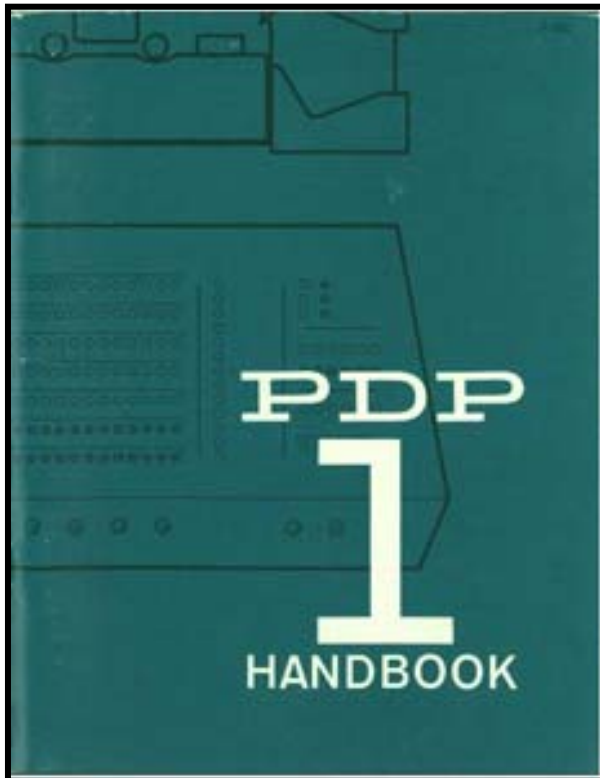


# Guide to the Collection of Digital Equipment Corporation PDP-1 Computer Materials



**Dates:** 1960 – 1983 (bulk 1960 - 1976)

**Extent:** 9 linear feet

**Collection number:** X3602.2006

**Accession number:** 102660913

**Processed by:** Judith A. Strelbel and Rebekah Kim, 2006

**Abstract**

The Collection of Digital Equipment Corporation (DEC) PDP-1 Computer Materials is comprised of program listings, manuals, technical papers, promotional materials, design drawings and photographs regarding the PDP-1 digital computer spanning 1959 to 1983.

**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], [Item Date], Collection of Digital Equipment Corporation PDP-1 Computer Materials, Lot X3602.2006, [Box #], [Folder #], Computer History Museum

**Processing Notes**

The processing of the Collection of DEC PDP-1 Computer Material was undertaken as a result of the restoration of a PDP-1 computer at the Computer History Museum and the subsequent online exhibit. The collection had partial archival processing at CHM before its full processing by Judy Strebel and Rebekah Kim during 2005 and 2006. No original order existed from the previous processing or from its acquisition by CHM.

**Provenance Notes**

The provenance is unknown for the Collection of DEC PDP-1 Computer Materials and most likely came from a variety of different sources. The nucleus of the collection was originally acquired in the 1980s and 1990s when the Computer History Museum was then known as the Computer Museum, located in Boston. The Collection is a portion of the larger artificial Company Collection. Gwen Bell, the Computer Museum's first curator arranged documents by originating institution or company. In 2005 and 2006 all the PDP-1 materials shelved as part of the "Company Collection" were given the found in collection lot number of X3602.2006 and processed.

**Repository**

Computer History Museum  
1401 N. Shoreline Blvd.  
Mountain View, CA 94043  
USA  
650-810-1010  
[www.computerhistory.org](http://www.computerhistory.org)

## Historical Note

In 1960 Digital Equipment Corporation (DEC) launched its first computer, the PDP-1 (Programmed Data Processor-1). The computer cost \$120,000.00, and was 8 feet by 2 feet by 6 feet in size. The computer was designed in three and a half months by Ben Gurley. He based his system on the Massachusetts Institute of Technology (MIT) Lincoln Laboratory TX-0 and TX-2 computers and used DEC's initial product, a series of interconnectable circuits known as "Laboratory Modules," to create the PDP-1.

The PDP-1 was the world's first commercial interactive computer, and was used for process control, scientific research, and graphics applications, as well as to pioneer timesharing systems. The PDP-1 also made it possible for smaller businesses and laboratories to have access to much more computing power than ever before.

Though the PDP-1 was produced in relatively small quantities (just over 50) its impact was significant. For DEC, it was the first in a long line of computers that focused on interactivity and affordability. For the user, the PDP-1 represented an unprecedented freedom of human-machine interaction, spurring the creation of hacker culture at MIT, Bolt Baranek and Newman (BBN) and elsewhere. Inspired programmers created early debugging, text editing, music and game programs - including the first computer video game, *Spacewar!*

## Scope and Content Note

The Collection of Digital Equipment Corporation PDP-1 Computer Materials is composed of program listings, manuals, technical papers, memorandums, promotional materials, logbooks, specifications, design drawings, photographs and paper tape [software] spanning 1959 to 1976. The records are divided into eight series and total 9 linear feet, in six record cartons, one manuscript box, and one oversized box. All series are arranged alphabetically by folder title.

The first series, *Program Listings*, date from 1961 to 1976. Included in this series is the program listing for *Spacewar!*, one of the earliest, if not the earliest video game, for digital computers. The large group of program listings includes debugging programs, administrative routines, and test programs.

The second series, *Technical Notes*, date from 1959 to 1975. This series contains technical programming notes to all types of programs from *Invisible Debugger* to *Expensive Typewriter*. Contained in this series are technical notes for the PDP-1 by the Digital Equipment Corporation Users Society (DECUS), BBN, DEC, Itek Laboratories, and MIT.

The third series is *Manuals*, 1960 to 1967. The manuals cover hardware and programming topics. This series contains manuals that focus on specific components as well as ones that cover basic instructions and maintenance for the PDP-1. Included is an early *Programmed Data Processor-1 Handbook* (1963).

The fourth series is *Miscellaneous*, 1960 to 1965. Contained in this series are a small number of interoffice memoranda and promotional materials. Also included is a 1963 option and price list. Of interest is an oral history transcript of Richard Best, an engineer who worked at MIT's Lincoln Laboratory and then at Digital Equipment Corporation.

