

# 41CL Memory Reference

06/21/18

Page	Contents	ID	XROM	Description	YCRC value	Revision Date
0x000	NUT0-N	OS41	N/A	HP Operating System Rev N, pg 0	0xC67CA32B	
0x001	NUT1-F			HP Operating System, Rev F, pg 1	0x8BF110D6	
0x002	NUT2-L			HP Operating System, Rev L, pg 2	0x5B1C1C70	
0x003	XFNS3-3B	XFN3	25	HP CX Extended Functions 3B, pg 3	0xA270BAF7	
0x004	SERVICE	HSRV	N/A	HP Service 2A	0xF023B96D	
0x005	XFNS5-2D	XFN5	N/A	HP CX Extended Functions 2D, pg 5	0x447DF70E	
0x006	TIME-3A	TMOD	26	HP CX Time Functions 3A	0xEA20E86B	
0x007	YFNZ-4F	YFNZ	15	41CL Extra Functions -4F	0x3650EF10	
0x008	ADVL1-1B	41AD	22	HP-41 Advantage Pac 1B, pg 1	0xDD3065AC	
0x009	ADVL1-1B			HP-41 Advantage Pac 1B, pg 1	0xDD3065AC	
0x00A	YFNX-3A	YFNX	15	41CL Extreme Functions -3A	0x0FE228D4	01/22/18
0x00B	YLIB-3D	YLIB	N/A	41CL Library Functions -3D	0xC6358F45	01/22/18
0x00C	ADVU1-1B	41AD	24	HP-41 Advantage Pac 1B, pg 2, bnk 1	0xF7BCFBE7	
0x00D	ADVU2-1B			HP-41 Advantage Pac 1B, pg 2, bnk 2	0x2B2E2B57	
0x00E	MPL2V1F	MLTI	3	Multiprecision Library ROM	0xE3E8C1B1	
0x00F	YFNP-1F	YFNP	15	41CL Extra Functions Plus -1F	0x008496C7	
0x010	AECROML	AECR	18	AECROM, pg 1	0x34F1B188	
0x011	AECROMU			AECROM, pg 2	0x31DD795C	
0x012	AUTOFIN	AFIN	21	Autofinance	0x2666909C	
0x013	ASSEM3	ASMB	21	Assembler 3	0x1FD481E3	
0x014	AUTOSTRT	AUTO	10	HP Autostart	0x0BB24A6A	
0x015	AVIATION	AVIA	19	HP Aviation Pac 1A	0x1A7938E1	
0x016	B52DEX	B52B	21	Boeing B-52, pg 1	0xE78B04BD	
0x017	B52DIO		31	Boeing B-52, pg 2	0xA014A069	
0x018	CCDL-1B	CCDR	9	CCD Module 1B, pg 1	0xD9D7EB4D	
0x019	CCDU-2B		11	CCD Module 2B, pg 2	0x4216E34B	
0x01A	CHEMUSER	CHEM	20	Chemistry Solutions book	0x03DE24BE	
0x01B	CIRCUIT	CIRC	6	HP Circuit Analysis Pac 1A	0xE3A29B2B	
0x01C	CLINICAL	CLIN	19	HP Clinical Lab & Nuclear Medicine Pac 1A	0x721745CD	
0x01D	DATAACQL	DACQ	21	HP Data Acquisition 1B, pg 1	0x94933C29	
0x01E	DATAACQU		31	HP Data Acquisition 1B, pg 2	0xE813EC77	
0x01F	DAVID-2C	DAVA	2	David Assembler 2C	0x3166EFBA	
0x020	HPILDEVL	DEVI	22	HP HP-IL Development Pac 1B, pg 1	0x991A9E79	
0x021	HPILDEVU		24	HP HP-IL Development Pac 1A, pg 2	0x40A4E414	
0x022	HPILDIAAG	DIIL	19	HP HP- IL Diagnostic	0xC8CBD00E	
0x023	DIAMOND	DMND	31	Diamond	0x2DC2A47F	

0x024	ES41L	<b>E41S</b>	4	ES41, pg 1	0x10ADCDF3
0x025	ES41U		6	ES41, pg 2	0x4AABE9EE
0x026	ESMLDL	<b>ESML</b>	10	ESMLDL 7B	0xFB2A334E
0x027	EXTIO-1A	<b>EXIO</b>	23	HP Extended I/O 1A	0x504397A2
0x028	FINANCE	<b>FINA</b>	4	HP Financial Decisions Pac 1D	0x5346BC6F
0x029	GAMES-1A	<b>GAME</b>	10	HP Games Pac 1A	0xDA9B9799
0x02A	GMAC2	<b>GMAS</b>	31	GMAC 2	0x524B3D27
0x02B	GMAC3L	<b>GMAT</b>	21	GMAC 3, pg 1	0x7D266AF8
0x02C	GMAC3U		31	GMAC 3, pg 2	0x41A229ED
0x02D	HEPX1-1E	<b>HEPX</b>	7	HEPAX 1D, bnk 1	0x0659DE89
0x02E	HEPX2-1D			HEPAX 1D, bnk 2	0xE9ACACBA
0x02F	HEPX3-1D			HEPAX 1D, bnk 3	0x5C548CF8
0x030	HEPX4-1D			HEPAX 1D, bnk 4	0x88B25201
0x031	HOMEMGT	<b>HOME</b>	9	HP Home Management Pac 1A	0x5C02D8D7
0x032	LABELS	<b>LBLS</b>		LABELS	0x9E04665E
0x033	LANDNAV	<b>LAND</b>	1	LANDNAV	0xA00C3699
0x034	MATH-1D	<b>MATH</b>	1	HP Math Pac 1D	0xCB6B3AB2
0x035	MACHINE	<b>MCHN</b>	12	HP Machine Design Pac 1A	0xAFB46CDA
0x036	MELBRNE	<b>MELB</b>	12	Melbourne	0x42B19762
0x037	MIL-ENGL	<b>MILE</b>	21	Military Engineering, pg 1	0x888318B4
0x038	MIL-ENGU		31	Military Engineering, pg 2	0x165D810F
0x039	MLROM	<b>MLRM</b>	21	MLROM	0x8C4C2123
0x03A	NAVL-1B	<b>NAVI</b>	14	HP Navigation Pac 1B, pg 1	0x80C504F2
0x03B	NAVU-1B		14	HP Navigation Pac 1B, pg 2	0xF2A12F3B
0x03C	NFCROM	<b>NFCR</b>	17	NFCROM 1B	0x93941C36
0x03D	NAVCOM2L	<b>NVCM</b>	14	NAVCOM 2, pg 0	0xA65D4319
0x03E	NAVCOM2U		15	NAVCOM 2, pg 1	0x4B36EC51
0x03F	APAC1	<b>P3BC</b>	9	Aviation Pac for P3B/C, pg 1	0xF1D2CC95
0x040	APAC2		31	Aviation Pac for P3B/C, pg 2	0x82DB2775
0x041	APAC3		21	Aviation Pac for P3B/C, pg 3	0x825B3038
0x042	APAC4		9	Aviation Pac for P3B/C, pg 4	0xF1D2CC95
0x043	PCODER	<b>PCOD</b>	16	Pcoder 1A	0xFD976C53
0x044	PETROLL	<b>PETR</b>	15	HP Petroleum Fluids Pac 1A, pg 1	0xC234E735
0x045	PETROLU		16	HP Petroleum Fluids Pac 2A, pg 2	0x2719C0EE
0x046	PLOTTERL	<b>PLOT</b>	17	HP Plotter Pac 1A, pg 1	0x7AF0E0E8
0x047	PLOTTERU		18	HP Plotter Pac 2A, pg 2	0x18BB9276
0x048	PPCL	<b>PPCM</b>	10	PPC ROM pg 1	0x011BEAFE
0x049	PPCU		20	PPC ROM, pg 2	0x14D6A2B3
0x04A	REALESTL	<b>REAL</b>	11	HP Real Estate Pac 1A, pg 1	0x3AA6E48D
0x04B	REALESTU			HP Real Estate Pac 1A, pg 2	0x87E282B9
0x04C	QUATERL	<b>QUAT</b>	15	Quaternion, pg 1	0x326D5668
0x04D	QUATERU		16	Quaternion, pg 2	0xAC788AB2
0x04E	SECURITY	<b>SECY</b>	19	HP Securities Pac 1A	0x82D5290E
0x04F	STANDARD	<b>STAN</b>	5	HP Standard Applications Pac 1C	0xC2173B4A
0x050	SGS-GAS	<b>SGSG</b>	21	SGS GAS	0xA78F8ADF

0x051	SIM12L	SIMM	4	SIM pg 1	0x0648D8D5	
0x052	SIM12U		10	SIM, pg 2	0x5528FE19	
0x053	SIM34L		31	SIM, pg 3	0xF183D28F	
0x054	SIM34U		30	SIM, pg 4	0x31302A25	
0x055	SKWIDBC	SKWD	8	SKWID	0xB1EBDE82	
0x056	SIMPLEX	SMPL	16	Simplex	0xA6D345E5	
0x057	STAT-1B	STAT	2	HP Statistics Pac 1B	0xA71163CA	
0x058	STRESS	STRE	8	HP Stress Analysis Pac 1A	0x86A0AD50	
0x059	STRUCTL	STRU	7	HP Structural Analysis Pac 1B, pg 1	0x10D00FE5	
0x05A	STRUCTU		19	HP Structural Analysis Pac 1A, pg 2	0x0C707646	
0x05B	SUPRROML	SUPR	21	SUP-R-ROM, pg 1	0x9F5748AE	
0x05C	SUPRROMU		31	SUP-R-ROM, pg 2	0x5F352490	
0x05D	SURVEY	SURV	3	HP Survey Pac 1B	0x006F7876	
0x05E	THERMAL	THER	13	HP Thermal & Transport Science Pac 1A	0x9D9C85F6	
0x05F	DISASM4C	DA4C	15	DisAsm 4C	0x5944FC8E	02/16/18
0x060	USPSL	USPS	21	DEL SERV 1, pg 1	0x5DAF1F6C	01/22/18
0x061	USPSU		31	DEV SERV 1, pg 2	0xA99532C3	
0x062	UPDAT-3B	YUPS	31	41CL Update Functions -3B	0xF9417D87	
0x063	UPHST-1B	YCLN	31	41CL Clone Functions -1B	0xC052BC72	
0x064	CLILUP	YUIL	14	41CL IL Update Functions	0xC4F52F75	06/21/18
0x065	YREGAPPS	YRGA	21	YREG Applications	0xC71C310B	
0x066	HANDY	HNDY	31	Handy Compact	0x5C5FE236	
0x067	ASTRO-1	ASTT	6	Astro-2010, pg 1	0x534B45A3	
0x068	ASTRO-2			Astro-2010, pg 2	0xEB815A99	
0x069	ASTRO-3			Astro-2010, pg 3	0x5D9DB525	
0x06A	ASTROUI		8	Astro-2010 UI ROM	0x62510A17	
0x06B	CHESS1	CHES	8	Chess, pg 1	0xD285F4BD	
0x06C	CHESS2			Chess, pg 2	0x7B042C6D	
0x06D	FUN1	FUNS	10	Funstuff, pg 1	0xADDE16CE	
0x06E	FUN2			Funstuff, pg 2	0xB8B36961	
0x06F	FUN3			Funstuff, pg 3	0x702C8E1C	
0x070	FUN4			Funstuff, pg 4	0xB4F6F8D1	
0x071	JMBMATHL	JMAT	5	JMB-Math, pg 1	0x3B320E23	
0x072	JMBMATHU		6	JMB-Math, pg 2	0x89ABC04	
0x073	SLANTR	SR1B	11	SLANTR-SR1B	0x1CEEE2D7	
0x074	QUEENS	QUEN	9	N-Queens	0x8FD86EED	
0x075	KRAUSS1	KRSS	17	Krauss book, pg 1	0x5A1BD088	
0x076	KRAUSS2			Krauss book, pg 2	0x0E21B262	
0x077	TREKKIES	TREK	11	Trekkies	0x80DF47BF	
0x078	UNITCONV	UNIT	10	UNITCONV	0xE8A981FA	
0x079	BMF1	ADV1	12	Adventure, pg 1	0xE441BEE7	
0x07A	BMF2			Adventure, pg 2	0xCBED8E13	
0x07B	BMF3			Adventure, pg 3	0xED8C5C95	
0x07C	BMF4			Adventure, pg 4	0x4D7257DF	

