

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Assembly	ERA		Type 1119 A1, Ser. 106	Magnetic Storage Drum, 39.6K bits capacity, no read/write heads but has capacity for 6 rows of 9. Has two rows of permanent magnet heads. This	1	1954	6.5x7.5x18.5	Drum Memory	Don E. Anderson	<a href="#">img_2082_RJ.JPG</a>	7.0	Eagan office
Assembly	RR Univac	156121	Type 1124 G1, Ser. 4UTA8	Magnetic Storage Drum and Head Assembly, 18.25K bytes, 3 phase AC, 115 V, 420 cycles, 0.2 hp induction motor, 12000 rpm	1	1955	8.5" dia x 22" long	Drum Memory	Harry Wise	<a href="#">IMG_1787.JPG</a>	6.0	Eagan bsmt
Assembly	RR Univac		Type 3001B2, Ser. 4731	Automatic Antenna Coupler	1	1956	7.2x8.8x21.5	Antenna Coupler	Harry Wise	<a href="#">IMG_1999_RJ.jpg</a>	5.0	Eagan bsmt
Assembly	ERA		Type 1124 A1, Ser. 7	Magnetic Storage Drum 198K bits capacity, has only 17 read/write heads but has capacity for 6 rows of 30 heads (180 tracks). 28 gauge twisted pair wires to	1	1956	6.25x7x22.5	Drum Memory	Don E. Anderson	<a href="#">img_2085_RJ.JPG</a>	8.0	LDB
Assembly	Sperry	7240530-06	ICA S/N 2386	Panel, Maintenance	1	1988	9x12x1.5	UYK-44			14.0	1000
Assembly		7341429-02	RMFI S/N 000117	Panel, Maintenance	1	1993	9x12x1.5	UYK-44			15.0	1000
Card	ERA		1008, 1017, 2106	PC Card, 15-Pin In-Line, uses saturated core logic, no transistors but does have diodes, three logic types of cards. Similar to those shown in a paper describing the incremental computer.	3	1956	2.0x2.5x0.5	Incremental Computer, Magtec		<a href="#">Magstec3.jpg</a>	39.0	1001
Card	ERA		333, 333M, 433M	PC Card, 15-Pin In-Line, Philco PNP germanium transistors, three logic types of cards	4	1956	2.0x2.5x0.6	Transtec		<a href="#">Transtec3.jpg</a>	40.0	1001
Card	ERA		233M, 333M, 523M	PC Card, 15-Pin In-Line, Philco PNP germanium transistors, three logic types of cards	3	1956	2.0x2.5x0.6	Transtec	Don Weidenbach		41.0	1001
Card	ERA		T02	PC Card, 15-Pin In-Line, uses saturated core logic and a single transistor along with diodes, one logic type of card. One has transistor missing.	2	1956	2.0x2.5x0.6	Magtec/Transtec?	Wayne Olson	<a href="#">IMG_3883.JPG</a>	41.1	
Card	ERA		9118, 18344, 1134	PC Card, 15-Pin In-Line, three logic types of cards. One has single transistor, one has two, and another has four.	3	1956	2.0x2.5x0.6	Transtec?	Wayne Olson	<a href="#">IMG_3884.JPG</a>	41.2	
Card	RR Univac	497-101A1	Flip Flop	PC card, 33-pin, metal frame plug-in with handle, has 8 RCA 2N269 transistors, possibly used in the Tele-control unit of the File Computer.	1	1957	6.7x4.9x0.8	File Computer or TACS		<a href="#">IMG_1826.JPG left side</a>	75.0	1000
Card	RR Univac	497-106A1	Gated Amp	PC card, 33-pin, metal frame plug-in with handle, has 5 RRU Type 155D1 coil wound, possibly used in the paper tape to magnetic tape converter part of the Tele-control unit of the File Computer.	1	1957	6.7x4.9x0.8	File Computer or TACS		<a href="#">IMG_1826.JPG right side</a>	76.0	1000
Card		250160	1591	PC card, 15-pin, "Clock Output Driver Amplifier". Later renumbered as 7000160 which was designed by Jack Metzger in 11/1964..	1	1960	1.6x2.6x0.35	USQ-20 CP-642A		<a href="#">USQ20A.jpg</a>	45.0	1008
Card		250420	5191	PC card, 15-pin, "Flip-Flop" (actually a dual flip-flop),	1	1960	1.6x2.6x0.35	USQ-20		<a href="#">USQ20A.jpg</a>	46.0	BiCent
Card		4035944		32-finger triangular PC card, 64 diodes, four line pair terminal posts	1	1962	4.25x3.45x0.25	1107	Don Weidenbach	<a href="#">IMG_3851.JPG</a>		1000
Card	Univac	7002060-00		PC card, 15-pin, "Inverter Gates, AND 3-3-2", designed by R. Sorensen and Jack Metzger in 7/1963.	2	1962	1.6x2.6x0.35	CP-642B/USQ-20B		<a href="#">USQ20B.jpg</a>	53.0	1008
Card		846 5782		18-finger w/4 power/gnd fingers PC card	1	1962	4.25x2.9x0.8	1107	Don Weidenbach	<a href="#">IMG_3849.JPG</a>		1000
Card		846 46B3	1082	18-finger w/4 power/gnd fingers PC card	1	1962	4.25x2.9x0.4	1107	Don Weidenbach	<a href="#">IMG_3849.JPG</a>		1000
Card		846 44E1	1508	18-finger w/4 power/gnd fingers PC card	1	1962	4.25x2.9x0.4	1107	Don Weidenbach	<a href="#">IMG_3849.JPG</a>		1000
Card	Univac	250080	2 27 63	PC card, 15-pin, "1-1-1-1 Inverter"	1	1963	1.6x2.6x0.35	USQ-20 CP-642A	Don Weidenbach		44.0	1008
Card	Univac	250440	9658	PC card, 15-Pin, four transistors, "Relay Puller Driver Amplifier". Later renumbered as 7000440 which was designed by R. Sorensen and Jack Metzger in 7/1963.	1	1963	1.7x2.6x0.5	USQ-20 CP-642A	Harvey Taipale	<a href="#">USQ20A.jpg</a>	47.0	1008
Card	Univac	7002000		PC card, 15-pin, "Flip-Flop with 2222 And Or with Clear"	1	1963	1.6x2.6x0.35	CP-642B/USQ-20B	Don Weidenbach		50.0	1008

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Card	Univac	7002850	7002290	PC card, 15-pin, "Matched Sense Amplifier". No reason given for the incorrect 7002290 marking. Card designed 1/1964 by J. Domka and Jack Metzger.	1	1963	1.6x2.6x0.5	CP-642B/USQ-20B		<a href="#">USQ20B.jpg</a>	58.0	1008
Card		4224080-00		PC card, 27-pin, "AND-OR Flip-Flop, 2(330/3)", has six Motorola SC90, SC92, and SC94 hybrid circuits in 10-lead TO-5 cans on board (Ref. Univac 790003x series circuits). These are the first hybrid integrated circuits used by Univac Defense Systems.	1	1963	1.8x2.2x0.3	CP-667		<a href="#">CP-667x3.jpg</a>	68.0	1001
Card				PC Card, 33-pin, 1 bit of entire arithmetic section of a 24-bit computer, uses bi-directional data transmission. Twelve transistors. Designed by D. Mager, J. Bruder, and J. Lee in spare time. Led to patent by D. Mager for Sperry Rand. Is bolted to mating chassis connector.	1	1964	5.5x6x0.75			<a href="#">Card33pin.jpg</a>	72.0	1005
Card	Univac	7003010-00		PC card, 15-pin, "Solenoid Driver Amplifier", designed 5/1964 by John Domka and Jack Metzger.	1	1965	1.6x2.6x0.35	CP-642B/USQ-20B		<a href="#">Card15pin_2.jpg</a>	59.0	1008
Card	Univac	7003530		PC card, 15-pin, "Bias Voltage Regulator", 2 RCA transistors, 2 TI transistors, 2 missing transistors, 3 trimmer potentiometers. Card designed 10/1964 by R. E. Phelps and Al Kazynski.	1	1965	1.6x2.6x0.35	CP-642B/USQ-20B	Larry Bolton		60.0	1008
Card	Univac	4224260-00	4051453-00	PC card, 27-pin, "Sense Amplifier", #426, has two dual transistor devices in cans	1	1965	1.8x2.2x0.3	CP-667		<a href="#">CP-667x3.jpg</a>	69.0	1001
Card	Univac	7002013-00		PC card, 15-pin, "Driver Amplifier", designed by Bob Wyland and Jack Metzger in 7/1965.	1	1966	1.6x2.6x0.35	CP-642B/USQ-20B		<a href="#">USQ20B.jpg</a>	51.0	1008
Card	Univac	7002460-00		PC card, 15-pin, "Strobe Pulse Shaper A", designed 8/1963 by R. Sorensen and Jack Metzger.	1	1966	1.6x2.6x0.35	CP-642B/USQ-20B	Lowell Benson	<a href="#">USQ20B.jpg</a>	56.0	1008
Card	Univac	7002570-00		PC card, 15-pin, "Sense A Amplifier", designed 12/1963 by John Domka and Jack Metzger.	1	1966	1.6x2.6x0.35	CP-642B/USQ-20B			57.0	1008
Card	Univac	4224310-00		PC Card, 27-pin, "Data Line Amplifier"	1	1966	1.8x2.2x0.3	CP-667		<a href="#">CP-667x3.jpg</a>	70.0	1001
Card	17773 Mfd by Univac	11250890 or 7250890	Rev. 0 EL Ser 48 PCB 11250391	PC card, 27 pin, with guide pins and 13 ground fingers, "Emitter Line Pre-Driver", appears to be a triple circuit function (3 transistor pairs, one type WE GF-40154 TO-18, the other a Univac 7901426 (Mot SS1501H) Silicon PNP TO-5).	1	1966	3.0x3.0x0.4	Nike-X	Don Wiedenbach	<a href="#">IMG_3839.JPG</a>	71.0	1001