The fifth series *Specifications*, is a small quantity of specifications dating from 1961 to 1973. These include cable schedules, component lists, component diagrams, and wiring schematics.

The sixth series is *Logbooks/ Records*. This series consists of logbooks, 1962 to 1976, for the PDP-1 computers at the MIT Research Laboratory of Electronics. Information recorded here describes the programs that were run, maintenance issues, and failures. Also included is an undated maintenance log on loose paper.

The seventh series is *Design Drawings*, 1959 to 1968. These are oversized schematics of the PDP-1.

### Arrangement

- I. Program listings (1961 – 1976)
- II. Technical Notes (1959 - 1975)
- III. Manuals (1960 – 1967)
- IV. Miscellaneous (1960 – 1965)
- V. Specifications (1961 - 1973)
- VI. Log Books/ Records (1962 – 1984)
- VII. Design drawings (oversized drawings) (1959 – 1968)

### Subjects

Computer science. Computer architecture and design  
Digital Equipment Corporation  
Digital Equipment Computer Users Society  
Electronic digital computers programmed instruction  
Electronic digital computers  
Massachusetts Institute of Technology. Dept. of Electrical Engineering and Computer Science  
PDP computers  
Spacewar computer game  
Time-sharing computer systems

### Separated Material

Photographs were removed from the collection. There were over 75 original photographs covering, 1960 to 1983, of the PDP-1 Computer taken of the computer in use or for marketing purposes. To view the photographs go to the CHM website at <http://archive.computerhistory.org/search>.

Paper tapes were removed from the collection. There are 388 catalog records of various software programs punched on paper tape for the PDP-1. The cataloging was done by transcribing what was written on the paper tape and not by machine reading it to verify the actual content of the tapes. To view the paper tape catalog records go to the CHM website at <http://archive.computerhistory.org/search>.

### Related Collections at CHM

Harlan Anderson papers, X3575.2006.  
DEC corporate records, X2675.2004.  
PDP-1 Restoration online exhibit: <http://www.computerhistory.org/pdp-1/>

Other related research documents, software, still and moving images, and physical objects, can be found in the CHM collections database at <http://www.computerhistory.org/search/>. Use the following keywords to find these related materials in the collection:

PDP-1  
Digital Equipment Corporation (DEC)  
Digital Computer Corporation (DCC)  
Digital Equipment Computer Users Society (DECUS)  
Spacewar

### **Related Collections at Other Repositories**

#### Charles Babbage Institute: Center for the History of Information Technology

211 Andersen Library  
222 - 21st Avenue South  
University of Minnesota  
Minneapolis, MN 55455  
USA  
Phone: (612) 624-5050  
<http://www.cbi.umn.edu/>

Computer Product Manuals Collection, CBI 60.  
Digital Equipment Computer Users Society (DECUS) Proceedings and Publications, CBI 150.  
Calvin N. Mooers Papers, CBI 81.

## Folder List

PDP-1 Computer Materials

X3602.2006

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Program listings</b>		
<b>Box 1</b>		
102635722	7 bit character put and get	
102665103	ADMINISTRATIVE ROUTINE (1967)	1967-09-13
102665168	AMPEX CHECKERBOARD	
102665171	Action	
102664280	Administrative and executive routines	1967
102635713	Alphanumeric punch with parity	
102636256	Argus core	
102664281	Arithmetic pack for FORTRAN	1975-01-26
102636255	Ascii II tape lister	
102665164	BASIC EDITOR / BASIC INTERPRETER / BASIC COMPILER	
102665170	BASIC SOURCE #3	1973-10-14
102665113	CROCK = MTA4	
102636254	Certainly (1969)	1969-03-18
102664282	Certainly (1973)	1973 ca.
102636251	Character display	1964 ca.
102665030	Cylindrical File 17oct70	1970-10-17
102635727	DDT (DEC Debugging Tape)	1966-07-07
102636244	DPY Plot	
102636247	Decimal Print integer, Fraction, Double	1964-06-09
102636241	Decimal print subroutine	
102636245	Double Precis Square Root	
102636249	Double precision decimal print	
102664283	Drum Test (1963)	1963-02-09
102652449	Drum Test (1972)	1972
102635696	Drum error recovery	
102664465	ER X-REF; FR 15AU	1973-08-09
102636250	Executive Routine	1970-06-14
102636242	Expensive desk calculator	1962-05-24
102636253	Expensive typewriter (1969)	1969-09-25
102664474	Expensive typewriter (1973)	1973-05-26
102636252	Expensive typewriter text reader / writer	
102652330	Expensive typewriter window patches	1966-01
102652331	FCDDDT	1965-09-22
102664475	FILECASE ROUTINES	1972 -02-01
102635748	FLIT I	1961-07-31
102664487	FORTTRAN PASS 1	1975 -02-23
102664488	FORTTRAN PASS 2, FORTTRAN PASS 0, LINKING LOADER	1975-03-16