0x07D	BMF5	ADV2	13	Adventure, pg 5	0x7C1B6D51
0x07E	BMF6			Adventure, pg 6	0x6EA0A209
0x07F	BMF7			Adventure, pg 7	0xC15E821D
0x080	BMF8			Adventure, pg 8	0xE458FDA4
0x081	CFIT1	CURV	4	CurveFit, pg 1	0x9D0A8240
0x082	CFIT2		4	CurveFit, pg 2	0x541ADB05
0x083	MATRIX1	JMTX	8	JMB-Matrix, pg 1	0xADC5E87B
0x084	MATRIX2		8	JMB Matrix, pg 2	0x885C62C5
0x085	DISASM4D	DASM	15	DisAsm 4D	0xF34E5920
0x086	EXT-IL	EXTI	27	SKWID EXT-IL	0xD2BDDA53
0x087	CCD-OSX	CCDX	5	CCD-OSX	0x189D74C4
0x088	SANDBOXL	SBOX	8	Sandbox, pg 1	0xAC8E208F
0x089	SANDBOXU		13	Sandbox, pg 2	0x50D13F58
0x08A	PANAMEL	PANA	5	Paname, pg 1	0x1835E11B
0x08B	PANAMEU		9	Paname, pg 2	0x94B6C549
0x08C	83TRINH	TRIH	9	83trinh	0x0C499145
0x08D	ADV-APP	AADV	19	Advantage Applications	0x4CD371AC
0x08E	AFDC1L	AFDE	16	AFDC1, pg 1	0xE8F9A42E
0x08F	AFDC1U		17	AFDC1, pg 2	0x84C6B256
0x090	AFDC2L	AFDF	18	AFDC2, pg 1	0xD8530171
0x091	AFDC2U		19	AFDC2, pg 2	0x69A18873
0x092	AMC-OSX	AOSX	5	AMC-OSX	0xCD0E8B09
0x093	ASSEMB4	ASM4	21	Assembler 4	0x7DD19E36
0x094	ASTROLOGY	ALGY	31	ASTRO-ROM	0xCA478918
0x095	AV1	AV1Q	31	AV1	0xC2AD790B
0x096	BCMW	BCMW	8	BCMW	0x5BDE4368
0x097	CVPAK1	CVPK	21	CVPAK, pg 1	0xE2B0EC58
0x098	CVPAK2		31	CVPAK, pg 2	0x6467CCA7
0x099	DYERKA	DYRK	31	Dyerka	0xE58D1EBC
0x09A	FORTH4	FRTH	N/A	HP-41 FORTH, pg 1	0xC9EC9EC9
0x09B	FORTH5			HP-41 FORTH, pg 2	0x95445553
0x09C	HYDRACMP	HCMP	21	Hydracomp	0x3FF4FA5C
0x09D	ICODE	ICOD	19	Icode	0x2E9ECE57
0x09E	LAITRAM	LAIT	N/A	Laitram-XQ2	0x3DC83258
0x09F	MCTEST	MTST	3	Mctest	0x19AF1854
0x0A0	MDP1L	MDP1	15	MDP1, pg 1	0x8C813FE0
0x0A1	MDP1U		16	MDP1, pg 2	0x73C7B514
0x0A2	MDP2L	MDP2	17	MDP2, pg 1	0x64BBB478
0x0A3	MDP2U		18	MDP2, pg 2	0xEBABFF38
0x0A4	MUECKEL	MUEC	21	Muecke, pg 1	0xA9DC169B
0x0A5	MUECKEU		31	Muecke, pg 2	0x7B158017
0x0A6	NAVPAC2L	NPAC	14	Navpac, pg 1	0xEE05C28B
0x0A7	BW1A		15	Navpac, pg 2	0xFD2DFEA5
0x0A8	OILWELL	OILW	21	Oilwell, pg 1	0x8502C885
0x0A9	OILWELLU		31	Oilwell, pg 2	0x88D42414

0x0AA	PARIO	PARI	14	Pario	0x3E2F63E6	
0x0AB	PSOF	PSOF	16	PSOF	0xF7E1D7B0	
0x0AC	PPC-MELB	PMLB	12	PPC-Melbourne	0x8A7ECB80	
0x0AD	PRIDE1	PRIQ	21	Pride, pg 1	0x45250A0E	
0x0AE	PRIDE2		31	Pride, pg 2	0xD4942AED	
0x0AF	ROAM-0A	ROAM	5	ROAM	0x04D3BC5B	
0x0B0	ROMSV01	ROMS	9	Romsv01	0x95D8881F	
0x0B1	SEAKING	SEAK	21	SeaKing	0x0F256BCD	
0x0B2	SPEED2L	SMCH	21	Speed Machine II, pg 1	0xEBCA6C99	
0x0B3	SPEED2U		31	Speed Machine II, pg 2	0x3DB3FFFF	
0x0B4	TOMSROM	TOMS	6	Tomsrom	0xC894F0F9	
0x0B5	ZENROM	ZENR	5	Zenrom	0x02FB484B	
0x0B6	ZEPROM	ZEPM	9	Zeprom	0x79543B69	
0x0B7	EVAL_1F	FRML	30	Formula Evaluation	0xD21167E6	
0x0B8	EVAL_APP		31	Formula Evaluation Applications	0x370A508B	
0x0B9	HEPRAM	HEPR	N/A	HEPAX RAM Template	0x2273144F	
0x0BA	NYCS1	NYSB	30	New York City Subway Map, pg 1	0xD0A424B7	02/16/18
0x0BB	NYCS2			New York City Subway Map, pg 2	0xDFA5547F	02/16/18
0x0BC	SPECTRAL	SPEC	8	Spectral Analysis	0x1DD2785C	
0x0BD	KNIGHTTR	KNGT	31	JMB Knight's Tour	0x9B3FE97D	
0x0BE	MARKS3A	DBUG	3	(RAM only) HP-41 MCODE Debugger	0x8C67EE11	
0x0BF	MLABELS	MLBL	N/A	Mainframe Labels	0x9E04665E	
0x0C0	BESSEL1	BESL	2	Bessel Functions, pg 1	0x939B2BF8	
0x0C1	BESSEL2		3	Bessel Functions, pg 2	0xF294ABEF	
0x0C2	POLYN1	POLY	6	Polynomial Functions, pg 1	0x9154C56E	
0x0C3	POLYN2		9	Polynomial Functions, pg 2	0xA8E8AFAA	
0x0C4	ILBUFFER	ILBF	22	IL Buffer	0xE7A8790F	
0x0C5	NOVCHAP	NCHP	31	NOV CHAP	0xDC06E071	
0x0C6	MPATHS	METX	30	MetroX	0xA7AB8536	02/16/18
0x0C7	MMADRID	5MAD	N/A	Madrid, Spain Metro Map (for METX)	0x6B844ECB	02/16/18
0x0C8	DIFFGEOM	GEOD	31	Differential Geometry	0xF1B9A63D	
0x0C9	ISENE	ISEN	17	ISENE	0x064C1258	02/16/18
0x0CA	BSMS	BSMS	18	Bus. Sales/Marketing/Stats Solution Book	0xD07852CA	
0x0CB	CNTLSYS	CNTL	14	Control Systems Solution Book	0x219299E9	
0x0CC	ELECENG	EENG	15	Electrical Engineering Solution Book	0x8FD0F0A8	
0x0CD	LENDLS	LNDL	19	Lend/Lease Savings Solution Book	0x7A014988	
0x0CE	TESTSTAT	TEST	13	Test Statistics Solution Book	0xA82CB38F	
0x0CF	MECHENG	MENG	16	Mechanical Engineering Solution Book	0xDA5B87B3	
0x0D0	XROM	ROMX	31	XROM	0xDAAD35AD	
0x0D1	ANTENNAS	ANTS	16	Antennas Solution Book	0x60867B7C	
0x0D2	OPTOMTR	OPTO	16	Optometry Solution Book	0x7BB923E5	
0x0D3	PHYSICS	PHYH	15	Physics Solution Book	0x283DF261	
0x0D4	GEOMETRY	GEOM	14	Geometry Solution Book	0x2D53B753	
0x0D5	HL_MATH	HMAT	12	High-Level Math Solution Book	0xFBF8945B	
0x0D6	INTSOLN	ISOL	11	Interchangeable Solutions UPLE Program	0xBE1FDEAC	