Card	Univac	7002130-00	7440-891-4935	PC card, 15-pin, "Control Line Amplifier Driver",	1	1967	1.6x2.6x0.35	CP-642B/USQ-20B			54.0	1008
Card		7002180-00		PC card, 15-pin, "Switch, Positive and Negative", for drive of a core memory, designed 11/1963 by John Domka and Jack Metzger.	1	1967	1.6x2.6x0.35	CP-642B/USQ-20B			55.0	1008
Card	Univac	7104480-00		PC card, 15-pin, "+18 Volt Regulator", designed 8/1965 by J. Bruder and Jack Metzger.	1	1967	1.6x2.6x0.35	CP-642B/USQ-20B		<a href="#">Card15pin_3.jpg</a>	61.0	1008
Card	Univac	7111640-00 (black ink)	SN-01, 7111644	PC card, 56-pin, with T-bar, "A/Q Register", has 20 Westinghouse WS283 and WS282 which are the early 7901000 and 7901001 series devices. Designed 1/1968 by L. Boisclair.	1	1967	3.5x3.4x0.2	CP-901?	Mike Bukovich	<a href="#">Card56pin_01.jpg</a>	91.0	1008
Card	Univac	7500800-00	Rev. B, S/N A0277	PC Card, 56-pin, air cooled, no T bar, "-3V Data Line Driver Amplifier", has early Westinghouse WS287 and Raytheon RM1004 chips on board (7901003 and 7901004). Designed 7/1967 by Mel Wagner.	1	1967	3.5x3.5x0.3	7078027 Drawer Assy (1219?)		<a href="#">IMG_1980.JPG</a>	97.0	1008
Card	Univac	250070-00	FSN 1260-600-0823	PC card, 15-pin, "Inverter 2-3-3". Later renumbered as 7000070 card which was designed by H. Barrett and R. Miller in 9/1963.	1	1968	1.6x2.6x0.35	USQ-20 CP-642A	Tom Boudreau Dallas Fogg		43.0	1008
Card	Univac	4223860-00		PC card, 15-pin, "-20 Volt Regulator"	1	1968	1.6x2.6x0.35	USQ-20		<a href="#">Card15pin_1.jpg</a>	49.0	1008
Card	Univac	7080320-00		PC card, 55-pin, 1108/494 IBM Interface	1	1968	8x6x0.7	1108		<a href="#">CardIO.JPG</a>	77.0	1001
Card	Univac	7080330-00		PC card, 55-pin, 1108/494 IBM Interface	1	1968	8x6x0.7	1108		<a href="#">CardIO.JPG</a>	78.0	1001

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Card		2800650-00	Rev. 0, S/N A0100	PC Card, 56-pin, air cooled, no T bar, "Sense and Inhibit Amplifier", has four 7901001 type ICs and transistors, copper foil shield on back. Designed 9/1967.	1	1968	3.4x3.4x0.3	CP-890/C-3		<a href="#">Card56pin_06.jpg</a>	79.0	1008
Card	Univac	7056665-07	Rev. AB, S/N 237	PC Card, 56-pin, "Read/Write Current Regulator", Uses 7901001 and dual transistors. Designed 7/1966 by Dave Duncan.	1	1968	3.4x3.4x0.4	CP-901?	Curt Nelson	<a href="#">IMG_1873.JPG</a>	81.0	1008
Card	Univac	7111216-00	Rev. A, S/N 055	PC Card, 56-pin, "Control Logic Module, Type 10", has 20 early 7901001-01 chips, card shows rework. Designed 9/1968 by Dave Zemke and John Domka.	1	1968	3.4x3.4x0.25	CP-901, 1830B	Curt Nelson	<a href="#">7901001oncard.jpg</a>	88.0	1008
Card	Univac	7500421-00	Rev. C, S/N A0150	PC Card, 56-pin, air cooled, no T bar, "Read/Write Drive Diverter", has Raytheon RM1001 chips (7901001) on board. Designed 2/1968 by D. Ripley.	1	1968	3.5x3.5x0.3	1219B, 7053750 Memory, 7078028 Drawer		<a href="#">IMG_1874.JPG</a>	95.0	1008
Card	Univac	7500651-00	Rev. D, S/N A6217	PC Card, 56-pin, no T bar, "Sense and Inhibit Amplifier", uses 7901004 chips and transistors. Designed 8/1970 by Jim Warwick.	1	1968	3.4x3.5x0.2	1219B Memory		<a href="#">IMG_1870.JPG</a>	96.0	1008
Card	Univac	7500820-00	Rev. B, S/N A0258	PC Card, 56-pin, air cooled, no T bar, "-3V Input Amplifier", has early Westinghouse WS286 and WS287 chips on board (7901003 and 7901004). Designed 7/1967 by Mel Wagner.	1	1968	3.5x3.5x0.3	7078027 Drawer Assy (1219?)		<a href="#">IMG_1980.JPG</a>	98.0	1008
Card	Univac	7002013-00	7440-891-4933	PC card, 15-pin, "Driver Amplifier", designed by Bob Wyland and Jack Metzger in 7/1965.	1	1970	1.6x2.6x0.35	CP-642B/USQ-20B			52.0	1008
Card	Univac	7123585-00	Rev. 0, S/N 006	PC Card, 56-pin, conduction cooled, with top T bar, "Analog Signal Selector", uses transistors and 0.01% tolerance resistors. Designed 9/1969 by J. Bergman.	1	1970	3.4x3.4x0.2	OU-95 ICKCMX		<a href="#">Card56pin_03.jpg</a>	92.0	1008
Card		7123600	Marking is via an adhesive label, not ink.	PC Card, 56-pin, conduction cooled, with top T bar, "Relay Driver Amplifier", has four large 2PDT electro-mechanical relays and three 7901001 ICs mounted on it. Designed 7/1969 by S. Frase.	1	1970	3.4x3.4x0.5	OU-95 ICKCMX	Larry Bolton	<a href="#">Card56pin_05.jpg</a>	93.0	1008
Card		2658634P1, CT02618		PC Card, 40-pin, SEM A format, 12-2 input NAND gates. Fully encapsulated module made by Centralab Electronics.	1	1970	2x2.5x0.25				125.0	1005
Card	Univac	7091405-00	S/N 0001 ENG	PC Card, 56-pin, Conduction cooled to side edge, vertical bus bars, Engineering prototype, uses standard TTL logic. Possibly never released to production.	1	1971	4.0x4.0x0.25	UYK-1616, UYK-15, UYK-20, UYK-23	Mike Bukovich	<a href="#">IMG_1667.JPG</a>	82.0	1008
Card	Univac	7111510-00	Rev. G, S/N 488	PC Card, 56-pin, conduction cooled, with top T bar, "Control Line Driver", uses transistors and 7901001. Designed 4/1968.	1	1971	3.5x3.5x0.3	UYK-7 Trainer, UYK-8		<a href="#">IMG_1873.JPG</a>	90.0	1008
Card		7092619		PC Card, 40-pin, SEM A format, holds up to four 16-pin DIP IC packages. This is a 2-2-2-2 And-Or-Invert function.	1	1972	2x2.5x0.25	NSWC	Mike Bukovich	<a href="#">IMG_1987.JPG</a>	126.0	1005
Card	Univac	7092632-00	7092630-00	PC Card, 80-pin early SEM B format, FR4 thru-hole board, single side, dual 40-pin connectors, holds up to ten 16-pin Dual-In-Line circuits but this card has 9. It does not appear that documentation for this card was released. Function unknown.	1	1972	1.9x5.8x0.3		Mike Bukovich	<a href="#">img_2100_RJ.JPG</a>	127.0	1008
Card	Univac	7131121-00	Rev. - SN 1229	PC Card, 112 pin, "Control Register #3". Design release 5/1972 by Chuck Matson. Has surface mount flat pack microcircuits mounted over thermal heat conducting strips to edge of card.	1	1973	6.5x6.3x0.2	S-3, AYK-10, AYK-502	found in patent folder		106.0	1008
Card	Univac	7131365-00	Rev. B	PC Card, 112 pin, "Recursive Sequences". Missing test connector. Design release 12/1970 by Chuck Matson. Has 80 surface mount flat pack microcircuits mounted over thermal heat conducting strips to edge of card.	1	1973	6.5x6.3x0.2	S-3, AYK-10, AYK-502	found in patent folder		107.0	1008

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Card			Augat? 8136 PG 13-180	PC Card, 276-pin (6 groups of 46 sockets), considered a triple-wide double high prototyping card, engineering prototype, has 180 16-pin Dual-In-Line sockets, each with wire wrap pins. Can be wire wrapped to any desired function. Probably a generic board made by Augat.	1	1973	7.5x16.2x0.65	ATC/ARTS Engineering breadboard	Gary Hokenson		115.0	
Card	Sperry/Univac	7099175-04	S/N 1014	PC Card, 56-pin, "Channel Interface", air cooled, uses standard TTL logic including a General	1	1974	4x4x0.3	UYK-15, 1616, UYK-20 7119512 Proc.		<a href="#">IMG_1869.JPG</a>	84.0	1008
Card	Sperry/Univac	7099175-04	S/N 1015	PC Card, 56-pin, "Channel Interface", air cooled, uses standard TTL logic including a General Instrument UART. Designed 4/1973 by Lowell Benson. Superceded in 1975 by 7099176-00 probably due to obsolescence of the UART.	1	1974	4x4x0.3	UYK-15, 1616, UYK-20 7119512 Proc. Interrupt RS-232 Serial Channel Feature			85.0	1008
Card	Sperry/Univac	7116855-11	Rev. N, S/N 0092	PC Card, 56-pin, "Read-Only Memory, 128 Words". Air cooled, vertical bus bars. Uses standard TTL logic and four 32x8 bit fusible link programmable read	1	1974	4x4x0.3	UYK-15, 1616			86.0	1008