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Program listings</b>		
<b>Box 1</b>		
102664489	FORTRAN PASS 3	
102665163	FORTRAN PASS 3/4/5	
102665162	FORTRAN PASS 4	1975-07-25
102635710	Fancy title punch subroutine	1963-07-26
102636248	Fixed log base 2	
102635747	Float 1	
102635744	Floating Point Interpretive Routine	1961-07
102635709	Floating point arithmetic package	
102664476	Fork	1971-04-06
102665059	Fortran Utilities	
102652329	Fortran compiler ("Fort.comp")	
<b>Box 2</b>		
102664483	INVISIBLE DEBUGGER (1973-04-18)	1973-04-18
102664681	Input Routine	1975 ca.
102665031	LISP	
102652338	LISP for TS (time sharing)	1966-01-01
102650322	Lightmeter Test	
102635746	Line Plotting Routines and Macros	
102635745	Line display routines	
102664473	MAIZE / EDC / JOTTO	1971-06-16
102664479	MATH ROUTINES FORTRAN	
102665061	MIDAS	
102664484	MUSIC COMPILER and MUSIC PLAYER	1973-06-30
102652334	Map	1968-05-15
102652336	Midas Assembler Extended Memory	1963-11-10
102664680	Miscellaneous program listings	1975 ca.
102635695	Multi-precision Package	1962-04-03
102652332	Natural Log and log base 2	
102635697	New Float	
102635702	New mode sequence break subroutine	1965-03-01
102635698	Octal print subroutine	
102664485	PAL COMPILER	1971-10-20
102664477	PLOT 260 PROGRAM LISTING FORTRAN	1976-04-02
102635715	Pen follow program	
102652335	Possible	1965-08-16
102665066	Preliminary DECAL Manual, Solitaire, Space War 4.0 TS, Executive Routine, Microtape Interface	
102635716	Prime tester	

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Program listings</b>		
<b>Box 2</b>		
102664480	Programs 1 through 11	1975-08-05
102665069	Random Number Generator	
102665147	Real Time Clock; Summary Commands Expensive Typewriter; The Monitor Program; Utility Set Up	
102665062	Round File	1971-06-12
102664481	SCIENTIFIC SUBROUTINES	
102635732	Scatter READ and CHECK routines	1966-11-09
102635712	Scope character output subroutine	
102635718	Scope decimal print	
102635719	Sequence break routines	1963-11-05
102635723	Simple pen follow	
102635725	Sin-cosine subroutine	
102650074	Sine-cosine Routine	1962-12-31
102635726	Single precision integer square root	
102650101	Spacewar 3.1 and Spacewar 4.8	
102635728	Square root of sum of squares	
102635729	Stupid double add and integer log	
102635724	Symbol puncher printer lister	
102650321	Symboldum	
102635721	System assembler	1964-08-28
102635720	System saver	1969-08-20
102665165	TEST PROGRAMS (INSTR, MPR, SFT)	
102665166	TIME SHARING SUPERVISOR	1972-03-18
102652337	TJ-2-TS (Type Justifier)	1965-11-22
102635700	TRAC	
102635707	Text printing subroutine	
102636243	Text verifier	1975-05-21
102635701	Time-sharing system	1970-02-17
102635714	Title punch subroutine	
102636258	Translation checkerboard	
<b>Box 3</b>		
102664478	TRIG 250 PROGRAM LISTING FORTRAN	1975-08-03
102635708	TS macro FIO-DEC	1965-05-12
102665167	TX-0 UTILITY PROGRAMS	
102652339	Type justifier	1969-07-09
102650095	Type-Out Type-In Test	1962-05-22
102664482	UTILITY PACK FOR FORTRAN	1975-08-02
102652386	Unsigned square root	



<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 3</b>		
102652307	A Time-shared computation facility for education and research	1963-05-16
102650373	ALWAC Conversion Routine	1961-04-13
102650038	Add columns to a stored matrix (ACMATRIX)	1962-09-06
102650039	Add or subtract two matrices	1962-09-06
102650040	Add rows to a matrix	1962-09-06
102652542	Administrative Routine (Mystic)	1964 - 1966
102652325	Alphanumeric codes by character	
102650087	Analyzer	1961-05-24
102650070	Arithmetic Routines	1962-12-31
102650116	Average Response Computer Program (ARC)	1960-04-08
102650135	Back-search Readinbuffer	1961-11-28
102650093	Binary Punchoff	1961-06-19
102650339	Binary Tape Converter Program/ Binary Format Loader	1959-10-29
102650625	Binary Tape Format and Input Routine	1961-10-09
102650372	Binary to Decimal Punch	1961-03-09
102650066	CHKSYM (Check a symbolic tape)	1963
102650049	Calculate a row sum	1962-09-20
102650575	Certainly	1972-01-31
102650622	Changes to Drum DDT (DDDT)	1963-08-05
102650098	Character Display	1961-04-24
102636261	Character plotter	
102650053	Check Parity	1962-10-21
102650331	Colossal Typewriter Program (CT)	1960-12-19
102650118	Commands to Calif. Comp. Prod. Plotter	1961-10-30
102650020	Compare blocks	1963-03-12
102650056	Compare strings	1963-06-11
102650083	Compatible Reproduce	1963-01-11
102650125	Complementing checkerboard program	1960-01-13
102650078	DEC Debugging Tape (DDT)	1964-08-13
102650112	DTL Microcircuits	1968-01-02
102650338	Decimal - Binary Package	1962-01-04
102650627	Display Pattern Generator	
102650613	Drum Scheduling Techniques	1966-06-08
102650630	Drum Test	1963-06-17
102650084	Expensive Desk Calculator	1963-01-02
102650079	Expensive Typewriter	1972-08-01
102650102	Extend DDT	1964-03-02
102650099	Extended DECAL	1963-09-26

