision when they sponsored the formation of Fairchild Semiconductor in Palo Alto, California. A group of eight scientists and engineers involved in solid-state electronics had developed a method of mass-producing silicon transistors using a double diffusion technique and a chemical etching system called the “mesa” process. Fairchild provided the necessary backing for the groups’ project and the development and production of silicon diffused transistors and other semiconductor devices began. The eight scientists and engineers were Julius Blank, Victor Grinich, Jean Hoerni, Eugene Kleiner, Jay Last, Gordon Moore, Robert Noyce, and Sheldon Roberts.

Fairchild Semiconductor became a wholly-owned subsidiary of Fairchild Camera and Instrument Corporation in 1959 and in 1961 became the Semiconductor Division. In 1959, Fairchild announced the development of the patented Planar process for semiconductor device manufacturing. The Planar process paved the way for such technological advances as the integrated circuit. In 1961 Fairchild introduced the world’s first monolithic integrated circuit and in 1971 the isoplanar process for semiconductor manufacturing.

In 1968 the company’s corporate headquarters were moved from Syosset, New York to Mountain View, California. In 1979 Schlumberger Limited purchased Fairchild Semiconductor as a diversification move, but sold the assets to National Semiconductor Corporation (NSC) in 1987. In 1997 NSC divested a number of former Fairchild mature product lines in a leveraged buy-out to executives based at Fairchild’s former South Portland, Maine facility and the “new” Fairchild Semiconductor became a publicly traded company once again.

In early 1962 Richard Steinheimer was hired to start a photography department at Fairchild Semiconductor in Mountain View, California. Steinheimer hired Steve Allen (1938-) in 1966 as a photographer. Graphic Art and Photography was a division of Marketing Services, which also included Advertising, Public Relations, and Reproduction and Distribution. Though the work at Fairchild Semiconductor was industrial, the photographers were encouraged to be creative and develop themselves as artists. When NSC bought the company the attitude toward creative staff shifted. The philosophy of NSC was not to have artists, photographers, and art directors on staff. About 1990, NSC sold Allen his equipment and made him a contract photographer. Allen continued in that capacity until about 1997.

Scope and Content of the Collection

The Steve Allen photographs of Fairchild Semiconductor contains the professional photographic files of Steve Allen. The collection represents some of the most innovative graphic design that took place in Silicon Valley in the 1960s and 1970s, including photomicrographs, photo macrographs, and life field metallography. After Allen became a contractor for NSC, he was allowed to keep those images that would be most frequently requested, most likely used in projects, or that he would generally need regular access to. The remainder of the files stayed at NSC. The records span 1960 through 1992 with the bulk of the collection being from 1962 through 1988. Topics include Sherman Fairchild, Fairchild Aviation Corporation, Fairchild Camera and Instrument Corporation and Fairchild Semiconductor, with approximately two thirds of the collection being related to Fairchild Semiconductor products and people. The collection is arranged in 3 series:

Series 1: A Solid State of Progress photographs

Series 2: Subject Files

Series 3: Collected history files

Unless otherwise noted dates are inclusive. While Allen's files were in active use, he kept them arranged chronologically and then by subject within each year. Since this collection contains a portion of Allen's complete files, the original order has been lost and no attempt has been made to reconstruct it.

Indexing Terms

Allen, Steve

Fairchild (Firm)

Fairchild Aerial Camera Corporation

National Semiconductor Corporation

Integrated circuits—Pictorial works

Semiconductor industry—Pictorial works

Series 1, A Solid State of Progress, 1961- circa 1974

This series contains photographs, negatives and slides of Fairchild Semiconductor integrated circuits, ingots, wafers, chips, and other devices used to illustrate *A Solid State of Progress*. *A Solid State of Progress* began as a one-of-a-kind publication of mounted original prints presented as a special gift to the head of TDK Electronics, Ltd. of Japan, about 1963. A second volume of mounted original prints was presented to an executive at Phillips about a year later. *A Solid State of Progress* was so well received that Marketing Services decided to publish a four color print version in limited quantities. There were approximately three editions of limited quantity four color print catalogs. This series is arranged alphabetically by product name.