0x0D7	TIMERSLN	TIME	6	Timer Solution Book	0x902B26A1	
0x0D8	GRAFIKS1	GRF1	9	Grafiks, pg 1	0x7D34373D	
0x0D9	GRAFIKS2			Grafiks, pg 2	0xEE12B8E5	
0x0DA	GRAFIKS3	GRF3	10	Grafiks, pg 3	0x45F45FF1	
0x0DB	GRAFIKS4			Grafiks, pg 4	0x3F515E7B	
0x0DC	CAB41L	CAB4	21	Schenk CAB 41, pg 1	0x1AF4A9EA	
0x0DD	CAB41U		31	Schenk CAB 41, pg 2	0x688AC431	
0x0DE	FLDB	FLDB	N/A	41CL Flash YCRC Database	0x06212018	06/21/18
0x0DF	IMDB	IMDB	N/A	41CL Image Database	0xA71D2496	06/10/18
0x0E0	GASPRP1	GASL	1	GASPROP, pg 1	0x0DA56A8A	
0x0E1	GASPRP2		2	GASPROP, pg 2	0x231A1D20	
0x0E2	GPROPP3		3	GASPROP, pg 3	0x6A32AD99	
0x0E3	GPROPP4		4	GASPROP, pg 4	0xBA1C1417	
0x0E4	GPROPP5	GASU	5	GASPROP, pg 5	0xA9BC8A12	
0x0E5	GASPRP6		6	GASPROP, pg 6	0xDB0B714F	
0x0E6	GPROPP7		8	GASPROP, pg 7	0x7DCF8B26	
0x0E7	GPSERVIC		7	GASPROP, pg 8	0x59960EE8	
0x0E8	AEC3L	AEC3	18	AECROM III pg 1	0x1B79FD88	
0x0E9	AEC3U		18	AECROM III, pg 2	0x5249CCAD	
0x0EA	BLDROM	BLDR	17	BLD	0xD7EAF53A	
0x0EB	FACCL	FACC	10	300889 FACC, pg 1	0xFBB19D07	
0x0EC	FACCU		11	300889 FACC, pg 2	0x9B205EEC	
0x0ED	BGUG_IDC	IDC1	21	BGUG	0xF0E36AD4	
0x0EE	ML-IDC_L	IDC2	21	ML-IDC, pg 1	0xACBEEA79	
0x0EF	ML-IDC_U		22	ML_IDC, pg 2	0x35F9AC9D	
0x0F0	KC135_1L	K135	21	KC135 Weight & Balance, pg 1	0xC69D63BD	
0x0F1	KC135_1U		31	KC135 Weight & Balance, pg 2	0xE6E1F56A	
0x0F2	KC135_2		16	KC135 Weight & Balance, pg 3	0xC19C79A9	
0x0F3	MLONDON	5LON	N/A	London, England Tube Map (for METX)	0x3F822FDA	02/16/18
0x0F4	PROFIL	PRFS	27	Profiset, pg 1	0x0F3423F1	
0x0F5	PROFIU		31	Profiset, pg 2	0x1D013B09	
0x0F6	SMATH2L	SND2	2	Sandmath II, pg 1	0xB35356D4	
0x0F7	SMATH2U		3	Sandmath II, pg 2	0xDB82EFF5	
0x0F8	MAHJONG1	MAHJ	10	Mahjong, pg 1	0xE176B636	
0x0F9	MAHJONG2			Mahjong, pg 2	0x2C60830F	
0x0FA	IERF1	IERR	1	IERF, pg 1	0x54E81895	
0x0FB	IERF2			IERF, pg 2	0xD3941CC8	
0x0FC	ACTION1	AGAM	13	Action Games, pg 1	0x436ACA57	
0x0FD	ACTION2			Action Games, pg 2	0x3EDC15A8	
0x0FE	L119L	L119	21	AFDC-L119, pg 1	0xE19AFE10	
0x0FF	L119U		31	AFDC-L119, pg 2	0x7BD2A484	
0x100	ADVMTRX1	MTRA	22	Advanced Matrix, pg 1, bnk 1	0x68B79323	
0x101	ADVMTRX1		24	Advanced Matrix, pg 1, bnk 2	0x68B79323	
0x102	CCDADV	CCDA	10	CCD Advanced	0x706C0B22	
0x103	GEOMETRY	GMTY	16	Geometry 11	0x1C7F4143	

0x104	ADVMTRX2	<b>MTRA</b>	<b>22</b>	Advanced Matrix, pg 2, bnk 1	0xF36D67ED	
0x105	ADVMTRX3		<b>24</b>	Advanced Matrix, pg 2, bnk 2	0x379659C1	
0x106	NUMTHRY	<b>NTHY</b>	<b>16</b>	Number Theory	0x1A82B478	
0x107	DIGITPAC	<b>DIGT</b>	<b>24</b>	DigitPAC	0xE8AD50A6	
0x108	ILDEV2L	<b>DEV2</b>	<b>22</b>	IL Development II, pg 1	0x1F8D9268	
0x109	ILDEV2U		<b>24</b>	IL Development II, pg 2	0x3A0ACD5E	
0x10A	MONOPLY1	<b>MONO</b>	<b>16</b>	MONOPOLY, pg 1	0x5F4A9C7D	
0x10B	MONOPLY2			MONOPOLY, pg 2	0xB3FBC23A	
0x10C	RAMBOX32	<b>RM32</b>	<b>31</b>	RAMBox32	0xB87F92B8	
0x10D	RAMPAGE	<b>RMPG</b>	<b>15</b>	RAMpage	0x74520970	
0x10E	SUDOKU	<b>SUD1</b>	<b>16</b>	SUDOKU	0x2D95C87A	
0x10F	VECTORS	<b>VECT</b>	<b>14</b>	Vector Analysis	0x92859384	
0x110	HDISASM	<b>HDIS</b>	<b>9</b>	HEPAX Disassembler	0x76DAFD70	
0x111	YACHTL	<b>YACH</b>	<b>21</b>	Bobby Schenk's Yacht, pg 1	0x09C527D7	
0x112	YACHTU		<b>31</b>	Bobby Schenk's Yacht, pg 2	0xF317427F	
0x113	EXILPS	<b>EILP</b>	<b>27</b>	Extended IL Plus	0xF8017E3A	
0x114	CLUTLSB1	<b>PWRL</b>	<b>12</b>	Power-CL Utilities, bnk 1	0x735C97B9	03/22/18
0x115	CLUTLSB2			Power-CL Utilities, bnk 2	0x74EB21F2	
0x116	CLUTLSB3			Power-CL Utilities, bnk 3	0x0791F2E5	
0x117	CLUTLSB4			Power-CL Utilities, bnk 4	0x61BC9BC5	
0x118	DIFEQ1	<b>DIFF</b>	<b>15</b>	Differential Equations, pg 1	0xFA5F8A3C	
0x119	DIFEQ2			Differential Equations, pg 2	0xA0E2C68B	
0x11A	INTEG1	<b>INTG</b>	<b>16</b>	Integrator, pg 1	0x317B7E69	
0x11B	INTEG2			Integrator, pg 2	0x53AEDC2E	
0x11C	SIROM	<b>SIHP</b>	<b>24</b>	Solve & Integrate	0x14F0CD12	
0x11D	PRTSRVC	<b>PSRV</b>	<b>N/A</b>	Printer Service	0x3C5DEAF9	
0x11E	441ZL	<b>441Z</b>	<b>1</b>	Library-4 HP41Z, pg 1	0x8243464F	
0x11F	441ZU		<b>4</b>	Library-4 HP41Z, pg 2	0x326EE777	
0x120	LIBRARY4	<b>4LIB</b>	<b>N/A</b>	Library-4	0x8AE9EAEC	01/22/18
0x121	RAMPGX4	<b>4RAM</b>	<b>17</b>	Library-4 RAMpage X	0xA181AD52	
0x122	TBOX4_L4	<b>4TBX</b>	<b>13</b>	Library-4 Toolbox	0xCAD0D3B4	01/22/18
0x123	ALPHA44	<b>4ALP</b>	<b>6</b>	Library-4 Alpha	0x09E5FFC1	
0x124	HP67_FUN	<b>H67G</b>	<b>23</b>	HP-67 Games	0x830772EB	
0x125	OUTERPLN	<b>OPLN</b>	<b>21</b>	Outer Planets	0xF5D8BB73	
0x126	RAWGM1	<b>RGME</b>	<b>18</b>	RAW Games, pg 1	0x37C08DB5	
0x127	RAWGM2			RAW Games, pg 2	0x312D0081	
0x128	SYSDEMO1	<b>DEMO</b>	<b>14</b>	HP41 System Demo, pg 1	0xC2EFC4CA	
0x129	SYSDEMO2			HP41 System Demo, pg 2	0xBF8D46D4	
0x12A	SYSDEMO3			HP41 System Demo, pg 3	0x43ADC256	
0x12B	SYSDEMO4			HP41 System Demo, pg 4	0xDDEF81D9	
0x12C	XMASSTG	<b>MASS</b>	<b>16</b>	Extended Mass Storage	0x35C45268	
0x12D	41ZDIAG	<b>4DIG</b>	<b>8</b>	Library-4 41Z Diagnostic	0x75620288	
0x12E	N-BODY	<b>NBOD</b>	<b>6</b>	Gravitational N-Body Problems	0xCD086ECD	05/14/18
0x12F	CHEMENG	<b>CENG</b>	<b>12</b>	Chemical Engineering Solutions	0x215AC3F6	