Card	Sperry/Univac	7133255-01	Rev. C, S/N 1013	PC Card, 112-pin w/ dual 56-pin connectors, triple wide, MIL-STD-188C, Type II, 2-Channel, Async	1	1974	4x13x0.25	UYK-20		<a href="#">IMG_1885.JPG</a>	108.0	1008
Card		7137845-00	S/N 1001	PC card, 150 pin (female), FR4, double sided, conduction cooled to top edge, ECL-based	1	1974	2.2x6.4x0.3	STV (IR&D System Test Vehicle)		<a href="#">IMG_1978.jpg</a>	109.0	1005
Card		7137982-00	S/N 1001	PC card, 150 pin (female), FR4, double sided, conduction cooled to top edge, ECL-based.	1	1974	2.2x6.4x0.3	STV (IR&D System Test Vehicle)		<a href="#">IMG_1979.JPG</a>	110.0	1005
Card	Sperry/Univac	7093385-00	Rev. E, S/N 227	PC card, 112-pin, conduction cooled, "Sense Digit"	1	1975	3.3x6.0x0.2			<a href="#">Card112pin.jpg</a>	101.0	1008
Card	Sperry Univac	7111095-02	Rev. P, Ser 474	PC card, 56-pin with T bar, "I/O Sequence Control", has 20 Raytheon RM1000 and Motorola SC901 which are 7901000 and 7901001 chips. Designed 8/1966 by Dave Zemke and Dave Duncan.	1	1976	3.5x3.4x0.2	CP-901		<a href="#">IMG_1671.JPG</a>	87.0	1008
Card	Sperry/Univac	7164998-00	Rev. -, S/N ENG 1	PC Card, 204-pin, w/three 68-pin dual row connectors, engineering general purpose, has 149 16-pin Dual-In-Line sockets, each with wire wrap pins. Can can be wire wrapped to any desired function.	1	1976	8x13x0.8	Engineering breadboard			114.0	1007
Card	Univac	7098081	"DD Bit 1 Hi Range Dig Curr Gen"	PC Card, 112-pin, in plastic 7059127 protector. "High Range and Variable Digit Current Generator".	1	1977	6.6x6.3x0.35	Test Equipment			104.0	1001
Card	Sperry/Univac	7515366-00	Rev. -, S/N 1004	PC Card, 200-pin w/dual 100-pin female connectors, FR4, air cooled, unknown function, has TTL and ECL chips, probably an interface card, never released	1	1979	6.8x9.0x0.5	unknown, none on record			111.0	1005
Card		7098082-00		PC Card, 112 pin, in plastic 7059127 protector. "Low Range Digit Current Generator"	1	1982	6.5x6.5x0.25	Test Equipment			105.0	1001
Card	Sperry/Univac	7223308-02	Rev. L, S/N 0015	PC Card, 200-pin w/dual 100-pin female connectors, FR4, air cooled, "Semiconductor Memory Unit", has 16 64K UV-EPROM devices and two 64Kx1 DRAM chips	1	1982	6.8x9x0.25	MATCAL-S-MMD	John Brennan		112.0	1005
Card	Sperry/Univac	7103565-00	Rev. ?, Temperature Sensor - T Di S/N 00150 M28787/534	PC Card, 100-pin SEM B, thru-hole FR4 board w/ heat ladders, single sided, "Temperature Sensor". Has 6 Dual-In-Line packages and numerous R, C, Diodes and transistors. Transistors missing. Designed 3/82 by R. Ebright, J. Staubus, & J. Parker.	1	1982	1.9x5.8x0.3	UYK-43			145.0	1008
Card	Sperry/Univac	7103605-01	Rev. 2A, SU 00112 M28787/530	PC Card, 100-pin SEM B, ceramic, double sided, "Emulation Control II". Has 52 20-pad lcc and a hybrid resistor pack. Designed 11/81 by R. Ebright & L. Slechta.	1	1982	1.9x5.8x0.3	UYK-44	Dallas Fogg	<a href="#">img_2104_RJ.JPG</a>	146.0	1008

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Card	Sperry	7237210-06	Rev. T, SN 01009 M28787/540	PC Card, 100-pin, SEM B format, ceramic, double sided (reverse side board is missing), "HP Emulation Control I". Has 29 20-pad lcc on one side. Designed 8/83 by B. Nelson & B. Oxborough.	1	1983	1.9x5.8x0.3				134.0	1008
Card	Sperry	7237240-02	Rev. F, SN 01062 M28787/523	PC Card, 100-pin, SEM B format, Ceramic, Double sided, "Multiply/Math Pac" or "Memory Unit, Mathpac". Has 49 20-pad lcc and one TRW 1010 multiplier in 68-pad lcc. Designed 10/83 by B. Oxborough.	1	1983	1.9x5.8x0.3	UYK-44		<a href="#">img_2104_RJ.JPG</a>	135.0	1008
Card	Sperry/Univac	7103510-03	Rev. 4A, SN 01007 M28787/517	PC Card, 100-pin SEM B, ceramic, double sided, "Shift Matrix & General Register". Has 48 20-pad lcc and a 64-pad lcc 'SMASH' custom NMOS ASIC. Designed 8/81 by R. Ebright, R. Oxborough, & T. Penkauskas.	1	1983	1.9x5.8x0.3	UYK-44			143.0	1008
Card	Sperry/Univac	7103755-01	Rev. 9A, SN 01407, M28787/500	PC Card, 100-pin SEM B, ceramic, double sided, "MIL-STD-1397 Parallel Channel Control". Has 26 20-pad lcc plus 2 1266-gate custom gate arrays in 64-pad lcc. The arrays are for RS-232 support. Designed 9/81 by R. Ebright & T. Penkauskas.	1	1983	1.9x5.8x0.3	UYK-44			147.0	1008
Card	Sperry/Univac	5990832-00	Rev. A, S/N A030, Cache Directory	PC Card, 300-pin, dual connector, "Cache Directory"	1	1984	8x10x0.7	Memory Processor		<a href="#">CardUYK43Mem.JPG</a>	117.0	1001
Card	Unisys	7241270-03	Rev. 6A, S/N 00047	PC Card, 300-pin w/dual 150-pin connectors, FR4, Conduction cooled, "Resource Controller", has five 32K UV-EPROM chips	1	1984	6.8x9x0.4	CP-183	John Brennan		120.0	1005
Card	Sperry	7221575-00X	Rev. 1A, Memory Data	PC Card, 100-pin SEM B format, ceramic, double sided, "Memory Data". Has 57 20-pad lcc and	1	1984	1.9x5.8x0.3	SQS-53C		<a href="#">img_2104_RJ.JPG</a>	130.0	1008
Card	Sperry	7237305-02	Rev. P, SN 03014	PC Card, 100-pin SEM B format, ceramic, double sided, "Interface Type B/PIC". Has 23 20-pad lcc, 4 hybrids, and 4 Micro-Rel 76-pad lcc. Designed 10/83 by B. Nelson & B. Oxborough.	1	1984	1.9x5.8x0.3	UYK-44			138.0	1008
Card	Sperry	7237385-04	Rev. AA, SN 00346	PC Card, 100-pin SEM B, thru-hole FR4 board w/ heat ladders, single sided, "Temperature Sensor". Has 6 Dual-In-Line packages and numerous R, C,	1	1984	1.9x5.8x0.3	UYK-44			141.0	1008
Card	Sperry	7237385-04	Rev. Y, SN 00374	PC Card, 100-pin SEM B, thru-hole FR4 board w/ heat ladders, single sided, "Temperature Sensor". Has 6 Dual-In-Line packages and numerous R, C, Diodes and transistors. Designed 5/84 by R. Ebright,	1	1984	1.9x5.8x0.3	UYK-44		<a href="#">img_2110_RJ.JPG</a>	142.0	1008
Card	Sperry	7103555-01		PC Card, 100-pin SEM B, thru-hole FR4 board w/heat ladders, single sided, "Direct Memory Access I". Has 10 Dual-In-Line packages and numerous R, C, Diodes, and Transistors. Designed 6/82 by R. Ebright, D. Senechal, & J. Parker.	1	1984	1.9x5.8x0.3	UYK-44		<a href="#">img_2099_RJ.JPG</a>	144.0	1008
Card	Sperry Univac	7111440-03	Rev. Y, SN 12346	PC card, 56-pin, "X-Y Read/Write Current Regulator", has three 7901001 circuits plus a TTL 5401 standard logic gate. Designed 2/1968 by Jim Howe.	1	1985	3.5x3.4x0.3	UYK-7 Memory Chassis	Brian Eckstein		89.0	1008
Card	Sperry/Univac	7093385-06	Rev. V, S/N 129331	PC card, 112-pin, conduction cooled, "Sense Digit"	1	1985	3.3x6.0x0.2			<a href="#">IMG_1871.JPG</a>	102.0	1008
Card	Sperry/Univac	7093390-01	Rev. K, S/N 18391	PC card, 112-pin,	1	1985	3.3x6.0x0.2			<a href="#">IMG_1871.JPG</a>	103.0	1008
Card	Sperry/Univac	5990852-301	Rev. P, S/N C049-Y6, Memory Array	PC Card, 300-pin, dual connector, "Memory Array", has 72 64K DRAM memory chips on it. Copy of the same card used on UYK-43.	1	1985	8x10x0.7	Memory Processor			118.0	1001
Card	Unisys	7241814-03	Rev. 7A, S/N 70	PC Card, 300-pin w/dual 150-pin connectors, FR4, Conduction Cooled, "Micro Program Controller", uses five Sperry custom ST350 gate arrays	1	1985	6.8x9x0.4	Wild Weasel, CP-183	John Brennan		121.0	1005

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Card	Unisys	7241815-007	S/N 011	PC Card, 300-pin w/dual 150-pin connectors, FR4, Conduction Cooled, "Emulation Controller", uses four Sperry custom ST350 gate array.	1	1985	6.8x9x0.4	Wild Weasel, CP-183	John Brennan		122.0	1005