Series 2, Subject files, 1960-1992, bulk 1960-1988

This series contains the files of Allen and Richard Steinheimer from the photography department in Mountain View, California. Included are photographs, negatives, contact sheets, and slides created for the sales force, trade shows, reliability brochures, covers

of electronics magazines around the country, and internal publications. They illustrate people, products, research & development facilities, fabrication plants, and events from Fairchild Semiconductor and NSC. There are posed head shots, group shots at sales conferences, ceremonies and meetings, as well as images of a limited amount of Fairchild Semiconductor products. This series is arranged alphabetically by subject.

Collected history files, 1926-1979, bulk 1960-1979

This series contains material that Allen rescued from destruction during the years he was a contract photographer for National Semiconductor Corporation. These are not Allen's records and were not maintained by him during their period of active use. There may have been multiple creators of this series, including, but not limited to, Dick Bailey, Fred Hoar, Lyn Christenson and Roger A. Barney. They do all appear to have come from the Employee Communications or Corporate Communications departments, or a variant of that. This series contains photographs of Sherman Fairchild from his twenties through his seventies, biographies of Sherman Fairchild, photographs and biographies of other executives from the 1960s and 1970s, press releases, clippings and photographs related to Fairchild Aerial Surveys, Inc. and Fairchild Instrument and Camera Corporation. It is unknown if the negatives of Sherman Fairchild in his twenties and thirties are originals or subsequent generation copies. This series has some water damage. This series is arranged alphabetically by subject.

Related Collections at CHM

Lot X4017.2007 Gift of Henry Mahler. Unprocessed

Lot X4348.2008; X4172.2008; X4359.2008; X4380.2008; X4324.2008

Collection of Fairchild Semiconductor employee papers

Related Collections at Other Repositories

Stanford University. Libraries. Dept. of Special Collections:
Photographic Files of Steve Allen, c. 1960-1985 M1038

Stanford University. Libraries. Dept. of Special Collections:
Photographs of integrated circuits, etc., ca. 1964-1995 M0985

Stanford University. Libraries. Dept. of Special Collections:
35 mm slides, 1960-1970 MISC 587

Folder List

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
A solid state of progress		
Box 1		
102710073	0002 RF power transistor	1963-04
102710040	0014	1964-10
102710054	0028	1964-01
102710066	0057 MOS-FET	1966-10
102710048	0328 large power transistor	1970-02-04
102710064	103 dual gate TTL	1964-03
102710044	117	1965-04
102710067	1211-A	1964-11
102710045	1312	1964
102710062	1702	1964
102710065	1902 EQR, 1702 non-EQR	1966-04
102710037	3101MOS dual JK flip flop	1967-05-18
102710068	3111	1964-11
102710046	3355 Iso-P 1024 bit serial static register (1st Iso-P MOS circuit)	1973-07
102710032	3410 Micromosaic	1969-01-17
102710031	35115z and 3402	1971-08
102710049	3544 16K MOS RAM	1977-01-03
102710030	3665	1977-09-13
102710028	3708 1st silicon gate MOS	1969-08-13
102710053	3800 MOS / LSI	1967-09-21
102710025	3850 (1 of 2 F-8 chips)	1975-03
102710051	4070	1976-11-23
102710033	4100, 93400 and MEM 180	1969-11-19
102710050	4183 I3L bipolar, 16K fdynamic RAM	1977-05-03
102710018	4200, 1st Planar transistor	1960
102710069	4500 micromatrix	1966-12
102710038	4711 MSI 2 layer	1968-30-09
102710047	6207 discrete emitter power	1967-05-02
102710021	700, 1st LIC uA 700	1964-11
102710034	703	1964-1967
102710035	709	1965-05
102710036	709	1969-11-30
102710019	7202 power amplifier	1964
102710058	722 10 bit current source	1968-01-22
102710060	78XX voltage regulator	1971
102710059	9002 Y TTL	1970-12
102710041	9030	1966
102710057	907	1963-08