0x130	SNEAP1	NEA1	21	SNEAP, pg 1	0xBF50A7B3
0x131	SNEAP2		31	SNEAP, pg 2	0x34536449
0x132	SNEAP3	NEA3	11	SNEAP, pg 3	0xC66ADE2A
0x133	SNEAP4		10	SNEAP, pg 4	0x12D67EA5
0x134	SNEAP5	NEA5	13	SNEAP, pg 5	0x49C8C957
0x135	SNEAP6		14	SNEAP, pg 6	0x63C507B3
0x136	KERMI2K	KRMK	26	Kermit 2000	0xA6D201B6
0x137	FLUIDDYN	FDYN	17	Fluid Dynamics Solutions	0xC5A565D3
0x138	SWPGAME1	GSWP	9	Swap Games, pg 1	0x6C6161CB
0x139	SWPGAME2			Swap Games, pg 2	0xDAAF84D7
0x13A	HVAC	HVAC	16	HVAC Solutions	0xC911BCF8
0x13B	SOLARENG	LENG	14	Solar Engineering Solutions	0x49D1CCD1
0x13C	SAMLUNG1	GRMK	10	Games from Sammlung book, pg 1	0x9BB5E471
0x13D	SAMLUNG2			Games from Sammlung book, pg 2	0xF6807B5D
0x13E	FAIRFLDL	FAIR	21	Fairfield, pg 1	0xA76B6C13
0x13F	FAIRFLDU		31	Fairfield, pg 2	0xCE99C45D
0x140	LAPLACE1	LPLC	10	Laplace Transform, pg 1	0xE9CC4D9F
0x141	LAPLACE2			Laplace Transform, pg 2	0x503F3F6B
0x142	RSU_OSL	ROSV	4	RSU OS, pg 1	0xB0CD3BE2
0x143	RSU_OSU		6	RSU OS, pg 2	0x61899B2C
0x144	HEPX4H_1	HEP2	7	HEPAX 4H, bnk 1	0x16ABD09C
0x145	HEPX4H_2			HEPAX 4H, bnk 2	0x761BDC70
0x146	HEPX4H_3			HEPAX 4H, bnk 3	0x983EFF48
0x147	HEPX4H_4			HEPAX 4H, bnk 4	0x216F49EC
0x148	BASIC1	BASI	8	BASIC, pg 1	0x443C6AF4
0x149	BASIC2		11	BASIC, pg 2	0x0CB7ABCC
0x14A	CMT-300L	CMT3	9	CMT-300 Multimeter, pg 1	0x62DCE73E
0x14B	CMT-300U			CMT-300 Multimeter, pg2	0x6205818C
0x14C	XPLORE1	GAMX	12	Explore Games, pg 1	0x128417B9
0x14D	XPLORE2			Explore Games, pg 2	0x52B2C530
0x14E	CMT-200	CMT2	4	CMT-200 Data Acquisition	0xEC2C6C4F
0x14F	MLEPR_1H	EPRH	4	MLEPR -1H	0x22EB5C08
0x150	BUDER2L	BUD2	15	Buderus-2, pg 1	0x5F36C487
0x151	BUDER2U		16	Buderus-2 pg 2	0xD1579CAA
0x152	BUDER3	BUD3	9	Buderus-	0x884D590E
0x153	MWKLN3	MWK3	10	MWK-3	0x8BE45A73
0x154	MWKLN4L	MWK4	21	MWK-4, pg 1	0x8D2CDC5A
0x155	MWKLN4U		31	MWK-4, pg 2	0xF9D8CCE2
0x156	OVTROP2L	OTRP	5	Oventrop Ventil, pg 1	0x2FDA2E51
0x157	OVTROP2U		6	Oventrop Ventil, pg 2	0xA47B13E6
0x158	NEXT_2C	NEXT	6	NEXT	0x9787FBD4
0x159	MOUNT1C	MCMP	15	Mountain Computer 1C	0x8D1D4459

0x15A	CMT_1	<b>CMT1</b>	<b>31</b>	CMT-100 Eprom Test, pg 1	0x40C2CF42	
0x15B	CMT_2			CMT-100 Eprom Test, pg 2	0xA1C2F451	
0x15C	CMT_3			CMT-100 Eprom Test, pg 3	0x42B276C5	
0x15D	CMT_4			CMT-100 Eprom Test, pg 4	0x67C06D58	
0x15E	ICEBOX1H	<b>IBOX</b>	<b>4</b>	ICEbox -1H	0x8A1BD27C	
0x15F	MMEPROM	<b>EPRM</b>	<b>16</b>	MMEPROM	0xA9D63976	
0x160	C141BL	<b>141B</b>	<b>22</b>	C141B FSC, pg 1	0xDE1B6C26	
0x161	C141BU		<b>31</b>	C141B FSC, pg 2	0xB2D15B96	
0x162	ADVTGMTH	<b>ADVG</b>	<b>12</b>	Advantage Math	0xE3932EA8	
0x163	NONLINR	<b>NONL</b>	<b>16</b>	Non-linear Systems Module	0xE0F07F5E	
0x164	4WINS	<b>4WIN</b>	<b>16</b>	Connect Four Game	0x17CB9809	
0x165	AP550-2	<b>TGT2</b>	<b>10</b>	AP550 A2 Targeting	0x28A0B775	
0x166	ELIPAPPS	<b>ELIX</b>	<b>16</b>	Elliptic Applications	0xFA913ABE	04/02/18
0x167	YFNF-2A	<b>YFNF</b>	<b>16</b>	41CL Memory Functions -2A	0x44AB64B1	
0x168	OSXB1	<b>OSX3</b>	<b>5</b>	Lib-4 OS/X Bank-Switched, bnk 1	0x843F3EBC	04/24/18
0x169	OSXB2			Lib-4 OS/X Bank-Switched, bnk 2	0xC839B7B1	04/24/18
0x16A	OSXB3			Lib-4 OS/X Bank-Switched, bnk 3	0xE9DA0D56	01/22/18
0x16B	OSXB4			Lib-4 OS/X Bank-Switched, bnk 4	0x4A1700BA	01/22/18
0x16C	WWRAMBOX	<b>WRAM</b>	<b>31</b>	W&W Rambox64	0xDF80DEF1	
0x16D	OBCSYS	<b>OBCZ</b>	<b>31</b>	OBCSYS	0x125CDF67	
0x16E	AECPROG	<b>PROG</b>	<b>18</b>	Program Generator	0x1C33B87A	
0x16F	AECSLVR	<b>GSLV</b>	<b>18</b>	Geometric Solver	0x8BDB0A81	
0x170	BBS1	<b>BBSC</b>	<b>11</b>	BBS, pg 1	0x506EB229	
0x171	BBS2		<b>12</b>	BBS, pg 2	0xCB4ED3ED	
0x172	BBS3		<b>13</b>	BBS, pg 3	0x7D295934	
0x173	BBS4		<b>14</b>	BBS, pg 4	0xA441583F	
0x174	DST12_1L	<b>DST1</b>	<b>8</b>	CalTrans Survey, pg 1	0x2668BCF2	
0x175	DST12_1U		<b>9</b>	CalTrans Survey, pg 2	0xFF209E30	
0x176	DST12_2L		<b>10</b>	CalTrans Survey, pg 3	0xAA809FAD	
0x177	U-BAHN	<b>5UBH</b>	<b>N/A</b>	Berlin, Germany U-Bahn Map (for METX)	0xD490695A	02/16/18
0x178	MATPOL11	<b>4MTI</b>	<b>22</b>	Lib-4 Matrix/Polynomial, pg 1, bnk 1	0xCEBB6B52	06/21/18
0x179	MATPOL12			Lib-4 Matrix/Polynomial, pg 1, bnk 2	0x39E901AC	06/21/18
0x17A	ETSII4A	<b>ETS4</b>	<b>8</b>	ETSII4A, pg 1	0x83C7C2B8	04/24/18
0x17B	ETSII4B		<b>14</b>	ETSII4B, pg 2	0x6829371E	04/24/18
0x17C	MATPOL21	<b>4MTI</b>	<b>24</b>	Lib-4 Matrix/Polynomial, pg 2, bnk 1	0xA3EDE6C1	06/21/18
0x17D	MATPOL22			Lib-4 Matrix/Polynomial, pg 2, bnk 2	0x9780F36F	06/21/18
0x17E	ETSII5A	<b>ETS5</b>	<b>10</b>	ETSII5A, pg 1	0xEB2004FB	
0x17F	ETSII5B		<b>20</b>	ETSII5B, pg2	0xDE23ECED	
0x180	PWREXT1	<b>PWRX</b>	<b>12</b>	PowerCL Extreme, bnk 1	0xE33E26CE	04/24/18
0x181	PWREXT2			PowerCL Extreme, bnk 2	0x808A9321	04/24/18
0x182	PWREXT3			PowerCL Extreme, bnk 3	0x397B4044	02/16/18
0x183	PWREXT4			PowerCL Extreme, bnk 4	0xC7CF31A2	05/14/18
0x184	VERMPACK	<b>VERM</b>	<b>27</b>	Vermpack 1A	0x3986AA52	
0x185	TVM_1E	<b>TVMY</b>	<b>22</b>	TVM 1E	0x95BBC5C6	
0x186	NUTIP-1A	<b>ITCP</b>	<b>4</b>	NutIP TCP/IP 1A	0x993752D4	

0x187	CARDR-1G	RCRD	30	HP-41 Card Reader	0xC1604FD1	
0x188	FORCAST1	FCST	10	Forecast	0x8FCB260B	
0x189	FORCAST2	FCS2	10	Forecast 2	0xE359A8D9	
0x18A	SUNSHT-1	COOQ	31	Sunshot, pg 1	0xDEE4DF51	01/22/18
0x18B	SUNSHT-2			Sunshot, pg 2	0x9A21CB00	01/22/18
0x18C	SSHEET	SHTZ	8	Spreadsheet	0x67DF34B4	
0x18D	INDOOR	INDO	10	Philips Indoor Lighting	0xAA5AA5CF	
0x18E	ETSII3A	ETS3	12	ETSII3A, pg 1	0x74CD8122	
0x18F	ETSII3B			ETSII3B, pg 2	0x2E2A950E	
0x190	FCALAS1	FSSY	14	FOCAL Assmby/Disassembly, pg 1	0xF315D6A5	
0x191	FCALAS2			FOCAL Assembly/Disassembly, pg 2	0xE52E0D4C	
0x192	FOR_FEE	FFEE	14	For Fee	0x5068EACF	
0x193	ETSII6A	ETS9	16	ETSII6A	0xFB2C3FED	
0x194	CVLENG	CIVI	16	HP Civil Engineering Solutions	0xA1D22783	
0x195	CIVU1	CIVU	20	Civil Engineering Special Collection, pg 1	0xD82A040B	
0x196	CIVU2			Civil Engineering Special Collection, pg 2	0x75F238A0	
0x197	CRTVONK	VONK	16	Math Programs Collection	0x19A26E5D	
0x198	CLXPREGS	XPMM	20	CL Expanded Memory Functions	0x29D7442D	
0x199	CCDAPPS	UCCD	18	CCD Manual examples	0x28C2D578	
0x19A	ANGEL-1	ANGZ	3	Angel ZEPROM, pg 1	0x0144EE52	
0x19B	ANGEL-2		12	Angel ZEPROM, pg 2	0xB4685AC1	
0x19C	TMAX3A	TMAX	6	Turbo-MAX 3A	0x2A476430	
0x19D	BJ1B	BLJK	7	Blackjack -1B	0x98AB118B	
0x19E	MAX2E	BJMX	6	Blackjack MAX -2E	0x8BB1375E	
0x19F	VEGAS1C	VEGS	6	Vegas -1C	0x94DB7444	
0x1A0	SMAT41	SM44	3	Lib-4 Sandmath 4x4, pg 1, bnk 1	0xC9DFB030	01/22/18
0x1A1	SMAT42			Lib-4 Sandmath 4x4, pg 1, bnk 2	0xBDA55041	01/22/18
0x1A2	SMAT43			Lib-4 Sandmath 4x4, pg 1, bnk 3	0xB71A1C78	
0x1A3	SMAT44			Lib-4 Sandmath 4x4, pg 1, bnk 4	0xA27449EE	01/23/18
0x1A4	HLMAT41		2	Lib-4 Sandmath 4x4, pg 2, bnk 1	0xC8CBEB21	
0x1A5	HLMAT42			Lib-4 Sandmath 4x4, pg 2, bnk 2	0x555C8744	
0x1A6	HLMAT43			Lib-4 Sandmath 4x4, pg 2, bnk 3	0x681EFCA7	
0x1A7	HLMAT44			Lib-4 Sandmath 4x4, pg 2, bnk 4	0xA2EAA593	
0x1A8	PPCAPPS1	PPCU	17	PPC User Applications, pg 1	0x2CC66A39	
0x1A9	PPCAPPS2		18	PPC User Applications, pg 2	0x772F977E	
0x1AA	WWDAPPS	WWDB	17	Wickes, Wlodek, Dearing books	0xEB6A4C4F	
0x1AB	JARRETXF	JARR	17	K. Jarrett XF book	0xDB96270E	
0x1AC	JARRETSP		18	K. Jarrett SP book	0x5D2B141D	
0x1AD	RAWFL_1	GRAW	18	Gene's RAW files, pg 1	0x75391A76	
0x1AE	RAWFL_2			Gene's RAW files, pg 2	0xF1BF6CE8	
0x1AF	MCCRNAK	MCKK	16	Alan McCornack book	0x5B47D616	
0x1B0	GERMAN1	KRGM	17	Kruse/Gosmann books, pg 1	0x0A1DE4B8	
0x1B1	GERMAN2		18	Kruse/ Gosmann books, pg 2	0xB6FD2E2C	03/22/18
0x1B2	PK_ALPH	PKP1	31	Poul Kaarup's Alpha and Pointers	0xFDE520DC	