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 3</b>		
102650335	FIO-DEC and Computer Typewriter Codes	1962-01-18
102650326	FRAP; FRAP and DECAL	1961-12-11
102650086	Floating Point Package	1962-04-27
102650574	Fortran	1971-11-08
102652446	I/O and Mass Memory Devices	1975-02-02
102650106	Index Register	1968-06-12
102650616	Input / Output in the PDP-1-X	1966-03-10
102650619	Invisible Debugger (ID)	1965-1971
102650628	Knobs and Buttons	1965-02-09
102650371	LISP Implementation for the PDP-1 Computer	1964-03
102665112	MACRO Assembly Program	1962-05-24
102664687	MUSIC COMPILER	
102650631	Magnetic Drum Storage	1963-02-28
102650085	Master Tape Duplicator	1963-10-20
102650096	Matrix Operations Program	1963-02-22
102650624	Microflit PS	1961-11-15
102650576	Microtape File System	1973-09-12
102650629	Microtape Hardware System	1967-12-21
102650620	Midas Assembly Program	1964-02-12
102665132	Misc. logic equations, diagrams, schematics, notes	
102664686	Modification Bulletin No. 1-1	1965-05-18
102650316	New Fiodec Codes and Symbols	1961-12-01
102650330	New Mode Sequence Break System for Time Sharing	1964-11-03
102650623	Off-Line Flexowriters	1962-10-08
102650115	Operating Instructions for IBM Tape Checker	1964-08-04
102650063	Order (ascending) a two dimensional array	1964-08-06
102650323	PAP Symbol Table	1962-08
102664262	PDP-1 Program Library: Expensive Desk Calculator	1963-01-02
102652326	PDP-1 instruction code and Friden code	1960-02-01
102650028	PDP-1-X System Organization	1967-06
102650111	Pen Tracker Routines	1962-05-15
102650573	Possible	1966-08-18
102650504	Preliminary Program Information for the PDP	1961-09-28
102650611	Process Scheduling	1966-06-09
102636234	Programmed Data Processor Specifications	1961-06-27
102650614	Programmed Queues	1966-06-07
102652327	Programming the PDP-1 Computer	1963-02-14
102650088	Punchout Read In Mode Tape	1961-04-12

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 3</b>		
102650091	Read Binary Test	1961-08-29
102636237	Revised PDP-1 order code	1959-11-12
102650130	STEP (Selective Trace and Examination of Process)	1961-09-18
102650612	Scheduling Data	1966-06-08
102650128	Software Applications Index	
102650626	Subroutine OS-01 Scope Character Output	
102636236	Summary of Teco Commands	1963 ca.
102650618	System Assembler	1964-08-25
102664682	THOT's: DDT-6 what should it be?	1963-12-05
102664683	TJ-2: Type Justifying Program	1963-05-09
102635717	TS Macro	1963-08-20
102665092	TX-O	
102650617	TX-O/PDP-1 Data Link	1966-02-16
102652418	Teletype Trouble Code	
102636259	Time Sharing System	1971
102650621	Type Justifier	1972-07-31
102650089	Typewriter Inquiry Control (TIC)	1961-06-19
102664685	USING THE PDP-1 COMPUTER	1965-03-03
<b>Box 4</b>		
102665106	A TIME SHARING SYSTEM for the PDP-1 COMPUTER	1962-06
102665058	An Invisible Debugger for a PDP-1 Time Sharing System	1963-06
102650334	DECTAPE Control Routine	1965-10-02
102650103	Decimal Input/ Output Package	1962-05-16
102650069	Digital Function Generate and Display	1963-09
102650119	Disc Input-Output Typing Routine (Operating Instructions)	1961-12-01
102650123	Disc-Clear Program (Operating Instructions)	1961-01-11
102650097	Display Line: dpyline, increment, FRAP subroutine	1961-03-28
102665104	Divide Simulator	1962-10-12
102650325	Divide Subroutine	1962-11-13
102650094	Divide and Multiply Test Using Random Numbers	1961-09-25
102650104	Double Precision Floating Point Elementary Mathematical Subroutines	
102665052	Drum Adaptor	
102650054	Dzm block	1963-02-20
102645676	Exchange blocks	1963-02-25
102664278	Expensive Desk Calculator	1968
102650075	Exponential Routines	1962-12-31
102650050	FLR	1962-09-28
102650052	FNIP	1962-09-26

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 4</b>		
102664693	FORTRAN	1971-11-08
102665067	FORTRAN for the PDP-1 version 3	1965-11
102650107	Fixed Point Multiply	1962-05-10
102650129	Flagcounter	1961-06-19
102652328	Flint 36	
102650071	Floating Input Routine	1962-12-31
102650072	Floating Output Routine	1962-12-31
102650077	Floating Point Arctangent	1962-12-31
102665068	Floating Point Arithmetic Package	
102650073	Floating Point Interpreter	1962-12-31
102650031	Floating Point Interpreter Routines: 18-18 Arithmetic routines	1962-06-15
102650032	Floating Point Interpreter Routines: Exponential Routines	1962-06-15
102650030	Floating Point Interpreter Routines: Floating output routine	1962-06-15
102650037	Floating Point Interpreter for Use with Programs Compiled with DECAL-BBN	1963-09-06
102650027	Floating Point Interpretive Routine: Single Precision Floating Point Interpreter	1962-06-15
102650035	Floating Point Interpretive Routines: Floating Point Natural Logarithm	1962-06-15
102650029	Floating Point Interpretive Routines: Floating input routine	1962-06-14
102650036	Floating Point Interpretive Routines: Floating point are tangent	1962-06-15
102650033	Floating Point Interpretive Routines: Floating square root	1962-06-15
102650034	Floating Point Interpretive Routines: Sine-Cosine Routines	1962-06-15
102650076	Floating Point Natural Logarithm	1962-12-31
102650314	Floating Square Root	1962-12-31
102650329	Frapcorrector	1961-04-11
102650336	Friden Model FPC-8 Double Case Flexowriter	1961-06-01
102650045	Generate a unit matrix	1962-09-06
102650057	Get median	1963-07-05
102645674	Get standard deviation	1963-02-12
102665095	IOT Operated I/O Devices	1970-12-15
102650060	Inclusive or Blocks	1963-02-12
102650092	Instruction Test Programs	1961-10-04
102665097	Instructional Manual: I/O and mass memory devices	1975-02-02
102650131	Intercom and Debug Program	
102665054	Invisible Debugger (ID)	1973-07-04
102665048	Jack Dennis Technical Papers	
102645673	Kalah game playing program	1961-03-31
102664689	LISP	1966-05-20
102650024	Larger, equal, smaller algebraic (lesa) or absolute magnitude (lesm)	1963-07-05