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
A solid state of progress		
Box 1		
102710072	931 1st DTL	1964-06
102710017	931 DTL flip flop	1964
102710042	9341 3 layer MSI	1970-03
102710023	93410 (4110) isoplanar, first commercial isoplanar product	1971-05
102710052	93415 (4115) 1024 bit Isoplanar memory	1971-08-18
102710022	9440S	1978-05-22
102710024	95410 (4010)	1971-12
102710043	9969	1967-10
102710063	C 028	1974-01
102710061	CCD 500	1972-12
102710027	CD488 CCD imaging chip	1975-10
102710071	Diffusion furnace fab 4	1965-03
102710055	Diode monolithic character display array	1971-02
102710039	FD 700	1968-02-28
102710074	FLPA-200	1964-10-26
102710076	FPA 601 self scanned photo array	1971-02
102710056	FPA601 64 element self scanning silicon gate photodiode array; photos for Phillips album	1970-12
102710070	Gallium arsenide light emitting diode	1969-04-22
102710014	History of Fairchild Semiconductor devices for Hogan albums	1959-1985
102710029	Isoplanar II	1973
102710026	LED superdigit	1972
102710015	RTL u1902 F element flip flop round chip, photo shoot	1971-01
102710020	u741 corrupted LIC op-amp	1968-01-22
102710016	uL902 RTL element flip flop, bonded; for Dick Merrill	1996-06
102710075	Unidentified negatives	1964 ca.-1971 ca.

Folder List

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
Subject files		
Box 1		
102709922	WGBH, Boston, photos for use in Information Age	1992-04
Box 2		
102709967	5000 C tester	1977-05
102709996	Allison, David	1988
102709969	Anixter, Ben, Jack Gifford and Jerry Larkin for EEE magazine	1968-10-07
102709948	Bay, Grimich, Last, Hoerni, Blank, Kleimer, Moore, Roberts, Seigel, Noyce, Allison, and Hodgeson at "Thank you Fairchild" party	1988-04-14
102710004	Bell Laboratories first transistor, John Bardeen, William Shockley and Walter H. Brattain	1978-10-18
102709992	Deal, Bruce	1988-04-08
102709970	Dedication Fairchild Research Center (Building E)	1988-04-14
102709951	Dedication of 844 E. Charlston Rd. by sate of CA as Historical Landmark #1000	1991-08
102709990	Dedication of research and development expansion, Andy Grove, Bruce Deal and Ed Snow	1966 ca.
102709950	Device fabrication layout with ingots, wafers, chip, devices	1966-04
102710011	Devices	1960
102709974	Division managers group portrait	1971-10
102709998	Epitaxial devices	1963
102709955	Fabrication and assembly scenes	1964
102709952	Facilities	1992
102709945	Fairchild Semiconductor founders	1988
102710002	Fairchild, Sherman visit to research and development with Gordon Moore and Robert Noyce	1965-10
102710001	Fairchild, Sherman with aerial cameras and airplane	1977-01
102709965	Fairchild, Sherman with other flyers	1977-01
102710006	Fairchild, Sherman, last portrait photograph	1970 ca.
102709947	Grimich, Moore, Noyce and Blank at 844 Charleston Rd. in Palo Alto, CA	1967-10
102709995	Grinich, Victor	1988 ca.
102709993	Hoerni, Jean	1985 ca.
102709963	Hogan, Les	1973 ca.-1977
102710003	Hogan, Lester C.	1968 ca.-1979 ca.
102709962	IBM 701 computer	1978-10
102709994	Last, Jay	1985 ca.
102709960	Last, Jay T.	1990 ca.
102709959	LM 100 National Semiconductor Corporation (NSC) integrated circuit	1988-03-18
102709972	Luncheon	1966-07