0x1B3	PK_MATH	PKP2	14	Poul Kaarup's Math and Physics, pg 1	0xC5A58BDE	
0x1B4	PK_PHYS		15	Poul Kaarup's Math and Physics, pg 2	0x64F9C986	
0x1B5	PK_FLAG	PKP3	3	Poul Kaarup's Flags and Stack	0x4E280C57	
0x1B6	PK_PROG	PKP4	5	Poul Kaarup's Program Utilities	0x744ED659	
0x1B7	PK_TIME	PKP5	18	Poul Kaarup's Timer and Utilities	0xB74C2C71	
0x1B8	WARPB1	WARP	21	Warp-core, bnk 1	0xFE4E4F39	02/16/18
0x1B9	WARPB2			Warp-core, bnk 2	0x892C9973	02/16/18
0x1BA	SWAP21	2SWP	10	Misc routines from 412 Swap Disks, pg 1	0x05843F5B	
0x1BB	SWAP22			Misc routines from 412 Swap Disks, pg 2	0xC35B0763	
0x1BC	HP-16C_1	16CS	16	HP-16C Emulator -1A, bnk 1	0x6C203845	01/23/18
0x1BD	HP-16C_2			HP-16C Emulator -1A, bnk 2	0x010BCC9F	01/22/18
0x1BE	HP-16C_3			HP-16C Emulator -1A, bnk 3	0xE576C6D8	
0x1BF	HP-16C_4			HP-16C Emulator -1A, bnk 4	0x8B083CDF	01/23/18
0x1C0	HC_1	HCPL	10	Hyper-Complex Math, pg 1	0xA849C145	
0x1C1	HC_2		20	Hyper-Complex Math, pg 2	0xB4C25E1C	
0x1C2	HC_3		21	Hyper-Complex Math, pg 3	0x0572EB82	
0x1C3	MPARIS	5PAR	N/A	Paris, France Metro Map (for METX)	0x36F0A484	02/16/18
0x1C4	PSYCHRO	STEQ	12	Steam Properties	0x5C74CFF9	
0x1C5	POKER	PPOK	10	Poker	0xE0A23C1B	
0x1C6	GRAVTIM1	GRVI	16	Gravity & Time, pg 1	0x286F1976	
0x1C7	GRAVTIM2			Gravity & Time, pg 2	0xAF5B06D2	
0x1C8	TS4031	TDSM	4	TDS Surveying, pg 1	0xBF22F456	
0x1C9	TS4032		10	TDS Surveying, pg 2	0x9E8588CF	
0x1CA	TS4033		31	TDS Surveying, pg 3	0x6A1C50CF	
0x1CB	TS4034		30	TDS Surveying, pg 4	0x5F4775CF	
0x1CC	TI2023	TDSI	5	TDS Instrument, pg 1	0xBD37F6EA	
0x1CD	TI2024		12	TDS Instrument, pg 2	0x98D9A27A	
0x1CE	TP2243	TDSP	8	TDS Plotter, pg 1	0x9801DAC7	
0x1CF	TP2244		9	TDS Plotter, pg 2	0xF944C90F	
0x1D0	TIDES	TIDW	10	Tides	0xB2C7D535	
0x1D1	PORTSL	PRTW	11	US Ports, pg 1	0x737C5C10	
0x1D2	PORTSU			US Ports, pg 2	0x26852531	
0x1D3	HPCALEND	CLND	12	HP Calendar Solutions	0x933814CA	
0x1D4	RUBIKS	RUBK	8	Rubik's Cube	0x264D420D	
0x1D5	TINKER1	TAFB	21	Tinker AFB, pg 1	0xD06E207D	
0x1D6	TINKER2		31	Tinker AFB, pg 2	0xE43B37DC	
0x1D7	JMB_CAL	JMBC	17	JMB Calendar	0x3B68614D	
0x1D8	USERCAL	UCLN	18	User Calendar	0xE0DAB2CA	
0x1D9	FILTERS1	EEFD	17	EE Filter Design, pg 1	0x1E8384EC	
0x1DA	FILTERS2		18	EE Filter Design, pg 2	0xCAD49825	
0x1DB	CRYPTO41	CRTO	10	Cryptography	0x28BC8649	
0x1DC	XFRAME	XBFR	30	Direct Stiffness Method, pg 1	0x02AE22A3	
0x1DD	XBEAMS			Direct Stiffness Method, pg 2	0xF95A4251	
0x1DE	TRUSS	XTRS	30	Direct Stiffness Method: Trusses, pg 1	0x88058D2D	
0x1DF	XTRUSS			Direct Stiffness Method: Trusses, pg 2	0xFB3DAAD6	

0x1E0	SWAPMTH	3SWP	12	Swapdisk Math, pg 1	0xF8896B0C	
0x1E1	SWAPPOL		13	Swapdisk Math, pg 2	0xF3907193	
0x1E2	XMSTAT	XTAT	6	XM Statistics Module	0x315C68DD	
0x1E3	TRANSNEP	EPTN	23	Trans-Neptunian Planets, 2016-2025	0xB79E2C7E	
0x1E4	COUNTRY	CITY	18	Country/Capital	0x5DF3F873	
0x1E5	SERIES	SERI	18	Sums & Series	0x7D90435F	
0x1E6	PLANETS	PLAN	9	Planets	0x17FFE68E	
0x1E7	PLUTOIDS	PLTO	10	Plutoids	0xBC96B6FA	
0x1E8	SPANISH	WORD	31	English/Spanish Dictionary, pg 1	0x14567DB7	
0x1E9	ENGLISH			English/Spanish Dictionary, pg 2	0xBBFC04E6	
0x1EA	GJM_2B_1	GJMR	31	Greg J McClure's, pg 1	0x15DE7F71	
0x1EB	GJM_2B_2			Greg J McClure's, pg 2	0xC6FFD975	
0x1EC	ELLIPTIC	EPTC	17	Elliptic	0x7394911B	03/11/18
0x1ED	PERIOD1	HTAB	13	(HEPAX RAM only) Periodic Table, pg 1	0xCCA0B09D	
0x1EE	PERIOD2		14	(HEPAX RAM only) Periodic Table, pg 2	0x23A57B1A	
0x1EF	PERIOD3		16	(HEPAX RAM only) Periodic Table, pg 3	0x395E9D7C	
0x1F0	4IZL1	Z4DL	1	4IZ Deluxe, pg 1, bnk 1	0xE2E2DB94	01/22/18
0x1F1	4IZL2			4IZ Deluxe, pg 1, bnk 2	0x3C665B1C	01/22/18
0x1F2	ITGDIFF	FRID	18	Fractional Integro-Differentiation	0x60FB8998	
0x1F3	RECURSE	RCSN	9	Recursion	0xE3D80EBC	
0x1F4	4IZU1	Z4DL	4	4IZ Deluxe, pg 2, bnk 1	0x880A4647	01/22/18
0x1F5	4IZU2			4IZ Deluxe, pg 2, bnk 2	0x591737EA	01/22/18
0x1F6	GAMESB1	GSB2	16	HP-41 Games Solution Book 1/2, pg 1	0x843AD40C	
0x1F7	GAMESB2			HP-41 Games Solution Book 1/2, pg 2	0x53A51C5C	
0x1F8	E-6A_1	E-6A	21	E-6A W&B, pg 1	0x30B8DDA3	
0x1F9	E-6A_2		31	E-6A W&B, pg 2	0xCAEE69CA	
0x1FA	E-6A_3		10	E-6A W&B, pg 3	0xD09ED147	
0x1FB	E-6A_4		9	E-6A W&B, pg 4	0xB3066F07	
0x1FC	AP550-3L	TGT3	21	AP550 A3 Targeting, pg 1	0x30BD2647	
0x1FD	AP550-3U		31	AP550 A3 Targeting, pg 2	0x6079942F	
0x1FE	ALL_FF			empty	0x53D36BD2	
0x1FF	ALL_FF			empty	0x53D36BD2	
0x200	ALL_FF			empty	0x53D36BD2	
0x201	ALL_FF			empty	0x53D36BD2	
0x202	ALL_FF			empty	0x53D36BD2	
0x203	ALL_FF			empty	0x53D36BD2	
0x204	ALL_FF			empty	0x53D36BD2	
0x205	ALL_FF			empty	0x53D36BD2	
0x206	ALL_FF			empty	0x53D36BD2	
0x207	ALL_FF			empty	0x53D36BD2	
0x208	LADYBUG1	LADY	16	Ladybug, pg 1	0x1C519857	
0x209	LADYBUG2			Ladybug, pg 2	0xD3A90581	
0x20A	OS4	LDY4	N/A	Ladybug Page 4	0x96BEF43C	
0x20B	GEIR	ISEM	23	Geir	0x9F8ABDA3	04/24/18