Card	Sperry Univac	7093491-01	Rev. F, SN 63249	PC Card, 56-pin, "Data Storage", has five newer standard TTL logic types in flat packs. Designed 10/1975 by Clarence Sieben and Jim Drexler.	1	1986	3.5x3.4x0.2	UYK-7 DDMFM	Brian Eckstein		83.0	1008
Card	Univac	7601953-00	Rev. E, S/N 2213	PC card, 56-pin, "Capstan Ref. Ramp", designed in 1971, uses transistors and potentiometers. Designed 4/1973 by Clayton(?).	1	1986	3.5x3.4x0.3	1840 Magnetic Tape Transport	Brian Eckstein		99.0	1008
Card	Sperry	5990860-301	Rev. M, SN B045	PC Card, 300-pin w/dual 150-pin connectors, "Error Correct 1"	1	1986	6.8x9.0x0.4	Trident	Brian Eckstein		119.0	1005
Card	Sperry/Univac	7165535-01	Rev.E, S/N 6292	PC Card, 56-pin, conduction cooled, with top T bar, "Main Delay Line 2", Newer design uses standard Schottky TTL logic and 4 delay lines. Designed 8/1977 by D. Weiss.	1	1987	3.5x3.5x0.3	UYK-7 DDMFM		<a href="#">IMG_1873.JPG</a>	94.0	1008
Card		9635-02	Rev. G, S/N 1233	PC Card, 100-pin SEM B format, ceramic, double sided. Has 58 20-pad lcc mounted.	1	1987	1.9x5.8x0.3	UYK-44	Mike Bukovich		128.0	1008
Card	Sperry	7174635-00	Rev. A, SN 00014	PC Card, 100-pin, SEM B format, ceramic, single sided, "Microprocessor, 68000, NAH GE". Has 10 lcc plus a Thomson 68000 processor in 68-pad lcc. Designed for a GE program 3/87 by R. Ebright & J. Antoniou.	1	1987	1.9x5.8x0.3	Tri-SEM		<a href="#">img_2101_RJ.JPG</a>	133.0	1008
Card	Sperry	7237305-02	Rev. P, Interface Type B/PIC, SN 03399 M28787/502	PC Card, 100-pin SEM B format, ceramic, double sided, "Interface Type B/PIC". Has 23 20-pad lcc, 4 hybrids, and 4 Micro-Rel 76-pad lcc. Designed 10/83 by B. Nelson & B. Oxborough.	1	1987	1.9x5.8x0.3	UYK-44		<a href="#">img_2109_RJ.JPG</a>	136.0	1008
Card	LM Manassas	129A854-1	Rev. -, BUFFER	PC Card, ceramic, 250-pin, 5-row connector, double sided, leadless chip carrier circuits, conformally coated, conduction cooled, "FBAF Buffer"	1	1988	4.7x5.9x0.6	BSY-1	Brian Eckstein		123.0	1005
Card	Unisys	7179035-00	Rev. 3A, SN 43	PC Card, ceramic, 316-pin, 6-row plus 4 optical, double sided, leadless chip carrier circuits, has 40K gate ASICs (including Instruction Processor and High Speed Bus Protocol Machine) and four 7917145 Unisys Fiber Optic Transmitter hybrids	1	1988	6.8x5.9x0.6	ATF	Brian Eckstein		124.0	1005
Card	Unisys	7237305-02	Rev. AG, MIL-STD-1397 B/PIC INTFC, SN 19507 M28787/502-2	PC Card, 100-pin SEM B format, Ceramic, double sided, "MIL-STD-1397 B/PIC Interface". Has 23 20-pad lcc, 4 hybrids, and 4 Micro-Rel 76-pad lcc. Designed 10/83 by B. Nelson & B. Oxborough.	1	1988	1.9x5.8x0.3	UYK-44			137.0	1008
Card	Unisys	7171740-00	Rev. H, SN 01840 M28787/434-2	PC Card, 100-pin, SEM B format, Ceramic, Double sided, "Semiconductor Memory Data". Has 57 20-pad lcc and a 39C60 52-pad lcc. Designed 12/85 by Jim Baker & G. Goodwin	1	1989	1.9x5.8x0.3	UYK-44			132.0	1008
Card	General Electric	77D621007G 1	Rev. E	PC Card, 100-pin SEM B, ceramic, double sided, "Serial Interface". Uses Univac ceramic boards. Has 44 lcc including 4 Intel 8251A chips	1	1989	1.9x5.8x0.6				149.0	1008
Card	Unisys	7357446-02	Rev. 2, S/N 0002	PC Card, 200-pin w/dual 100-pin female connectors, FR4, air cooled, "Short Range Radar Scan Converter", has five Altera 2500-gate programmable logic devices and six Logic Devices 16-bit Arithmetic Logic Unit devices	1	1991	6.8x9x0.25	HUFO/NI	John Brennan		113.0	1005
Card	Unisys	7359519-06	Rev. H, SN 00086 M28787/475-2	PC card, 250-pin SEM B format, Kevlar substrates, double sided, double space, UYK-44 EP "Instruction Processor". One of two cards in the EP to use the five row 250-pin connector. Has 2 Xicor FPGA in thru-	1	1994	1.9x5.8x0.6	UYK-44 EP		<a href="#">img_2102_RJ.JPG</a>	148.0	1008

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Card			unmarked	PC Card, 15-Pin In-Line, fully encapsulated card, function unknown, has protruding test point pin and possibly two laid down transistors.	1	1958?	1.6x2.6x0.25				42.0	HJT
Card	Univac	250660	0170	PC card, 15-pin, "Analog Data Comparator", three 2N645 transistors	1		1.6x2.6x0.35	USQ-20 CP-642A	Don Weidenbach		48.0	1008
Card			none	PC card, 15-pin, engineering prototypes made on generic breadboard. Three functions but not defined. Contains a mix of transistors, diodes, resistors, and capacitors.	3		1.6x2.6x0.35	unknown			62.0	1008
Card	RR Univac	495-73A1	Ser. 580314 102897	PC card, 33-pin, metal frame plug-in, no handle, has 7 Sylvania FA7 transistors (one missing).	1		8.0x4.55x0.7	File Computer?	Harvey Taipale		73.0	1000
Card	RR Univac	123640-2	Type 495-139A1	PC card, 33 pin, metal frame plug-in, hole in pcb to aid in pulling out, 4 tube sockets, with one 6350/K7J Sylvania 9-pin computer tube. Used in File Computer main chassis.	1		10.2x4.6x0.7	File Computer chassis	Don Weidenbach	<a href="#">IMG_3848.JPG</a>	74.0	
Card	Univac	2800930-01	Rev. D, S/N C195-Z9	PC Card, 56-pin, air cooled, no T bar, "SVC Commutator", has two large inductors and six high power resistors on card. Designed 5/1968 by Bob Wyland.	1		3.4x3.4x0.8	CP-890/C-3	Larry Bolton	<a href="#">Card56pin_09.jpg</a>	80.0	1008
Card	Univac	EXP MSI 8		PC card, 56-pin, with vertical bus bars, air cooled, no T bar, engineering experimental or demo card, unmarked integrated circuits	1		4.2x3.75x0.25		Don Weidenbach	<a href="#">IMG_3838.JPG</a>	100.0	1008
Commemorative: Company	RR Univac		Open House	Sample etched PC card showing capability of Printed Circuit Lab, for Open House, May 5,6 1956	1	1956	5x4x0.1				273.0	1004
Commemorative: Company	Sperry Univac	none	Aristos, FY74 Top Sales Award "Lyle J Franklin"	Sales Award	1	1974	8"x10"x2"		Lyle J. Franklin		272.0	1002
Commemorative: Company	Unisys			Certificate of Appreciation, from Sandia National Laboratories, participation in Protective Force Benchmarking Study	1	1993	8x10x0.5				269.0	1000
Commemorative: Company		Several		Collection of 11 types of 56-pin cards mounted in a plastic show case.	1	1960s	9.4x20.5x1.8	Several	B.(Mike) N. Svendsen	<a href="#">56PinCards.jpg</a>	260.0	Eagan office
Commemorative: Company	Unisys		"The World Leader in Complex Multilayer Ceramic Substrates"	Display unit showing progression of metal layers to make a ceramic SEM B circuit board. Mounted on walnut base.	1		4.2x6.6x1.6	UYK-44		<a href="#">img_2047_RJ.JPG</a>	162.0	1008
Commemorative: Company	Sperry/Univac			Cigarette tray, ceramic, US Navy	1		3x6x6				270.0	1000
Commemorative: Company	Unisys			Notepad cube	1		3x3x3				271.0	1000
Commemorative: Company	Sperry Univac	none	none	Roll of Sperry Star Stick ons	1		Roll				274.0	1002
Commemorative: Company	Univac		unmarked	Unidentified Hybrid made into a tie tack, encapsulated, 14-pin ceramic flat pack	1		1x1x0.15		Greg Miller		275.0	1001
Commemorative: Company	Univac		unmarked	Unidentified Hybrid made into a tie tack, encapsulated, 16-pin metal base	1		1x1x0.15		Dean VanDeWalker		276.0	1001
Commemorative: Company	Univac		unmarked	Unidentified Hybrid made into a tie tack, encapsulated, 16-pin metal base	1		0.75x0.5x0.2		Greg Miller		277.0	1001
Commemorative: Program	Univac			Display of models of 10 computer families marketed from 1958 to 1969.	1	1960s	3.6x24x8	Navy computers	Lowell Benson	<a href="#">NavyComputers2.jpg</a>	259.0	Eagan office