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 4</b>		
102650374	MAC: A Master Subroutine Control System	1960-11-22
102665093	MODES, REGISTERS, NEW INSTRUCTIONS, and TRAPS AND INTERRUPTS in the PDP-1-X	1966-06-07
102650090	Memory Addressing Test Program	1961-08-29
102650042	Move a matrix to a new location	1962-09-06
102645677	Move block	1963-02-25
102650324	Multiply Subroutine	1962-11-13
102650041	Multiply a matrix by a constant	1962-09-06
102650046	Multiply a row by a constant	1962-09-20
102650043	Multiply two matrices	1962-09-06
102650113	Multiply/ Divide Option	1961-06-29
102665088	Music programs	1970-11-02
102650134	Nth word readinbuffer subroutine	
102650327	Octal Loader Program/ Octalinput/ Binary Loader	1960-01-22
102650080	Octal Debugger	1963-02-07
102650328	Octal Dump	1960-02-08
102650133	Octal Typeout	1963-03-28
102650120	Operating Instructions for Punching Titles on Tapes	1961-12-07
102650064	Order (Ascending) a dimensional array	1964-09-01
102650025	Order block of fixed point numbers algebraically (oba), or according to absolute magnitude (obm)	1963-07-05
102665098	PDP-1 Basic Instructions	1969-09-22
102665102	PDP-1 INSTRUCTION LIST	1966-04-29
102664692	PDP-1 Sequence Break System	
102665101	PDP-1 Teletype hardware	1969-06-27
102665056	PDP-1 Timesharing interface	
102665060	PDP-1 memory	
102665091	PRELIMINARY DECTAPE FILE SYSTEM	1968-02-15
102665090	PRELIMINARY MICROTAPE FILE SYSTEM	1970-02-06
102664690	PROGRAMMED QUEUES in the PDP-1-X	1966-06-07
102664277	PROPOSED INSTRUCTIONS FOR TIME SHARING ON PDP-1	
102650105	Paper Tape Reader Test Program	1962-04-18
102650121	Program Flags	1962-01-05
102650320	Program Library Index	1964-02-13
102650317	Programmed System for Typographic Composition & Editorial Processing	1961-11-16
102665099	Programming teh PDP-1 computer	1963-02-14
102665050	Proposal: An Implementation of an almost-segmented multiprogrammed computer system for the PDP-1	
102650081	Punch Memory	1962-10-30

<u>Folder Number</u>	<u>Title</u>	<u>Date</u>
<b>Technical Notes</b>		
<b>Box 4</b>		
102650047	Punch an intermediate matrix on paper tape	1962-09-20
102645675	Push block up N registers	1963-02-18
102650065	RATBIN (read and type a binary paper tape)	1963-03-23
102650082	Random Number Generators; Coin, Random, Ranmodn	1962-11-08
102650126	Random Punch Paper Tape/ Typewriter Test	1962-03-30
102650051	Random Walk Number	1962-09-26
102650124	Read & Write Disc	1962-01-23
102650048	Read intermediate matrix tape	1962-09-20
102650333	Readinbuffer	1961-05-09
102664691	Relocatable Assembler	
102665100	Relocatable subroutine library	1971-10-17
102650109	Rotate Test	1962-05-14
102650059	Rotate blk right, left	1963-02-20
102650026	SINGLEDEC	1963-01-10
102650055	Search	1963-05-26
102650058	Select with/without replacement	1963-05-26
102650319	Sequence Break	1960-10-28
102650127	Simple Core Memory Test	1962-03-30
102650062	Sort a block of alphabetic items using sortl (DSL-LP-56)	1963-06-24
102650061	Sort a block of items	1963-06-24
102650136	Speed of the PDP-1 Reader	1961-10-09
102650068	Start-Stop Reader Test	1963-11-19
102664688	TECO (Tape Editor and Corrector)	
102650337	Tape Conversion Program	1961-03-14
102650318	Teletypesetter	1961-12-04
102650117	Telex Disk Storage Unit	
102650315	Telex Test	1961-09-29
102650110	Temporary-Storage Pushdown Package	1962-05-14
102665055	Test Programs	
102665057	Timesharing system instructions	
102665049	Timing charts for PDP-1 computer (Not including in-out features, multiply, divide or the sequence break system)	1962-11-26
102645672	To compute $n(n-1)\dots n(n-r+1)$	1962-07-02
102650021	To compute $(n/r) = n!/(r!(n-r)!)1$	1962-07-03
102650022	To delay a running program for a specified number of milliseconds	1962-07-16
102650023	To delay a running program for a specified number of seconds	1962-07-16
102650108	Tracing Program; trace	1962-05-14
102650044	Transpose matrix	1962-09-06
102650114	Trigonometric-Root	1960-11-22

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**Technical Notes****Box 4**

102650067	Two Memory Checkerboard Program	1963-04-16
102650132	Type-A-Tape	
102665107	Typewriter Control	1960-01
102650122	Use of Disc, Light Pen and Logic	1962-01-03

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<b>Manuals</b>		
<b>Box 4</b>		
102652396	DECAL-BBN Programming Manual	1963-09-26
102652397	DECAL-BBN Technical Manual	1963
102636228	Instruction List	
<b>Box 4A</b>		
102652387	A-D, D-A Interface	1963
102652388	ADA-1A Interface Maintenance Manual	1969
102650503	Adjustment and Lubrication Prodcedures for Decoder and Power Unit of the Computeriter	1963
102652389	Coder Unit Models EC and ETC Computeriter Manual	1963-03
102652390	DECTape Control Type 550 Instruction Manual	1966
102652391	Digital Modules manual	1962
102652393	Magnetic Tape Equipment Types 50/51/52	1963
102652394	Precision CRT Display Type 30A	1962
102652392	System Modules	1964
<b>Box 5</b>		
102652403	Basic Instruction Manual (Preliminary)	
102652448	I-O Device programming manual	1965-05
102650615	Instruction Manual (PDP-35)	1968-1975
102635758	MACRO Assembly Program	1964
102650491	MAINDEC 1 Instruction Test	1962
102650496	MAINDEC 10 Read Binary Test	1962
102650497	MAINDEC 12 Punch Test	1963
102650500	MAINDEC 132 Light Pen Test	1964
102650498	MAINDEC 14 Typewriter Test Program	1963
102650492	MAINDEC 2 Memory Checkerboard	1963
102650499	MAINDEC 22 Memory Checkerboard Test	1964
102650493	MAINDEC 3 Address Test Program	1963
102650494	MAINDEC 4 Multiply and Divide Test	1963
102650495	MAINDEC 5 Single Channel Sequence Break Test Program	1963
102635749	Macro Assembly Program Internal Operations Manual	
102652398	Macro Assembly Program for Programmed Data Processor -1 (PDP-1)	1963
102652409	Microtape	1964-06
102652395	PDP-1 Course Workbook	1964
102650502	PDP-1 Input-Output Systems Manual (Preliminary Manual)	
102652402	PDP-1 Installation Manual	1964-05
102652399	PDP-1 Supplement (PDP-1D-45)	1964
102652404	Programmed Data Processor - 1 Maintenance Manual	1962
102636240	Programmed Data Processor-1 Handbook	1963