0x20C	IMSSYS4L	IMS4	31	IMS System-4, pg 1	0x6B2D0D27	
0x20D	IMSSYS4U		21	IMS System-4, pg 2	0x784349D2	
0x20E	WPNEFF_L	WPNE	21	Weapon Effects, pg 1	0xE4C89BC9	
0x20F	WPNEFF_U		31	Weapon Effects, pg 2	0xAA5B6B68	
0x210	ASTRO10A	LAST	23	Astro-10000, pg 1	0x2E48A231	03/22/18
0x211	ASTRO10B		24	Astro-10000, pg 2	0x730E6B4A	03/22/18
0x212	DERIVEZ1	ZDRV	21	Z-Derive, pg 1	0x4DCBD05A	
0x213	DERIVEZ2		22	Z-Derive, pg 2	0x866E53AB	
0x214	PARDIFEQ	BPDE	19	Partial Differential Equations	0xFE4B118D	
0x215	ELLIPSOI	BELP	21	Ellipsoids	0xD86B4618	
0x216	INTGDIF1	BIDQ	21	Integration/Differentiation, pg 1	0x49EE6656	
0x217	INTGDIF2		22	Integration/Differentiation, pg 2	0xF4C37E75	
0x218	DRVITG1	BDRV	31	Derivatives and Integrals, pg 1	0xAF6F90E4	05/14/18
0x219	DRVITG2			Derivatives and Integrals, pg 2	0xBA433F26	
0x21A	PRECNUT	BPRN	9	Precession & Nutation	0x37DF4FB8	02/16/18
0x21B	ALL_FF			empty	0x53D36BD2	
0x21C	EPH2018A	P18E	23	Planetary Ephemerides 2018, pg 1	0xAA054808	
0x21D	EPH2018B		24	Planetary Ephemerides 2018, pg 2	0xAA4816ED	
0x21E	DERIVE1	DRV4	31	DERIVE41, pg 1	0x82B3A55F	05/14/18
0x21F	DERIVE2			DERIVE41, pg 2	0x4D07F1E4	05/14/18
0x220	RHODESII	RDII	31	RhodeSystem II	0xA9C03C67	
0x221	MORTAR	MRTR	31	MORTAR	0xCBFBFA57	
0x222	RESERV_1	VOI1	9	Reservoir Engineering 1	0x28E6CA2F	02/16/18
0x223	RESERV_2			Reservoir Engineering 2	0x9F444F1B	02/16/18
0x224	RESERV_3	VOI3	10	Reservoir Engineering 3	0xD645BC8E	02/16/18
0x225	RESERV_4			Reservoir Engineering 4	0xFE783137	02/16/18
0x226	RESERV_5	VOI5	11	Reservoir Engineering 5	0x2DF9DBDC	02/16/18
0x227	RESERV_6			Reservoir Engineering 6	0x9F314E40	02/16/18
0x228	BVS-1	BVLU	3	Business Valuation	0x00CA7A88	01/22/18
0x229	CMA-1	CMGT	6	Capital Management	0xE0152D43	01/22/18
0x22A	FCAST1-1	FCS1	10	Forecaster-1	0x8FCB260B	01/22/18
0x22B	FCAST3-1	FCS3	10	Forecaster-3	0x0B200938	01/22/18
0x22C	HPP-1	HPPA	8	Hypothetical Probate Plus, pg 1	0x7A54301D	01/22/18
0x22D	HPP-2		12	Hypothetical Probate Plus, pg 2	0xD0F71013	01/22/18
0x22E	RACETR-1	RCTR	21	Racetrack	0x843AE9F7	01/22/18
0x22F	DSTAT	DSTY	10	Data & Statistics	0xA959E01D	02/16/18
0x230	MBK-EP-1	MBKF	3	MBK-EPROM, pg 1	0x4826340F	01/22/18
0x231	MBK-EP-2		13	MBK-EPROM, pg 2	0xA2D159B1	01/22/18
0x232	MBK-EP-3		14	MBK-EPROM, pg 3	0x9FA6E938	01/22/18
0x233	ALL_00			blank, loaded as MBK-EPROM, pg 4	0xD666D0E4	01/22/18
0x234	LOUDSPKR	LDSP	10	Loudspeaker Design	0xBFB8FA07	03/22/18
0x235	HOROSCOP	HORO	16	Horoscope	0xD6704434	04/02/18
0x236	UPLMTH1	UPLM	13	User's Program Library - Math, page 1	0x6764715F	04/24/18
0x237	UPLMTH2			User's Program Library - Math, page 2	0x05F79BD3	04/24/18

0x238	BUDER1-1	BUD1	10	Buderus 1, pg 1	0xA9FE9A7C	01/22/18
0x239	BUDER1-2		21	Buderus 1, pg 2	0x208F6360	01/22/18
0x23A	DRP16K-1	DRPS		Drilling Rig Platform, pg 1	0x6F499FA7	01/22/18
0x23B	DRP16K-2			Drilling Rig Platform, pg 2	0x07CB574F	01/22/18
0x23C	DRP16K-3			Drilling Rig Platform, pg 3	0x168F261A	01/22/18
0x23D	DRP16K-4			Drilling Rig Platform, pg 4	0xB8D836CD	01/22/18
0x23E	GE126A-1	GEDA	9	Geodata 126A, pg 1	0xE2041AAF	01/22/18
0x23F	GE126A-2		10	Geodata 126A, pg 2	0xC135517C	01/22/18
0x240	LOGANA-1	LOGA	21	LOGANA, pg 1	0x7922945A	01/22/18
0x241	LOGANA-2		31	LOGANA, pg 2	0x93FBB965	01/22/18
0x242	41ENS-1	ENS1	21	41 ENS, pg 1	0xD07FEABB	01/22/18
0x243	41ENS-2		31	41 ENS, pg 2	0x22B2FD27	01/22/18
0x244	ASTRO1	ASTU	31	Astro-1	0x3C4908FD	01/22/18
0x245	RADIAK-1	RADA	21	RADIAK	0x923A822D	01/22/18
0x246	AMASTRO	ASTI	24	Amateur Astronomy	0xD0FEE85B	03/11/18
0x247	SWORDS	IGSW	24	Gladiator Arena Game	0xB0EEDC5D	06/21/18
0x248	IRPR-1B	IPRT	29	HP Infrared Printer Module, bnk 1	0xE8D475FB	01/22/18
0x249	IRPR-3B			HP Infrared Printer Module, bnk 2	0x54FD2405	01/22/18
0x24A	PRINTER	WPRT	29	HP 82143A Printer	0x88E517ED	01/22/18
0x24B	ILMOD-1H	HILM	28	HP-IL Module	0xC646538A	01/22/18
0x24C	WAND-1F	HWND	27	HP Barcode Wand	0x30C16379	01/22/18
0x24D	ILPRT-2E	HILN	29	HP-IL Module Printer functions	0xC4FC4699	06/10/18
0x24E	ALL_FF			empty	0x53D36BD2	
0x24F	ALL_FF			empty	0x53D36BD2	
0x250	PPCSTAT1	PPC9	9	PPC Statistics, pg 1	0xDCD52CEB	05/14/18
0x251	PPCSTAT2		13	PPC Statistics, pg 2	0xC4670B3D	05/14/18
0x252	GMAC1	GMAQ	31	GMAC 1	0x7D17D183	05/14/18
0x253	SW_DEVL	SWSW	6	Software Development German book	0x65E3C429	05/14/18
0x254	PRAXIS	VIEW	9	Programs from Vieweg book	0xC364469B	05/14/18
0x255	GAMEZONE	ZONE	10	Game Zone	0x5219B146	05/14/18
0x256	REGULA1	REGU	9	Control Systems, pg 1	0x37791126	05/14/18
0x257	REGULA2		10	Control Systems, pg 2	0x6078182A	05/14/18
0x258	BSH1	BSHM	21	BSH EPROM, pg 1	0x1DB37BF5	05/14/18
0x259	BSH2		31	BSH EPROM, pg 2	0x884F4099	05/14/18
0x25A	BSH3		15	BSH EPROM, pg 3	0xA12A0934	05/14/18
0x25B	BSH4		16	BSH EPROM, pg 4	0x6C0743C9	05/14/18
0x25C	DERIVE41	DRVP	21	DERIVE41	0xD10B4A6C	05/14/18
0x25D	DIFFGEO5		31	DIFF GEOM	0xD37FC5E6	05/14/18
0x25E	ALL_FF			empty	0x53D36BD2	
0x25F	ALL_FF			empty	0x53D36BD2	
0x260	ALL_FF			empty	0x53D36BD2	
0x261	ALL_FF			empty	0x53D36BD2	
0x262	ALL_FF			empty	0x53D36BD2	
0x263	ALL_FF			empty	0x53D36BD2	
0x264	ALL_FF			empty	0x53D36BD2	

0x265	ALL_FF			empty	0x53D36BD2
0x266	ALL_FF			empty	0x53D36BD2
0x267	ALL_FF			empty	0x53D36BD2
0x268	ALL_FF			empty	0x53D36BD2
0x269	ALL_FF			empty	0x53D36BD2
0x26A	ALL_FF			empty	0x53D36BD2
0x26B	ALL_FF			empty	0x53D36BD2
0x26C	ALL_FF			empty	0x53D36BD2
0x26D	ALL_FF			empty	0x53D36BD2
0x26E	ALL_FF			empty	0x53D36BD2
0x26F	ALL_FF			empty	0x53D36BD2
0x270	ALL_FF			empty	0x53D36BD2
0x271	ALL_FF			empty	0x53D36BD2
0x272	ALL_FF			empty	0x53D36BD2
0x273	ALL_FF			empty	0x53D36BD2
0x274	ALL_FF			empty	0x53D36BD2
0x275	ALL_FF			empty	0x53D36BD2
0x276	ALL_FF			empty	0x53D36BD2
0x277	ALL_FF			empty	0x53D36BD2
0x278	ALL_FF			empty	0x53D36BD2
0x279	ALL_FF			empty	0x53D36BD2
0x27A	ALL_FF			empty	0x53D36BD2
0x27B	ALL_FF			empty	0x53D36BD2
0x27C	ALL_FF			empty	0x53D36BD2
0x27D	ALL_FF			empty	0x53D36BD2
0x27E	ALL_FF			empty	0x53D36BD2
0x27F	ALL_FF			empty	0x53D36BD2
0x280	ALL_FF			empty	0x53D36BD2
0x281	ALL_FF			empty	0x53D36BD2
0x282	ALL_FF			empty	0x53D36BD2
0x283	ALL_FF			empty	0x53D36BD2
0x284	ALL_FF			empty	0x53D36BD2
0x285	ALL_FF			empty	0x53D36BD2
0x286	ALL_FF			empty	0x53D36BD2
0x287	ALL_FF			empty	0x53D36BD2
0x288	ALL_FF			empty	0x53D36BD2
0x289	ALL_FF			empty	0x53D36BD2
0x28A	ALL_FF			empty	0x53D36BD2
0x28B	ALL_FF			empty	0x53D36BD2
0x28C	ALL_FF			empty	0x53D36BD2
0x28D	ALL_FF			empty	0x53D36BD2
0x28E	ALL_FF			empty	0x53D36BD2
0x28F	ALL_FF			empty	0x53D36BD2
0x290	ALL_FF			empty	0x53D36BD2
0x291	ALL_FF			empty	0x53D36BD2