Commemorative: Program	Sperry Univac	none	AN/UYK-20 nameplate, "Lyle J Franklin"	Presentation pen holder commemorating 2000th UYK-20, pen holder loose	1	mid 80s	5"x6"x1"	UYK-20	Lyle J. Franklin	<a href="#">artPenSet1.JPG</a>	266.0	1002
Commemorative: Program	none	none	DSS, "Lyle J Franklin"	Presentation pen holder commemorating DSS program, plaque loose	1	mid 80s	5"x6"x1"	DSS	Lyle J. Franklin	<a href="#">ArtPenSet2.JPG</a>	267.0	1002
Commemorative: Program	RR Univac		Athena Guidance Computer WS-107A-2	Display of Athena can, Athena cabinet badge, vacuum tube, mercury relay on a wooden display base, marked Don Wiedenbach	1		5.5x11x5.25	Athena	Don Weidenbach		258.0	Eagan office

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Commemorative: Program	Univac, Sperry, Sperry Univac	none		Approx 60 Commemorative tie tacks, lapel pins from various programs, products, company initiatives in a framed display case				various		<a href="#">artPins_Projects.jpg</a>	261.0	1002
Commemorative: Program	various			Marketing and company memorabilia, trade show giveaways, otherwise uncataloged.					Franklin, Lavers, et. al		262.0	1004
Commemorative: Program	Sperry/univac			Notepad cube and UYK-44 model holder	1		4x4x4	UYK-44			263.0	1000
Commemorative: Program	Unisys			Notepad, cube on desktop computer base	1		4x3x3	AN/USQ-69B			264.0	1000
Commemorative: Program	Sperry			Pen/Pencil Holder, Model of terminal, UYK-44 photo	1		4x4x4	UYK-44			265.0	1000
Commemorative: Program	Sperry		UYK-43 NECS	ST-101 gate array die, encapsulated and made into a tie tack	1		0.4x0.9x0.6	UYK-43			268.0	1001
Component	RCA	807 HBA		Tube, Plastic Encapsulated Electron Tube from early computer	1	1959	2"x2"x6"				233.0	1001
Component		7900301	PD9057	Micro Diodes, Univac PN 7900301,	25	1965	0.05x0.05x2.0	1824	Larry Bolton	<a href="#">IMG_1670.JPG</a>	207.0	1005
Component		GF-40162		Microcircuit, Hybrid, 11 leads (10 in rectangular 2x3 pattern), made by Western Electric. Contains diode/transistor and diffused resistor die. Reference card photo 3535 for typical application views.	1	1965	0.6 dia x 0.5	Nike-X	Harvey Taipale	<a href="#">IMG_2764cs.jpg</a>	209.0	LDB
Component		GF-40174		Microcircuit, Hybrid, 11 leads (10 in rectangular 2x3 pattern), made by Western Electric. Contains diode/transistor and diffused resistor die. Reference card photos 3537 for actual application view.	1	1965	0.6 dia x 0.5	Nike-X	Harvey Taipale	<a href="#">IMG_2764cs.jpg</a>	210.0	LDB
Component			WS283	Integrated Circuit, Univac 7901001 early monolithic DTL integrated circuits made by Westinghouse, in ceramic/metal flat packs, three in carriers, two open.	10	1966	0.35x0.9x0.1	CP901 UYK-7	Larry Bolton		201.0	1001
Component		GF-40178		Microcircuit, Hybrid, 11 leads (10 in rectangular 2x3 pattern), made by Western Electric. Contains diode/transistor and diffused resistor die. Reference card photo 3535 for typical application view. One of the units is opened.	2	1966	0.6 dia x 0.5	Nike-X	Harvey Taipale	<a href="#">IMG_2760cs.jpg</a>	211.0	LDB
Component				Integrated Circuit, Univac 7901000, Sperry Semiconductor attempt to make the DTL logic, dual 4-input NAND. Includes 4 control units.	19	1967			John Gould		200.0	1001
Component			RM1003, RM1004	Integrated Circuit, Univac 7901003 and 7901004 early monolithic DTL integrated circuits made by Raytheon Semiconductor, in ceramic/metal dual-in-line packages.	2	1968	0.3x0.7x0.2	ARTS			203.0	1001
Component			Victoreen Corotron GV6C-4000	Tube, glass, 9-pin, 4000V regulator, in metal shield. Used in TWT power supplies and radar applications.	1	1968	0.8" dia x 2.7				232.0	1005
Component				Resistor, Univac 7901771 resistor network, thick film, laser trimmed, in 14-pin flat pack. Used on 7111435 Sense Amp card. Difficult to measure individual resistors due to layout. Open unit.	1	1969	0.35x0.9x0.1	1830, 1830A	Larry Bolton		230.0	1001
Component			FT I 200261-01	Connector, PC Card, 112 contact	2	1971	0.75x5x0.3				191.0	1008
Component	Univac	7904412	7016880	Microcircuit, Hybrid, Dual -3V Line Driver, 14-pin ceramic flat pack (1108)	5	1973	0.75x0.5x0.1	UYK-23	Dean VanDeWalker	<a href="#">7016880a.jpg</a>	220.0	1001
Component	Univac	7903963	7118529	Microcircuit, Hybrid, Dual -3V Line Driver, 14-pin ceramic flat pack	5	1974	0.75x0.5x0.1	DSS, UYK-23	Dean VanDeWalker	<a href="#">7118529a.jpg</a>	219.0	1001
Component	Univac	7016903-00		Microcircuit, Hybrid Line Driver, 34-pin metal flat pack	1	1975	1x1x0.15	CCIS	Dean VanDeWalker	<a href="#">7016903c.jpg</a>	213.0	1001
Component	Univac	7016906-07		Microcircuit, Hybrid Line Driver, 34-pin metal flat pack	1	1975	1x1x0.15	CCIS	Dean VanDeWalker	<a href="#">7016906a.jpg</a>	214.0	1001
Component	Univac	7016913-07		Microcircuit, Hybrid Line Driver, 34-pin metal flat pack	1	1975	1x1x0.15	CCIS	Dean VanDeWalker	<a href="#">7016913c.jpg</a>	215.0	1001
Component	Univac	7016915		Microcircuit, Hybrid Line Driver, 34-pin metal flat pack	1	1975	1x1x0.15	CCIS	Dean VanDeWalker	<a href="#">7016915a.jpg</a>	216.0	1001



Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Component	Univac	7903962	7016876	Microcircuit, Hybrid, Dual -15V Line Driver, 14-pin ceramic flat pack	3	1975	0.75x0.5x0.1	1616, CCIS, UYK-15, Salt Lake I/O Console	Dean VanDeWalker	<a href="#">7016876a.jpg</a>	218.0	1001
Component	Univac	7904437	7016888	Microcircuit, Hybrid, Dual -3V Line Driver, 14-pin ceramic flat pack (1108)	5	1975	0.75x0.5x0.1	1616, UYK-15	Dean VanDeWalker	<a href="#">7016888a.jpg</a>	221.0	1001
Component	Univac	7904411	7016882	Microcircuit, Hybrid, Dual Line Driver, 14-pin ceramic flat pack	5	1975	0.75x0.5x0.1	1640, CNCE	Dean VanDeWalker	<a href="#">7016882a.jpg</a>	222.0	1001
Component	Univac	7904200	7119492	Microcircuit, Hybrid, Dual Line Driver, -3V and -16V, 14-pin ceramic flat pack	5	1976	0.75x0.5x0.1	MPC-1624, 6977, CCIS, MUTT, 1616, UYK-15	Dean VanDeWalker	<a href="#">7119492a.jpg</a>	223.0	1001
Component	Univac	70169xx?	unmarked	Microcircuit, Hybrid, Univac-made, in 34-pin metal package	1	1976	1x1x0.15	CCIS?	Dean VanDeWalker	<a href="#">70169xxc.jpg</a>	227.0	1001
Component	Univac	7016900		Microcircuit, Hybrid Line Driver, 34-pin metal flat pack	1	1977	1x1x0.15	CCIS	Dean VanDeWalker	<a href="#">7016900a.jpg</a>	212.0	1001
Component	Univac	2280473-00		Microcircuit, Hybrid Line Driver, both ceramic and metal 14-pin DIP packages	2	1978	0.75x0.5x0.1	SLC W4 program	Dean VanDeWalker		217.0	1001
Component	Univac	7908708-06		ASIC, Custom Gate Array, 781 gates, 139-pin pin-grid-array ceramic package, "Error Correct", produced by Univac Semiconductor on ST-101 process in Eagan, MN	1	1981	1.5x1.5x0.4	UYK-43	Gary Hokenson	<a href="#">PartUYK43GA.JPG</a>	176.0	1001
Component			911 805	ASIC, Custom Gate Array, 873 Gates, 139-pin pin-grid-array ceramic package, "Priority", produced by Univac Semiconductor on ST-101 process in Eagan, MN. Has thermal heat transfer pad on bottom.	1	1981	1.5x1.5x0.4	UYK-43	Gary Hokenson	<a href="#">PartUYK43GA.JPG</a>	177.0	1001
Component		7909399		Microcircuit, Hybrid, Optical Receiver	1	1982	1.0x1.25x0.35	GLCM		<a href="#">GLCM.jpg</a>	224.0	1001
Component		7909238		Microcircuit, Hybrid, Optical Transmitter	1	1982	0.75x1.00x0.35	GLCM		<a href="#">GLCM.jpg</a>	225.0	1001