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**Manuals****Box 5**

102652401	Programmed Data Processor-1 Manual	1960-1961
102650501	Ultra-Precision CRT Type 31A Display	1963
102652400	User's Guide to Data Handling on the PDP-1	1967-08-01

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<b>Miscellaneous</b>		
<b>Box 5</b>		
102652419	Correspondence with vendors: Digitronics	1963-1964
102652421	Correspondence with vendors: Soroban	1963-1964
102652420	Correspondence with vendors: Teletype	1963-1964
102665109	DEC PDP-1 Technical Memoranda	1961
102665108	DEC PDP-1 Technical Memoranda	1960-1961
102652531	MIT PDP-1 computer work description worksheet	
102652422	Misc. DEC Interoffice Memos	1963-1964
102652416	Oral history transcript: Dick Best	
102652417	P.E. Customers and serial numbers	1965 ca.
102665105	PDP-1 to MIT donation	
102652415	Type 33 card codes and printouts	
<b>Box 6</b>		
102652406	Computer Application Note	1964
102652405	DEC Programmed Data Processor	1960
102652407	PDP Option List	1963 ca.
102652408	PDP-1 Price List	1963-02-01
102650632	PDP-1 related published articles and conference proceedings	1959 - 1968
102664938	dec PROGRAMMED DATA PROCESSOR	1960 ca.

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<b>Specifications</b>		
<b>Box 6</b>		
102652423	10 pin amphenol	1964-12-09
102665127	1K26 pin assignments, inter-bay and dataphone connections	1963-06-13
102652424	22 pin amphenol	1964-12-09
102652426	50 pin amphenol	1964-12-09
102652433	Ampex write up	
102652435	Bus Reset Driver WK01	
102664279	Cable schedule	1963 ca.
102652447	Cable schedule	
102665051	Cable schedule	1964 ca.
102652431	Data channel schematics	
102652445	Explanatory notes for cycle flow diagrams	1964-12-09
102652427	External Components List	1964-12-09
102652428	General Wiring Sheets	1964-12-09
102652438	Installation procedure for 823 SCR Driver	1962
102636257	Master drawing list PDP-1C-6	1964-04-26
102652439	Microtape power control	
102665123	Misc. Hardware Specifications	
102634751	Module list	1966-03-24
102664679	Music Maker diagram	
102652436	Music parts 5 & 6, Position: 10F6	
102652443	Radio astronomy typewriter conn to PDP schematics	
102650100	Self contained DRPE logic	1966
102634776	Special pulse timing chart	1961-06-21
102665047	System diagrams	
102652434	System modules test data: Sense Amplifier	1963-07-30
102652444	TDCM Connections - Memory Bay schematics	
102652429	Taper pins schematic list	1964-12-09
102652432	Teletype Private Type-in control input shift register schematics	1973
102652430	Type 121D Core Memory Control external components list	
102635759	Types and quantities of component used	1961
102652437	Typewriter TSN/TSF Switch PDP Time Sharing	1964

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<b>Logbooks</b>		
<b>Box 6</b>		
102665149	MIT computation book	
102665148	PDP Log (1979-1984) and notes	1979-1984
102665027	PDP-1 Logbook from December 18, 1973 to December 1, 1974	1973-1974
102665064	PDP-1 Logbook from February 24, 1965 - July 21, 1965	1965
102665026	PDP-1 Logbook from June 3, 1973 to December 17, 1973	1973
102665025	PDP-1 Logbook from November 13, 1972 to June 2, 1973	1972-1973
102665029	PDP-1 maintenance log, test programs and guidelines for use of PDP-1 computer	
102665016	Photocopy of Department of Research Laboratory of Electronics PDP-1 Logbook from March 12, 1962 to August 15, 1962.	1962
102665017	Photocopy of PDP-1 Logbook from August 15, 1962 -October 29, 1962	1962
102665020	Photocopy of PDP-1 Logbook from December 2, 1965 to April 20, 1966	1965-1966
102665018	Photocopy of PDP-1 Logbook from January 1, 1963 to June 28, 1963	1963
102665019	Photocopy of the Department Research Laboratory of Electronics PDP-1 Logbook from July 20, 1965 to December 2, 1965	1965
102665022	Photocopy of the Department of Research Laboratory of Electronics PDP-1 Logbook from October 19, 1966 to March 29, 1967	1966-1967
102665021	Photocopy of the Department of Research Laboratory of Electronics PDP-1 Logbook from April 20, 1966 to October 18, 1966	1966
102665028	Research Laboratory of 36-476 Electronics PDP-1 Logbook from December 1, 1974 to July 30, 1976	1974-1976
102665024	Research Laboratory of Electronics PDP-1 Logbook from April 11, 1972 to November 12, 1972	1972
102665023	Research Laboratory of Electronics PDP-1 Logbook from October 16, 1971 to April 11, 1972	1972-1972