0x292	ALL_FF			empty	0x53D36BD2
0x293	ALL_FF			empty	0x53D36BD2
0x294	ALL_FF			empty	0x53D36BD2
0x295	ALL_FF			empty	0x53D36BD2
0x296	ALL_FF			empty	0x53D36BD2
0x297	ALL_FF			empty	0x53D36BD2
0x298	ALL_FF			empty	0x53D36BD2
0x299	ALL_FF			empty	0x53D36BD2
0x29A	ALL_FF			empty	0x53D36BD2
0x29B	ALL_FF			empty	0x53D36BD2
0x29C	ALL_FF			empty	0x53D36BD2
0x29D	ALL_FF			empty	0x53D36BD2
0x29E	ALL_FF			empty	0x53D36BD2
0x29F	ALL_FF			empty	0x53D36BD2
0x2A0	ALL_FF			empty	0x53D36BD2
0x2A1	ALL_FF			empty	0x53D36BD2
0x2A2	ALL_FF			empty	0x53D36BD2
0x2A3	ALL_FF			empty	0x53D36BD2
0x2A4	ALL_FF			empty	0x53D36BD2
0x2A5	ALL_FF			empty	0x53D36BD2
0x2A6	ALL_FF			empty	0x53D36BD2
0x2A7	ALL_FF			empty	0x53D36BD2
0x2A8	ALL_FF			empty	0x53D36BD2
0x2A9	ALL_FF			empty	0x53D36BD2
0x2AA	ALL_FF			empty	0x53D36BD2
0x2AB	ALL_FF			empty	0x53D36BD2
0x2AC	ALL_FF			empty	0x53D36BD2
0x2AD	ALL_FF			empty	0x53D36BD2
0x2AE	ALL_FF			empty	0x53D36BD2
0x2AF	ALL_FF			empty	0x53D36BD2
0x2B0	ALL_FF			empty	0x53D36BD2
0x2B1	ALL_FF			empty	0x53D36BD2
0x2B2	ALL_FF			empty	0x53D36BD2
0x2B3	ALL_FF			empty	0x53D36BD2
0x2B4	ALL_FF			empty	0x53D36BD2
0x2B5	ALL_FF			empty	0x53D36BD2
0x2B6	ALL_FF			empty	0x53D36BD2
0x2B7	ALL_FF			empty	0x53D36BD2
0x2B8	ALL_FF			empty	0x53D36BD2
0x2B9	ALL_FF			empty	0x53D36BD2
0x2BA	ALL_FF			empty	0x53D36BD2
0x2BB	ALL_FF			empty	0x53D36BD2
0x2BC	ALL_FF			empty	0x53D36BD2
0x2BD	ALL_FF			empty	0x53D36BD2
0x2BE	ALL_FF			empty	0x53D36BD2

0x2BF	ALL_FF			empty	0x53D36BD2
0x2C0	ALL_FF			empty	0x53D36BD2
0x2C1	ALL_FF			empty	0x53D36BD2
0x2C2	ALL_FF			empty	0x53D36BD2
0x2C3	ALL_FF			empty	0x53D36BD2
0x2C4	ALL_FF			empty	0x53D36BD2
0x2C5	ALL_FF			empty	0x53D36BD2
0x2C6	ALL_FF			empty	0x53D36BD2
0x2C7	ALL_FF			empty	0x53D36BD2
0x2C8	ALL_FF			empty	0x53D36BD2
0x2C9	ALL_FF			empty	0x53D36BD2
0x2CA	ALL_FF			empty	0x53D36BD2
0x2CB	ALL_FF			empty	0x53D36BD2
0x2CC	ALL_FF			empty	0x53D36BD2
0x2CD	ALL_FF			empty	0x53D36BD2
0x2CE	ALL_FF			empty	0x53D36BD2
0x2CF	ALL_FF			empty	0x53D36BD2
0x2D0	ALL_FF			empty	0x53D36BD2
0x2D1	ALL_FF			empty	0x53D36BD2
0x2D2	ALL_FF			empty	0x53D36BD2
0x2D3	ALL_FF			empty	0x53D36BD2
0x2D4	ALL_FF			empty	0x53D36BD2
0x2D5	ALL_FF			empty	0x53D36BD2
0x2D6	ALL_FF			empty	0x53D36BD2
0x2D7	ALL_FF			empty	0x53D36BD2
0x2D8	ALL_FF			empty	0x53D36BD2
0x2D9	ALL_FF			empty	0x53D36BD2
0x2DA	ALL_FF			empty	0x53D36BD2
0x2DB	ALL_FF			empty	0x53D36BD2
0x2DC	ALL_FF			empty	0x53D36BD2
0x2DD	ALL_FF			empty	0x53D36BD2
0x2DE	ALL_FF			empty	0x53D36BD2
0x2DF	ALL_FF			empty	0x53D36BD2
0x2E0	ALL_FF			empty	0x53D36BD2
0x2E1	ALL_FF			empty	0x53D36BD2
0x2E2	ALL_FF			empty	0x53D36BD2
0x2E3	ALL_FF			empty	0x53D36BD2
0x2E4	ALL_FF			empty	0x53D36BD2
0x2E5	ALL_FF			empty	0x53D36BD2
0x2E6	ALL_FF			empty	0x53D36BD2
0x2E7	ALL_FF			empty	0x53D36BD2
0x2E8	ALL_FF			empty	0x53D36BD2
0x2E9	ALL_FF			empty	0x53D36BD2
0x2EA	ALL_FF			empty	0x53D36BD2
0x2EB	ALL_FF			empty	0x53D36BD2

0x2EC	ALL_FF			empty	0x53D36BD2
0x2ED	ALL_FF			empty	0x53D36BD2
0x2EE	ALL_FF			empty	0x53D36BD2
0x2EF	ALL_FF			empty	0x53D36BD2
0x2F0	ALL_FF			empty	0x53D36BD2
0x2F1	ALL_FF			empty	0x53D36BD2
0x2F2	ALL_FF			empty	0x53D36BD2
0x2F3	ALL_FF			empty	0x53D36BD2
0x2F4	ALL_FF			empty	0x53D36BD2
0x2F5	ALL_FF			empty	0x53D36BD2
0x2F6	ALL_FF			empty	0x53D36BD2
0x2F7	ALL_FF			empty	0x53D36BD2
0x2F8	ALL_FF			empty	0x53D36BD2
0x2F9	ALL_FF			empty	0x53D36BD2
0x2FA	ALL_FF			empty	0x53D36BD2
0x2FB	ALL_FF			empty	0x53D36BD2
0x2FC	ALL_FF			empty	0x53D36BD2
0x2FD	ALL_FF			empty	0x53D36BD2
0x2FE	ALL_FF			empty	0x53D36BD2
0x2FF	ALL_FF			empty	0x53D36BD2
0x300	ALL_FF			empty	0x53D36BD2
0x301	ALL_FF			empty	0x53D36BD2
0x302	ALL_FF			empty	0x53D36BD2
0x303	ALL_FF			empty	0x53D36BD2
0x304	ALL_FF			empty	0x53D36BD2
0x305	ALL_FF			empty	0x53D36BD2
0x306	ALL_FF			empty	0x53D36BD2
0x307	ALL_FF			empty	0x53D36BD2
0x308	ALL_FF			empty	0x53D36BD2
0x309	ALL_FF			empty	0x53D36BD2
0x30A	ALL_FF			empty	0x53D36BD2
0x30B	ALL_FF			empty	0x53D36BD2
0x30C	ALL_FF			empty	0x53D36BD2
0x30D	ALL_FF			empty	0x53D36BD2
0x30E	ALL_FF			empty	0x53D36BD2
0x30F	ALL_FF			empty	0x53D36BD2
0x310	ALL_FF			empty	0x53D36BD2
0x311	ALL_FF			empty	0x53D36BD2
0x312	ALL_FF			empty	0x53D36BD2
0x313	ALL_FF			empty	0x53D36BD2
0x314	ALL_FF			empty	0x53D36BD2
0x315	ALL_FF			empty	0x53D36BD2
0x316	ALL_FF			empty	0x53D36BD2
0x317	ALL_FF			empty	0x53D36BD2
0x318	ALL_FF			empty	0x53D36BD2

0x319	ALL_FF			empty	0x53D36BD2	
0x31A	ALL_FF			empty	0x53D36BD2	
0x31B	ALL_FF			empty	0x53D36BD2	
0x31C	ALL_FF			empty	0x53D36BD2	
0x31D	ALL_FF			empty	0x53D36BD2	
0x31E	ALL_FF			empty	0x53D36BD2	
0x31F	ALL_FF			empty	0x53D36BD2	
0x320	ALL_FF			empty	0x53D36BD2	
0x321	ALL_FF			empty	0x53D36BD2	
0x322	ALL_FF			empty	0x53D36BD2	
0x323	ALL_FF			empty	0x53D36BD2	
0x324	ALL_FF			empty	0x53D36BD2	
0x325	ALL_FF			empty	0x53D36BD2	
0x326	ALL_FF			empty	0x53D36BD2	
0x327	ALL_FF			empty	0x53D36BD2	
0x328	ALL_FF			empty	0x53D36BD2	
0x329	ALL_FF			empty	0x53D36BD2	
0x32A	ALL_FF			empty	0x53D36BD2	
0x32B	ALL_FF			empty	0x53D36BD2	
0x32C	ALL_FF			empty	0x53D36BD2	
0x32D	ALL_FF			empty	0x53D36BD2	
0x32E	ALL_FF			empty	0x53D36BD2	
0x32F	ALL_FF			empty	0x53D36BD2	
0x330	ALL_FF			empty	0x53D36BD2	
0x331	ALL_FF			empty	0x53D36BD2	
0x332	ALL_FF			empty	0x53D36BD2	
0x333	ALL_FF			empty	0x53D36BD2	
0x334	ALL_FF			empty	0x53D36BD2	
0x335	ALL_FF			empty	0x53D36BD2	
0x336	ALL_FF			empty	0x53D36BD2	
0x337	ALL_FF			empty	0x53D36BD2	
0x338	ALL_FF			empty	0x53D36BD2	
0x339	ALL_FF			empty	0x53D36BD2	
0x33A	ALL_FF			empty	0x53D36BD2	
0x33B	ALL_FF			empty	0x53D36BD2	
0x33C	ALL_FF			empty	0x53D36BD2	
0x33D	ALL_FF			empty	0x53D36BD2	
0x33E	ALL_FF			empty	0x53D36BD2	
0x33F	ALL_FF			empty	0x53D36BD2	
0x340	ALL_FF			empty	0x53D36BD2	
0x341	ALL_FF			empty	0x53D36BD2	
0x342	ALL_FF			empty	0x53D36BD2	
0x343	ALL_FF			empty	0x53D36BD2	
0x344	ALL_FF			empty	0x53D36BD2	
0x345	ALL_FF			empty	0x53D36BD2	