Component		7908412-10		Heat sink and frame with 100-pin connector, SEM B format. Double sided. For use with SEM B ceramic boards. This assembly is representative of several versions which were used over the duration of the UYK-44 program.	1	1983	1.85x5.7x0.3	UYK-44		<a href="#">img_2109_RJ.JPG</a>	164.0	1008
Component	Motorola	MBM 2011A		Magnetic Bubble Memory Unit, 1 Megabit (procured to Univac part number 7909704)	1	1983	2x2x0.75	Coast Guard	Lowell Benson	<a href="#">img_2048_RJ.JPG</a>	205.0	1008
Component	Sperry	4326151-000		ASIC, Custom Gate Array, ?? Gates, 132-pin bottom lid pin-grid-array package, with top heat sink, produced by Sperry Semiconductor, Eagan, MN	1	1984	1.5x1.5x0.5	Roseville	Gary Hokenson	<a href="#">PartUYK43GA.JPG</a>	171.0	1001
Component	Sperry	4283019-102		ASIC, Custom Gate Array, 1K-3K gates, bipolar, 139-pin pin-grid-array ceramic package, produced by Sperry Semiconductor, Eagan, MN	1	1984	1.5x1.5x0.4	Roseville	Gary Hokenson	<a href="#">PartUYK43GA.JPG</a>	173.0	1001
Component	Sperry	4283087-100		ASIC, Custom Gate Array, 1K-3K gates, bipolar, 139-pin pin-grid-array ceramic package, produced by Sperry Semiconductor, Eagan, MN	1	1984	1.5x1.5x0.4	Roseville	Gary Hokenson		174.0	1001
Component		7915870-45	LSI L1A0956	ASIC, Custom Gate Array #4, "1397 D/E Control", 1446 gates implemented on LSI series LL5220 gate array, in 84-pad ceramic leadless chip carrier package.	2	1985	0.9x0.9x0.1	UYK-44			166.0	1005
Component		7915868-45	LSI L1A0957	ASIC, Custom Gate Array #6, "1397 D/E Source", 1252 gates implemented on LSI series LL5140 gate array, in 64-pad ceramic leadless chip carrier package.	3	1985	0.7x0.7x0.1	UYK-44			167.0	1005
Component		4332616-000	2516-000	ASIC, Custom gate array based on 100K ECL, 256 gates, type LP816, Sperry logo but possibly fab by Fairchild, GB3055 series. 54-pad leadless chip carrier package, cavity down, conduction cooled.	4	1985	0.7x0.4x0.1	1100/90		<a href="#">IMG_1583.JPG</a>	169.0	1001
Component		4332620-000	2520-000	ASIC, Custom Gate Array, based on 100K ECL, 256 gates, type LP820, Sperry logo but possibly fab by Fairchild, GB3055 series. 54-pad leadless chip carrier package, cavity down, conduction cooled.	4	1985	0.7x0.4x0.1	1100/90			170.0	1001

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Component	Sperry	4326171-000		ASIC, Custom Gate Array, ?? Gates, 132-pin bottom lid pin-grid-array package, with top heat sink, produced by Sperry Semiconductor, Eagan, MN	1	1985	1.5x1.5x0.5	Roseville	Gary Hokenson	<a href="#">PartUYK43GA.JPG</a>	172.0	1001
Component		7916175-45	AMCC A003	ASIC, SNERT II Custom Microcircuit in 64-pin LCC	5	1985	1x1x0.1	UYK-44	Dean VanDeWalker		185.0	1001
Component		7916526-45	LSI L1A2203	ASIC, Custom Gate Array #6A, "1397 D/E Source", 1252 gates implemented on LSI series LL5140 gate array, in 64-pad ceramic leadless chip carrier package	3	1986	0.7x0.7x0.1	UYK-44			168.0	1005
Component		7916175-45	AMCC A004-01	ASIC, SNERT Custom Microcircuit in 64-pin LCC	4	1986	1x1x0.1	UYK-44	Dean VanDeWalker		178.0	1001
Component	H. H. Buggie	3921 3922		Connector, male and female pair, 33-pin, type as used on the 33-pin cards from the 1950s, receptacle has solder terminals, plug is PC board mount	2	1986				<a href="#">IMG_1887.JPG</a>	189.0	1000
Component		7916175-45	AMCC A005-01A	ASIC, SNERT Custom Microcircuit in 64-pin LCC	2	1987	1x1x0.1	UYK-44	Dean VanDeWalker		179.0	1001
Component		7916175-06	AMCC A005-02	ASIC, SNERT Custom Microcircuit in 64-pin Pin-Grid-Array package	4	1987	1x1x0.2	UYK-43	Dean VanDeWalker	<a href="#">SNERTpqa.jpg</a>	182.0	1001
Component				Integrated Circuit, CMOS, Rad Hard uProcessor RISC, 255-pin PGA package, 0.75x0.75 die	1	1987	2x2x0.5	for S.D.I. CIA Project		<a href="#">PartRISCchip.jpg</a>	197.0	1008
Component	Sperry SSO	7916725-000		Integrated Circuit, Die, MIPS, CMOS, Microprocessor, Struct., 0.3x0.3 die, in carrier	4	1987	2x2x0.3	SL-Weapons			198.0	1008
Component		7916175-45	VTC 002 60759800	ASIC, SNERT Custom Microcircuit in 64-pin LCC	5	1988	1x1x0.1	UYK-44	Dean VanDeWalker		180.0	1001
Component	Hitachi	BDN0153U		Magnetic Bubble Memory Unit, 4 Megabit, test sample (procured to Univac part number 7917502)	1	1988	1.5x1.75x0.3		Larry Bolton	<a href="#">IMG_1987.JPG</a>	206.0	1005
Component		7916175-06	AMCC A005-02	ASIC, SNERT Custom Microcircuit in 64-pin Pin-Grid-Array package, in carriers and shipping tube in ESD bag	4	1990	1x1x0.2	UYK-43	Dean VanDeWalker		183.0	1001
Component			Teradyne	Connector, male and female, example of Future Bus+ connector system. Has eight rows of 70 pins on each connector.	1	1990	1x0.6x9				190.0	1005
Component			IBM93 32R7896 68690437-001	Integrated Circuit, Processor, made for Unisys by IBM, about 10 million gates, 65 I/O, 1593 pad surface mount ceramic package. Donated to the Bicentennial coffin to be opened in 2058.	1	2000	2.1x2.1x0.3	Unisys 2200 series	Tom Turba Ron Smith		199.0	BiCent Box
Component	Motorola	SC-47		Microcircuit, Unidentified, in 10-lead TO-5 can, possibly early hybrid	1	1960?	0.7x0.7x2.0			<a href="#">img_2038_RJ.JPG</a>	228.0	1001
Component			Berg 65041-1 National 200125-01 Malco 000403- 0002	Connector, PC Card, 56 contact	4	1966- 1971	0.75x4x0.15				192.0	1008
Component		7916175-46	AMCC A005-01	ASIC, SNERT Custom Microcircuit in 64-pin LCC, in shipping tray	8	1986 1988	4.5x4.5x0.25	UYK-44	Dean VanDeWalker		181.0	1001
Component	Univac	259056-12	Various 90 pin conn P/Ns	90 pin connector terminating kit							165.0	1002
Component				ASIC, Custom Gate Array, 3u Bipolar Gate Array, 139-pin PGA, 0.3x0.3 die, 1200 gates	1		2x2x0.5	AN/UYK-43			175.0	1001
Component			HSSB20-10	Connector, 20-pin surface mount bolt-on, with extended leads and header. The raw connector for making the 20-pin modules.	2		1x1x0.9				188.0	1005
Component				Contact, Female, Tuning Fork mates with 56-pin connectors	16		0.1x0.01x1		Larry Bolton		193.0	1001
Component				Contact, Male, gold plated, 0.063 pin, .060 solder cup for wire attachment	24		1.5x0.1dia				194.0	1001
Component				Contact, Male/Female Pair, gold plated, 0.060 solder cups for wire attachment, female are split barrel for dual contact surface.	6		2x0.1dia				195.0	1001
Component			unmarked	Indicator, Front Panel, Neon, taper pin, tapered body, three terminals, domed top clear lens	3		1.6x0.5 dia		Larry Bolton	<a href="#">IMG_1822.JPG</a>	196.0	1001

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Component	Univac		Westinghouse 424	Integrated Circuit, Simple DTL logic , sample potted in clear plastic block with holder for magnifying glass. Showing Univac capability	1		1x4x2				202.0	Eagan Office
Component				Lamp holders for front panel indirect lighting. Screw in type with water seal. Accommodates unspecified lamp type.	7		0.6 dia x 0.7	Mavrick?			204.0	1005
Component			1960023-00	Microcircuit, Hybrid, Unidentified multichip device made in the Shepard Road facility. Contains a Motorola 56002 DSP chip and four 1MB memory	1		1.8x1.8x0.4		Jim Latorraca	<a href="#">IMG_1578a.jpg</a>	226.0	1001
Component		7900147		Receptacle, 15-pin, taper pin, w/ground clip, solder plated.	1		1.6x2.6x0.45				229.0	1005
Component			6U10, USA	Tube, Early 3-in-one triple triode compactron tube, 12 pins	1		1" dia x 1.7				231.0	1005
Computer	Sperry		Type P3070-51 SN 312394A	Computer, Personal (less software and documentation), made by Mitsubishi, marketed by Sperry, has two 5.25" floppy drives	1	1984		Personal Computer	Ray Dombeck		3.0	Eagan bsmt