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### Design Drawings

#### Box 7

102650752	16K Memory Type 170 DEC System Module Location	1963-08-09
102650751	16K Memory Type 170 Racks 3C & 3D	1963-12-17
102650754	16K Memory Type 170 Read Write	1963-07-19
102650753	16K Memory Type 170 Sense AMP & Inhibit	1963-07-24
102650755	A/D/A Interface & Relay Buffer	1966-06-16
102650749	Arithmetic Control Unit: AU Control Logic	1963-01-04
102650750	Arithmetic Control Unit: Flow Diagram of Arithmetic Unit	1963-01-04
102650797	Automatic Mul/Div Type 10 (field instl) switch plate WD	1963-04-25
102650796	Automatic Mul/Div Type 10 DEC system module location	1963-09-24
102665128	Bay 11 to Bay 3 signals	
102665129	Bay 11 to CPU signals	
102665131	Bay 6-7 interconnections	
102650732	Cable Diagram SCR Driver 823	1963-09-05
102650861	Cycle zero & defer cycles flow diagram	1962-06-08
102650862	Cycle zero & defer cycles flow diagram	1961-11-13
102650748	Data Control 131: 1 BUF & 2 BUF	1963-03-07
102650759	Data Control 131: 1C-43 1 Buf & 2 Buf; Racks 1C, 1D, 1E; PDP-5 - 131 - PDP-1 Interface	1965-02-09
102650747	Data Control 131: Flow Diagram	1963-04-09
102650746	Data Control 131: Initial Location Control	1963-06-21
102650745	Data Control 131: Word Counter	1963-06-19
102665130	Dataphone connectors	
102650744	Dectape 550: Block Diagram, 550 Control	1963-12-16
102650743	Dectape 550: C1 Control Print #1	1963-10-22
102650742	Dectape 550: C2 Flag Response Data Control Outputs	1963-12-13
102650739	Dectape 550: Control Interconnecting Cables	1964-06-23
102650738	Dectape 550: Power Wiring & Indicator Lite Wiring	1964-06-25
102650740	Dectape 550: Utilization Module List	1963-12-16
102650736	Dectape 555: Chassis Wiring	1963-12-30
102650741	Dectape Control 550: IN Information Handling	1963-12-05
102650735	Dectape Control 550: TM Control Pulses	1963-12-16
102650737	Dectape Control 550: Timing Diagram	1963-12-16
102650765	Inforonics	
102650756	Inforonics H.S. Punch Interface	
102665136	Memory assignments: process entity, computation entity, executive routine + (addresses 0 to 3174 octal), active drum area	
102650734	Micro Tape Control 550: W Mark Track Decoding Error	1964-03-13
102650857	PDP-1 Accumulator BS	1962-06-04
102650860	PDP-1 Accumulator Control BS	1962-06-14

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102650859	PDP-1 Accumulator Control BS	1962-10-11
102650858	PDP-1 Accumulator Control BS	1963-11-19
102650856	PDP-1 Automatic multiply/ divide type 10 BS	1962-07-05
102650871	PDP-1 Computer logic layout	
102650855	PDP-1 Cycle one flow diagram	1962-11-21
102650863	PDP-1 Display console logic typewriter control	1964-04-21
102650870	PDP-1 Drum field selection logic	1962-12-10
102650869	PDP-1 Drum reader amp MIT WD 9D & 9E	1962-12-10
102650867	PDP-1 Drum write amp. WD 9A & 9B MIT	1962-12-10
102650868	PDP-1 Drum write amplifiers MIT BS	1962-12-10
102650853	PDP-1 General control functions	1963-02-07
102650854	PDP-1 General control functions	1962-07-18
102650852	PDP-1 High speed channel control type 19, address mixer BS	1962-04-04
102650851	PDP-1 High speed channel control type 19, buffer mixer BS	1962-04-04
102650850	PDP-1 High speed channel control type 19, request & transfer logic BS	1962-04-03
102650848	PDP-1 In-out input mixer BS	1962-11-09
102650849	PDP-1 In-out input mixer BS	1962-06-04
102650847	PDP-1 In-out input mixer BS	1963-08-27
102650845	PDP-1 In-out register BS	1962-09-19
102650846	PDP-1 In-out register BS	1962-06-21
102650844	PDP-1 Instruction register & decoders	1962-05-16
102650843	PDP-1 Instruction register & decoders	1962-09-19
102650842	PDP-1 Instruction register & decoders	1963-08-27
102650841	PDP-1 MA, MB, IO & PC transfer logic	1963-08-27
102650840	PDP-1 MA, MB, IO & PC transfer logic BS	1962-07-13
102650839	PDP-1 Memory address register & decoders BS	1962-06-04
102650838	PDP-1 Memory address register & decoders BS	1963-01-20
102650837	PDP-1 Memory buffer register BS	1962-06-04
102650836	PDP-1 Memory buffer register BS	1962-09-19
102650835	PDP-1 Memory extension control type 15, MAD & MB buffers	1962-06-02
102650832	PDP-1 Memory extension control type 15, transfer and selection logic BS	1962-06-04
102650834	PDP-1 Memory extension control, type 15 memory buffer mixer	1962-06-02
102650833	PDP-1 Memory extension control, type 15, transfer and selection logic	1962-08-27
102650831	PDP-1 Memory module type 12	1962-03-01
102650830	PDP-1 Memory module type 12 BS	1962-05-16
102650829	PDP-1 Memory module type 12 BS	1962-11-21
102665124	PDP-1 Modifications, external flags and buffers	
102650828	PDP-1 Program counter BS	1962-09-19