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
Subject files		
Box 2		
102709956	Management meetings with Robert Noyce	1964
102709957	Marketing Services review talk by Sopkin	1969-08
102710012	Miscellaneous identified and unidentified images	1960 ca.-1990 ca.
102709966	Monroe solid state printing calculator with four functions	1977-11
102709944	National sales conference	1968-08
102709999	National sales conference, Acapulco	1966
102710000	National sales conference, Hawaii	1967-09
102710005	Nobel Prize party, William Shockley, Robert Noyce and others	1967-1974
102709946	Noyce and Hoerni patents	1961-1962
102709958	Noyce, Robert and Gordon Moore	1974 ca.-1980 ca.
102710010	Noyce, Robert, Don Valentine, Charles Sporck, Frank Yee and John Baldwin	1963-1965
102709971	Noyce, Robert, KQED fund drive	1968-01-26
102710008	Outtakes from portfolio	1979 ca.-1981 ca.
102709997	Planar epitaxial process artwork, master	1969-05
102709968	Pre-epitaxial devices and wafers	1962 ca.
102709953	Purchase of Fairchild Semiconductor by National Semiconductor Corporation from Schlumberger	1987
102710007	Research and development	1962
102709975	Research and development	1962-1964
102709961	Research and development lab scenes	1960-1965 ca.
102709991	Seeds, Robert	1964-10
102709954	Shareholder's meeting	1970
102710009	Sporck, Charles promotion, with Sherman Fairchild	1965-04-28
102709973	Sporck, Charles with eight founders	1988-04
102709964	Vedette aircraft owned by Fairchild Aerial Surveys, Quebec, Canada	1987
102709949	Widlar, Robert	1988-03-17

Box Misc oversize 2

102709989	Art in microelectronics portfolio	1968 ca.
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<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
Collected history files		
Box 1		
102709912	50th year: Fairchild photo album, The	1977
102709921	50th year: Fairchild photo album, The. Images used	1977
102709939	Amelio, Gilbert T.	1973 ca.-1978 ca.
102709916	Analyst's meeting	1970
102709926	Corrigan, Wilfred J.	1977 ca.
102709911	Dialogue, award winning cover	1968-1969
102709934	Early, James M.	1970 ca.
102709929	Facilities, Asia	1966 ca.-1979 ca.
102709925	Facilities, Healdsburg, California	1975 ca.
102709924	Facilities, Hong Kong	1975 ca.
102709910	Facilities, Latham, NY SATS headquarters	1979
102709920	Facilities, Mountain View, CA (?)	1975 ca.
102709927	Facilities, Seoul, South Korea	1975 ca.
102709928	Facilities, Singapore, China	1975
102709923	Facilities, South Portland, Maine	1975 ca.
102709930	Fairchild Aerial Surveys, Inc.	1955 ca.
102709933	Fairchild Camera and Instrument Corporation contributions to aviation	1952-1955 ca.
102709932	Fairchild, Sherman backgrounder (presented at Aviation Hall of Fame Awards May, 1979)	1979
102709915	Fairchild, Sherman M.	1923 ca.-1970 ca.
102709918	Fairchild, Sherman M. biographies and obituaries	1962 ca.-1973
102709938	Hogan, Lester C.	1968 ca.-1978 ca.
102709941	Horizons	1975
102709942	Images used in Irving Doyle's presentation at Sherman Fairchild memorial	1979-12-06
102709917	LM 101A 1st NSC VR?	1968 ca.
102709937	Longo, Thomas A.	1970 ca.-1979 ca.
102709931	Lunar mapping camera for the NASA Apollo Program press release packet	1971 ca.
102709936	McLachlan, Murray L.	1980 ca.
102709914	Press releases and article drafts from Public Relations	1940 ca.-1965 ca.
102709943	Speakers	1950 ca.
102709935	Stone, Nelson	1960 ca.
102710013	Tinkerings of Robert Noyce	1983-12
102709913	UNIVAC I, ENIAC, TX-O	1977 ca.
102709919	Wells, George D.	1978 ca.
Box 2		
102709940	Fairchild, Sherman	1951 ca.-1971 ca.