Computer	Sperry		Type 3584-00 SN 002770	Monitor, Color, for personal computer. (less documentation), made by Mitsuishi (July 1984), marketed by Sperry	1	1984		Personal Computer	Ray Dombeck		4.0	Eagan bsmt
Computer	Sperry Univac	7311600-00	Asset tag 87400166, Mfg. 607	Computer, U-1600	1		est 24x24x24	U1600			1.0	Eagan bsmt
Computer			S/N CNA0025	Computer, UYK-44	1			UYK-44			2.0	Eagan bsmt
Kit	Sperry/Univac	259056-12		90-pin connector kit. For installing a 90-pin right angle connector to the end of a cable. Apparently uses taper pins.	2	1977	8x12x1	USQ-20, AN/TSQ-90B, CP-808			234.0	1007
Kit	Sperry/Univac			Wire wrap practice kit, for hand wire wrap. Consists of a wire wrap card, a counting gauge, a knitting needle for a wire route aid, a hand wire wrap tool, and some pins and connectors.	1		4x5x0.75	production/field			235.0	1007
Kit				Wire wrap tool bits for several wire gauges from 18 thru 30, 16 bits total	1		4x8x1.4	production/field			236.0	1007
Kit	Unisys			Wire Wrap training kit. Includes PX-14804 Training Handbook, wire stripper, air driven wire wrap tool, and assorted wire wrap backplanes for practice.	1		12x9x2	production/field			237.0	1007
Module				Logic Module, 30-terminal, designed and built by ERA from components supplied by Western Electric. Four transistors each module are surface barrier type, good for only up to 3 volts. All three modules appear to be the same logic function. Modules are reversible.	3	1959	1.8x2.25x1.8	Nike-Zeus GPDC	Don Weidenbach	<a href="#">IMG_3850.JPG</a>		
Module		7017420		Module, 20-pin bolt-on surface mount, "Electronic Switch", open unpotted unit, has two 10-pin TO-5 devices (probably 7900032 hybrid integrated circuits)	1	1964	1x1x0.7	CP-823/U Memory		<a href="#">IMG_1651.JPG</a>	63.0	1005
Module				Module, triple-wide, with two 20-pin bolt-on surface mount connectors, unpotted unit with two pc boards mounted face to face. Uses six SB03006 circuits in 8-lead flat packs. Also a TI GM0089 transistor (Univac 4908000 PNP germanium). Cordwood packaging similar to that used in the ADD computer but the connector is not ADD.	1	1966	3.5x1x0.8	CP-823/U Memory		<a href="#">IMG_1651.JPG</a>	67.0	1005
Module			7056820 pc board	Module, 20-pin bolt-on surface mount, unpotted unit, has two pc boards mounted face to face, has one 7901001 flat pack and one TO-5 can mounted within. Motorola SD1328H. Cordwood packaging similar to that used in the ADD computer but the connector is not ADD.	1	1967	1x1x0.7	CP-823/U Memory		<a href="#">IMG_1651.JPG</a>	66.0	1005

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Module			UNI-027	Cascaded SAW Filter Splitter/Mux. 14 Channel, 60 to 300 MHz. Probably made by Unisys in Sudbury, Mass. Part of a possible technology transfer to Eagan about 1985-1988.	1	1985	3x3.5x0.5		Bob Kubat	<a href="#">IMG_1326.JPG</a>	30.0	1005
Module				Display unit, demo unit, show capability to send midcourse correction from helicopter to Harpoon missile, by then IBM Federal Systems in Owego, with write-up and photos	1	1987	4.5x9.5x4	IRAD	Tim Johnson		18.0	1005
Module		7071530-03	Planes:7022561-03 Diode Bd:7056815-04	Memory Module, Core, 4K word by 32 bit, partly disassembled to show construction, 32 planes of 4096 cores each, uses 25 mil cores, 4 wires per core	1	1988	4x4x6	UYK-7	Terry Houle	<a href="#">IMG_3658.JPG</a>	24.0	LDB
Module	Quadri	7890203-00	Rev. J, 1-0805-0018-02 Rev. Y, SN 02150	Memory Unit, Core, Subcontractor-built module, 64K x 18, conduction cooled with rail heat clamps	1	1992	6.45x8.9x1.4	AN/UYK-43			28.0	Eagan Office
Module	Ampex	7890203-00K	Mfr:09150, P/N 962280-A05 J	Memory Unit, Core, Subcontractor-built module, 64K x 18, conduction cooled with rail heat clamps	1	1993	6x9x1.4, plus stand	AN/UYK-43			29.0	1001
Module				Memory Module, Core, 68,000 bits, 17 planes of 90 mil cores in 50x80 matrix (4 wires per core), edge connections to each plane	1	1950s	10.1x7.3x4.1		Don E. Anderson	<a href="#">img_2081_RJ.JPG</a>	21.0	DEA
Module	RR			Memory bit, uses cold cathode tube technology	1		4.7x1.1 dia	RR Card Punch	Don Weidenbach	<a href="#">IMG_3842.JPG</a>		
Module		7022560-00	S/N 0100	Memory Module, Core, 4K word, w/Parts List	1		4x4x4	UYK-7			23.0	1001
Module	Univac	7017420		Module, 20-pin bolt-on surface mount, "Electronic Switch", potted in aluminum frame. Cordwood packaging similar to that used in the ADD computer but the connector is not ADD.	1		1.1x1.1x0.8	CP-823/U Memory		<a href="#">IMG_1651.JPG</a>	64.0	1005
Module			unmarked	Module, 20-pin bolt-on surface mount, potted but heavily depotted presumably for failure analysis attempt. Cordwood packaging similar to that used in the ADD computer but the connector is not ADD.	1		1.1x1.1x0.8	CP-823/U Memory			65.0	1005
Subassembly				Module, less cover. Has 2 cards: 207102 16A (has 17 input/output diodes) and 207186 32A (four transistors on each card, types GE 4JD1A70 and Philco S3001).	1	1958	5.2x4.8x2	Athena		<a href="#">img_2051_RJ.JPG</a>	11.0	1001
Subassembly	Univac			Plane from memory stack, Core, 4096 bits, 25 mil cores in 64 x 64 matrix (3 wires per core).	2	1968	3x3x0.05	CP-890 Posidon Navigation Computer	Bob Kubat	<a href="#">img_2095_RJ.JPG</a>	22.0	1005
Subassembly	Sperry/Univac	7156714-00		PC Board, unpopulated, accepts three 68-pin connectors, "Disk Control Unit"	1	1976	9x14x0.1	ARTS			116.0	1001
Subassembly	Sperry/Univac	7250200-00	AN/USQ-69	Name plate for AN/USQ-69 Data Terminal Set	1	1983	1x3.5x0.05	USQ-69	Greg Miller		32.0	1005
Subassembly				Card, Unidentified and unmarked, probably not Univac. Has six heat sinked power transistors.	1	1983	6.5x1.75x0.75			<a href="#">CardPowerSupply.jpg</a>	38.0	1005
Subassembly	Jayel	2155-04	Sperry P/N 7908678-00	Panel Maintenance	1	1984	9x5x0.7	UYK-43			17.0	1000
Subassembly		7237307-003	S/N 020127	PC Board, SEM B format, ceramic, has two large LCC packages mounted on tinned copper substrate. If completed would become part of a 7237305 as seen elsewhere in this archive.	1	1986	1.4x5.2x0.1	UYK-44		<a href="#">img_2107_RJ.JPG</a>	152.0	1008
Subassembly		123A682-01	S/N 136, K52787-136, Job No. K52787	PC Board, SEM D, ceramic, unpopulated	1	1987	4x5x0.1	BSY-1			156.0	1008
Subassembly			SEM E EXP S/N 47	PC Board, SEM E, ceramic, unpopulated	1	1987	5x6x0.1				158.0	1008
Subassembly			AMCC A005	ASIC, SNERT Custom Microcircuit, raw wafer, unpackage	1	1987	4.5 dia x 0.5	UYK-43/UYK-44	Dean VanDeWalker		184.0	1001
Subassembly	Unisys	7341429-02	Rev B S/N141, S/N 122 (incomplete)	Panel, Maintenance, subassembly	2	1993	Box 8x12x2	UYK-44			16.0	1002
Subassembly	Unisys		UYK-70	Name plate for UYK-70 Command & Decision	1	1995	3x3x0.05	UYQ-70	Greg Miller		33.0	1005

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Subassembly	Lockheed Martin	7395812-02	449	PC Boards, organic, with P0, P1, P2 connectors, 425 total pins, appear to have been made by Dynamic Details Inc as solder samples	2	2004?	6x9x0.05	B2 Security Guard			161.0	Eagan Office
Subassembly		4047536-01	Ser 0090	Memory plane, stackable, thin film, 2x64 wordx24 bits, 64-finger + 2 finger + gnd strip contacts (side wires have been cut off). Has 64 tape wound cores, and 64 microdiodes. 56 of these planes are in an ADD computer.	1	early 1960s	6.8x5.7x0.1	ADD	Don Weidenbach	<a href="#">IMG_3845.JPG</a>		1005