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102650827	PDP-1 Program counter BS	1962-01-26
102650826	PDP-1 Punch control	1963-11-02
102650825	PDP-1 Punch control BS	1962-03-01
102650824	PDP-1 Punch control BS	1962-10-11
102650821	PDP-1 Reader control BS	1965-08-21
102650823	PDP-1 Reader control BS	1962-07-05
102650822	PDP-1 Reader control BS	1962-10-11
102650818	PDP-1 SH/RO logic, program flag & count logic, one channel sequence break BS	1963-6-10
102650820	PDP-1 Sequence break system type 20, control BS	1962-06-04
102650819	PDP-1 Sequence break system type 20, priority chain BS	1962-06-04
102650865	PDP-1 Standard Wiring... for one memory CD	1962-04-11
102650817	PDP-1 Standard in-out transfer control BS	1962-10-29
102650816	PDP-1 Taper pin panels & in-out plugs for optional equipment WD	1962-05-11
102650814	PDP-1 Typewriter Control	1962-11-02
102650815	PDP-1 Typewriter control BS	1962-06-06
102665125	PDP-1 modifications IO buffer register	
102665137	PDP-1 modifications: time sharing IO input mixer	
102665133	PDP-1 modifications: time sharing sequence break	
102665126	PDP-1 time sharing executive flowchart	
102665134	PDP-1 time sharing executive routine	
102665135	PDP-1 time sharing executive routine	
102650812	PDP-1B Cycle one flow diagram	1961-07-12
102650813	PDP-1B Cycle one flow diagram	1961-07-12
102650811	PDP-1B Cycle zero & special cycles flow diagram	1961-07-12
102650809	PDP-1C Accumulator	1962-05-04
102650806	PDP-1C Accumulator	1963-11-20
102650807	PDP-1C Accumulator	1963-09-20
102650808	PDP-1C Accumulator	1963-09-20
102650805	PDP-1C Address mixer high speed channel control type 19	1961-05-12
102650803	PDP-1C Automatic multiply / divide type 10 BS	1964-03-02
102650802	PDP-1C Buffer mixer - high speed channel control type 19	1961-05-12
102650804	PDP-1C Flow diagram automatic mul /div type 10	1962
102650801	PDP-1C IOT control BS	1961-05-22
102664678	PDP-1C Option Interconnection for MAG TAPE 51	1963-09-19
102650800	PDP-1C Reader teletype#punch typ# control	1963-06-10
102650799	PDP-1C SH/RD +1,-1, PC, rotate, PF, one channel SB & control	1959-11-03
102650864	PDP-1C Special cycles	1961-10-29
102650798	PDP-1C Special cycles	1963-05-29

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102650795	PDP-1C TPG, SPG, EE, BC, defer, cycle & run, control BS	1959-12-01
102650794	PDP-1C Wiring diagram; IH- time pulses, IJ - PBG, SPG IOT; 1K - Run, Cycle, DF, Break WD	1961-06-28
102650770	PDP-1C--2 Memory system BS	1960-09-09
102650793	PDP-1C-2 AC Control	1960
102650792	PDP-1C-2 Accumulator BS	1959-10-05
102650791	PDP-1C-2 Console, control panel WD	1961-08-22
102650790	PDP-1C-2 IO Register	1959-09-21
10265089	PDP-1C-2 IOT pulses WD	1961-06-05
102650788	PDP-1C-2 IR + Buffers	1966-09-08
102650787	PDP-1C-2 MA, PC, MB 8, IO pulse control BS	
102650786	PDP-1C-2 Mem address register decoder BS	1959-08-19
102650785	PDP-1C-2 Memory Buffer Register BS	1959-09-08
102650784	PDP-1C-2 Memory system 3A,B,C,D WD	1961-07-05
102650783	PDP-1C-2 SH/RO, +1,-1, PC, Rotate, PF BS	1959-11-03
102650782	PDP-1C-2 Typewriter buffer O & control BS	1960-12-29
102650767	PDP-1C-20: In-out input mixer #2	1963-11-07
102650766	PDP-1C-20: Inforonics A/D/A	
102650769	PDP-1C-20: Option interconnection	1964-09-11
102650764	PDP-1C-20: Taper pin panels & in out plugs for optional equipment	1963-06-10
102650768	PDP-1C-20; Micro Tape 555 IOT Control	1963-08-26
102650781	PDP-1C-3 IOT Control BS	1961-07-25
102650780	PDP-1C-3 IOT Pulses WD	1961-06-05
102650779	PDP-1C-3 Logic for teletype BRPE punch B5	1961-05-15
102650778	PDP-1C-3 Memory system 3A,B,C,D WD	1961-07-05
102650777	PDP-1C-3 Program counter BS	1961-01-12
102650776	PDP-1C-3 Reader Buffers & Control	1960-09-09
102650775	PDP-1C-3 Reader Buffers & Control	1960-09-09
102650774	PDP-1C-3 SH/RO +1,-1, PC, Rotate, PF	1959-11-03
102650773	PDP-1C-3 Wiring Diagram ID+1 PC, SH/RD IE-Pf+SH/Logic IE, IR IF	1961-06-28
102650763	PDP-1C-33 Ass'y	1964-03-23
102650762	PDP-1C-35: Memory Extension Control Type 15, MAD & MB Buffers	1963-06-11
102650761	PDP-1C-38: Standard In-Out Transfer Control; A/D General Purpose; In-Out Input Mixer; Bit Control & Speed Accuracy; PDP-1C Option Interconnection for Micro Tape	1964-01-08
102650772	PDP-1C-4-2 Color box transfer logic	1968-12-10
102650760	PDP-1C-40: In-Out Input Mixer; IOT Control Data 131 Space War Console MIT; Taper Pin Panels & In Out Plug; Option Interconnection; Instruction Register & Decoders	1964-01-16
102650758	PDP-1C-49 ADX-10 Memory Extension Control Type 171 Transfer & Selection Logic	1964-04-29



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**Design Drawings****Box 7**

102650757	PDP-1C-50 ADX-9 Memory Extension Control Type 171 Transfer & Selection Logic	1964-04-29
102650771	PDP-1C-6-2 3D Display interface; PDP-1C-6-3 Request & transfer logic high speed control type 19	1963-6-3
102650866	Punch (2 1/2 amp) 2 step power control BS	1961-09-29
102650733	RACK 11F SCR Driver 823	1963-07-15