Subassembly			unmarked	Module, empty Athena can	1		6x6x1.5	Athena			9.0	1001
Subassembly	RR Univac	209257	S/N 0000352	Module, Inverter Assy-1717A1 (vg condition)	1		6x6x1.5	Athena			10.0	1001
Subassembly	RR Univac	1307 A1?	Symbol 1717, Serial 295?	Module, Inverter Assy, opened	1		6x6x1.5	Athena	Larry Bolton		12.0	lost
Subassembly	Univac	7023734	1824-C (Mockup)	Full size case (empty) of 1824 Computer	1		9.5x10x15	1824			13.0	1003
Subassembly		110041		Memory disk, double sided, 7" hub hole	3		24" dia x 0.12 thick		Rollie Terhaar		19.0	Eagan Office
Subassembly				Memory disk, double sided, these are disks from a commercially available hard disk drive commonly found on consumer personal computers. They are used to contrast with the 24" disks (part number 110041).	2						20.0	Eagan Office
Subassembly			no marking	Mated film memory diode stick. Has 65 diodes of type 7901009 or 7906030. 64 of them are connected as common anode. Wires to memory are wrapped and soldered to component leads.	1		3.1x0.6x0.1	UYK-7 et al	Larry Bolton	<a href="#">IMG_1237.JPG</a>	25.0	1005
Subassembly			72-215 247R and 5-406-149.8	Mated film memory element sheets. Two are deposited metal film, one is laminated copper foil. Presumably these are stacked in the memory. Holes exist in all three pieces.	1		2.5x4x0.005	Mated Film Memory		<a href="#">MemoryFilmPlane.jpg</a>	26.0	1005
Subassembly	Univac		3370	"Mated Film Memory Array, 1024 Bits", display of a memory array plane in plastic case. Layering is diagramed on back of case.	1		3.7x4.7x0.4	Mated Film Memory		<a href="#">img_2092_RJ.JPG</a>	27.0	1001
Subassembly				Photo-interrupter, custom made, milled from a phenolic block and aluminum. Uses an incandescent lamp and unidentified photo sensor. Could be used to detect rotational or linear position. Has a 1/4" slot. Optical openings are 1/10" diameter.	1		1.2x1.6x0.55			<a href="#">IMG_3655n56.jpg</a>	31.0	1000
Subassembly	Univac			System Badge "Remington Rand Univac file computer"	1		2.4x8x0.9	File Computer		<a href="#">img_2094_RJ.JPG</a>	34.0	1005
Subassembly	Univac			System Badge "UNIVAC", generic, cast aluminum	1		1.2x5.7x0.4			<a href="#">img_2111_RJ.JPG</a>	35.0	1005
Subassembly		7037440-00		PC board inner layer. Prepreg with etched copper foil on each side. For 90-pin card.	1		5x3.75x0.05		Bob Kubat		36.0	1005
Subassembly				Thermal Wedge Clamp for MPC-16, for thermally clamping the edge of conduction-cooled PC cards	1		0.3x5x0.25	MPC-16		<a href="#">CardClamp.JPG</a>	37.0	1005
Subassembly	Sperry		7237387-03 214629-1D	PC Card, 100-pin SEM B format, Kevlar, single sided, unpopulated thru-hole board with heat ladder frame and connector. If fully completed, it would become a 7237385 card (see elsewhere in the archive).	1		1.9x5.8x0.3	UYK-44		<a href="#">img_2110_RJ.JPG</a>	129.0	1008
Subassembly			has marks on ceramic like A, I', B and R.	PC Card, 100-pin SEM B format, ceramic, double sided, unpopulated but with connector, tinned copper?	1		1.9x5.8x0.3	UYK-44			131.0	1008
Subassembly			unmarked	PC Card, 100-pin SEM B format, Ceramic, double sided, partially populated with 10 lcc and 5 chip capacitors.	1		1.9x5.8x0.3				139.0	1008
Subassembly			unmarked	PC Card, 100-pin SEM B format, Ceramic, double sided, partially populated with 10 lcc on each side.	1		1.9x5.8x0.3				140.0	1008
Subassembly		4040116B		PC Board, 15-pin single sided	1		3.3x2.75x0.05	tbd			150.0	Eagan Office

Type	Company brand	Company Part Number	Other Markings	Description	Qty	Vintage	Size (HxWxD) inches	Equipment/System	Donor	Photo link	Sequence	Loc/Box
Subassembly		7221587-00		PC Board, SEM B, Ceramic, unpopulated	1		1x5x0.05				151.0	1008
Subassembly		7237232-02		PC Board, SEM B format, ceramic, has six laser-trimmed resistor network substrates and four chip capacitors mounted on tinned copper substrate. One end broken off and missing.	1		1.4x4.5x0.1	UYK-44			153.0	1008
Subassembly		7237282-002	S/N 005377 and 005409	PC Board, SEM B (UYK-44) format, ceramic, unpopulated, may be tinned copper	2		1.4x5.2x0.05	UYK-44		<a href="#">CardSEMBsubstrate2.jpg</a>	154.0	1008
Subassembly		7237207-01		PC Board, SEM B (UYK-44) format, ceramic, unpopulated, un-tinned copper	1		1.4x5.2x0.05	UYK-44			155.0	1008
Subassembly		123A682-01	S/N 155, K52787-155, Job No. K52787	PC Board, SEM D, Ceramic, unpopulated	1		4x4x0.1	BSY-1			157.0	1008
Subassembly	Univac	various		PC Boards, SEM B format (UYK-44 style), FR4 (green color), unpopulated, all can hold a 224 PGA package device in the middle.	4		1.5x5.25x0.05	UYK-44	Richard A. Erickson		159.0	1008
Subassembly	Univac	various		PC Boards, SEM B format (UYK-44 style), Kevlar (brownish color), unpopulated, all can hold one or two 224 PGA package device in the middle.	3		1.5x5.25x0.05	UYK-44	Richard A. Erickson		160.0	1008
Subassembly				PC Board, SEM B, Ceramic, stack of 12 boards showing successive application of each metal and dielectric layer. Metal is copper.	1		1.4x5.3x0.5	UYK-44		<a href="#">img_2032_RJ.JPG</a>	163.0	tbd
Subassembly				Ceramic Dual-In-Line package used for the hybrid assembly of multiple transient suppressor diodes, 24 pins, bottom brazed pins	1		0.8x1.3x0.4	Minuteman?, UYK-43?, etc.			187.0	1005
Subassembly				Display showing layout of multilayer ceramic hybrid into a 1024 bipolar memory array, has four 256 bit IC chips.	1		5x7x0.5			<a href="#">img_2035_RJ.JPG</a>	208.0	1001
Tool		2812355-00	Artwork, Ground Up	Glass Master for etching PC card, this is the ground layer, probably 1:1 scale.	1	1977	11x14x0.2	Memory Processor	Harry Wise		242.0	1007
Tool	Univac	none	"gauge Card Face Up" "credit card"	Punched card gauge used to check card punch registration	1	70s?	4x8x0.060				247.0	1001
Tool				Carriers, plastic, used with flat pack integrated circuits. Use to hold the devices during test and shipment. Avoids bent leads.	3		0.75x0.75x0.15				186.0	1005
Tool	Univac	4056041-00		Drafting Template, Logic Gates (AND, OR, Invert, etc)	1		4.0x7.4x0.05	engineering			238.0	1007
Tool	Univac	UDI-723	Rev. 12-67	Drafting Template, Programming Flow Chart	1		4.5x10.5x0.05	engineering			239.0	1007
Tool		7035151 7035152 7035447		Early mated film memory mask development scrap from the vacuum lab				production	Alden Allen		240.0	1007
Tool				Copper plate with an unidentified insulated coating used to test the deposition of the coating thru 0.050 holes in the card and then over plated with a conductor in the holes. Electrical probing would show any shorts from the conductive electrical test pattern to the copper substrate. The copper plate would have been an excellent heat sink for any components mounted on it.	1		3.25x4.5x0.068				241.0	1007
Tool	Intel	309178-002		Pin-grid-array package removal tool (pry up on package)	1		2.8x1.3x0.6		Gary Hokenson		243.0	1001
Tool			4001630	Plate, steel, apparently a drill backer plate for layout of two 4001630 pc cards. Drill holes go only part way thru. Each card is approx 4.2x5.7".	1		7x12x0.2	production	Harry Wise		244.0	1007
Tool			ETX 68005-A	Plate, steel, apparently a drill guide template for two cards. Each card is approx 4.2x5.7". Drill holes go all the way thru.	1		7x12x0.2	production	Harry Wise		245.0	1007