0x346	ALL_FF			empty	0x53D36BD2	
0x347	ALL_FF			empty	0x53D36BD2	
0x348	ALL_FF			empty	0x53D36BD2	
0x349	ALL_FF			empty	0x53D36BD2	
0x34A	ALL_FF			empty	0x53D36BD2	
0x34B	ALL_FF			empty	0x53D36BD2	
0x34C	ALL_FF			empty	0x53D36BD2	
0x34D	ALL_FF			empty	0x53D36BD2	
0x34E	ALL_FF			empty	0x53D36BD2	
0x34F	ALL_FF			empty	0x53D36BD2	
0x350	ALL_FF			empty	0x53D36BD2	
0x351	ALL_FF			empty	0x53D36BD2	
0x352	ALL_FF			empty	0x53D36BD2	
0x353	ALL_FF			empty	0x53D36BD2	
0x354	ALL_FF			empty	0x53D36BD2	
0x355	ALL_FF			empty	0x53D36BD2	
0x356	ALL_FF			empty	0x53D36BD2	
0x357	ALL_FF			empty	0x53D36BD2	
0x358	ALL_FF			empty	0x53D36BD2	
0x359	ALL_FF			empty	0x53D36BD2	
0x35A	ALL_FF			empty	0x53D36BD2	
0x35B	ALL_FF			empty	0x53D36BD2	
0x35C	ALL_FF			empty	0x53D36BD2	
0x35D	ALL_FF			empty	0x53D36BD2	
0x35E	ALL_FF			empty	0x53D36BD2	
0x35F	ALL_FF			empty	0x53D36BD2	
0x360	ALL_FF			empty	0x53D36BD2	
0x361	ALL_FF			empty	0x53D36BD2	
0x362	ALL_FF			empty	0x53D36BD2	
0x363	ALL_FF			empty	0x53D36BD2	
0x364	ALL_FF			empty	0x53D36BD2	
0x365	ALL_FF			empty	0x53D36BD2	
0x366	ALL_FF			empty	0x53D36BD2	
0x367	ALL_FF			empty	0x53D36BD2	
0x368	ALL_FF			empty	0x53D36BD2	
0x369	ALL_FF			empty	0x53D36BD2	
0x36A	ALL_FF			empty	0x53D36BD2	
0x36B	ALL_FF			empty	0x53D36BD2	
0x36C	ALL_FF			empty	0x53D36BD2	
0x36D	ALL_FF			empty	0x53D36BD2	
0x36E	ALL_FF			empty	0x53D36BD2	
0x36F	ALL_FF			empty	0x53D36BD2	
0x370	ALL_FF			empty	0x53D36BD2	
0x371	ALL_FF			empty	0x53D36BD2	
0x372	ALL_FF			empty	0x53D36BD2	

0x373	ALL_FF			empty	0x53D36BD2	
0x374	ALL_FF			empty	0x53D36BD2	
0x375	ALL_FF			empty	0x53D36BD2	
0x376	ALL_FF			empty	0x53D36BD2	
0x377	ALL_FF			empty	0x53D36BD2	
0x378	ALL_FF			empty	0x53D36BD2	
0x379	ALL_FF			empty	0x53D36BD2	
0x37A	ALL_FF			empty	0x53D36BD2	
0x37B	ALL_FF			empty	0x53D36BD2	
0x37C	ALL_FF			empty	0x53D36BD2	
0x37D	ALL_FF			empty	0x53D36BD2	
0x37E	ALL_FF			empty	0x53D36BD2	
0x37F	ALL_FF			empty	0x53D36BD2	
0x380	ALL_FF			empty	0x53D36BD2	
0x381	ALL_FF			empty	0x53D36BD2	
0x382	ALL_FF			empty	0x53D36BD2	
0x383	ALL_FF			empty	0x53D36BD2	
0x384	ALL_FF			empty	0x53D36BD2	
0x385	ALL_FF			empty	0x53D36BD2	
0x386	ALL_FF			empty	0x53D36BD2	
0x387	ALL_FF			empty	0x53D36BD2	
0x388	ALL_FF			empty	0x53D36BD2	
0x389	ALL_FF			empty	0x53D36BD2	
0x38A	ALL_FF			empty	0x53D36BD2	
0x38B	ALL_FF			empty	0x53D36BD2	
0x38C	ALL_FF			empty	0x53D36BD2	
0x38D	ALL_FF			empty	0x53D36BD2	
0x38E	ALL_FF			empty	0x53D36BD2	
0x38F	ALL_FF			empty	0x53D36BD2	
0x390	ALL_FF			empty	0x53D36BD2	
0x391	ALL_FF			empty	0x53D36BD2	
0x392	ALL_FF			empty	0x53D36BD2	
0x393	ALL_FF			empty	0x53D36BD2	
0x394	ALL_FF			empty	0x53D36BD2	
0x395	ALL_FF			empty	0x53D36BD2	
0x396	ALL_FF			empty	0x53D36BD2	
0x397	ALL_FF			empty	0x53D36BD2	
0x398	ALL_FF			empty	0x53D36BD2	
0x399	ALL_FF			empty	0x53D36BD2	
0x39A	ALL_FF			empty	0x53D36BD2	
0x39B	ALL_FF			empty	0x53D36BD2	
0x39C	ALL_FF			empty	0x53D36BD2	
0x39D	ALL_FF			empty	0x53D36BD2	
0x39E	ALL_FF			empty	0x53D36BD2	
0x39F	ALL_FF			empty	0x53D36BD2	

0x3A0	ALL_FF			empty	0x53D36BD2
0x3A1	ALL_FF			empty	0x53D36BD2
0x3A2	ALL_FF			empty	0x53D36BD2
0x3A3	ALL_FF			empty	0x53D36BD2
0x3A4	ALL_FF			empty	0x53D36BD2
0x3A5	ALL_FF			empty	0x53D36BD2
0x3A6	ALL_FF			empty	0x53D36BD2
0x3A7	ALL_FF			empty	0x53D36BD2
0x3A8	ALL_FF			empty	0x53D36BD2
0x3A9	ALL_FF			empty	0x53D36BD2
0x3AA	ALL_FF			empty	0x53D36BD2
0x3AB	ALL_FF			empty	0x53D36BD2
0x3AC	ALL_FF			empty	0x53D36BD2
0x3AD	ALL_FF			empty	0x53D36BD2
0x3AE	ALL_FF			empty	0x53D36BD2
0x3AF	ALL_FF			empty	0x53D36BD2
0x3B0	ALL_FF			empty	0x53D36BD2
0x3B1	ALL_FF			empty	0x53D36BD2
0x3B2	ALL_FF			empty	0x53D36BD2
0x3B3	ALL_FF			empty	0x53D36BD2
0x3B4	ALL_FF			empty	0x53D36BD2
0x3B5	ALL_FF			empty	0x53D36BD2
0x3B6	ALL_FF			empty	0x53D36BD2
0x3B7	ALL_FF			empty	0x53D36BD2
0x3B8	ALL_FF			empty	0x53D36BD2
0x3B9	ALL_FF			empty	0x53D36BD2
0x3BA	ALL_FF			empty	0x53D36BD2
0x3BB	ALL_FF			empty	0x53D36BD2
0x3BC	ALL_FF			empty	0x53D36BD2
0x3BD	ALL_FF			empty	0x53D36BD2
0x3BE	ALL_FF			empty	0x53D36BD2
0x3BF	ALL_FF			empty	0x53D36BD2
0x3C0	ALL_FF			empty	0x53D36BD2
0x3C1	ALL_FF			empty	0x53D36BD2
0x3C2	ALL_FF			empty	0x53D36BD2
0x3C3	ALL_FF			empty	0x53D36BD2
0x3C4	ALL_FF			empty	0x53D36BD2
0x3C5	ALL_FF			empty	0x53D36BD2
0x3C6	ALL_FF			empty	0x53D36BD2
0x3C7	ALL_FF			empty	0x53D36BD2
0x3C8	ALL_FF			empty	0x53D36BD2
0x3C9	ALL_FF			empty	0x53D36BD2
0x3CA	ALL_FF			empty	0x53D36BD2
0x3CB	ALL_FF			empty	0x53D36BD2
0x3CC	ALL_FF			empty	0x53D36BD2

0x3CD	ALL_FF			empty	0x53D36BD2	
0x3CE	ALL_FF			empty	0x53D36BD2	
0x3CF	ALL_FF			empty	0x53D36BD2	
0x3D0	ALL_FF			empty	0x53D36BD2	
0x3D1	ALL_FF			empty	0x53D36BD2	
0x3D2	ALL_FF			empty	0x53D36BD2	
0x3D3	ALL_FF			empty	0x53D36BD2	
0x3D4	ALL_FF			empty	0x53D36BD2	
0x3D5	ALL_FF			empty	0x53D36BD2	
0x3D6	ALL_FF			empty	0x53D36BD2	
0x3D7	ALL_FF			empty	0x53D36BD2	
0x3D8	ALL_FF			empty	0x53D36BD2	
0x3D9	ALL_FF			empty	0x53D36BD2	
0x3DA	ALL_FF			empty	0x53D36BD2	
0x3DB	ALL_FF			empty	0x53D36BD2	
0x3DC	ALL_FF			empty	0x53D36BD2	
0x3DD	ALL_FF			empty	0x53D36BD2	
0x3DE	ALL_FF			empty	0x53D36BD2	
0x3DF	ALL_FF			empty	0x53D36BD2	
0x3E0	ALL_FF			empty	0x53D36BD2	
0x3E1	ALL_FF			empty	0x53D36BD2	
0x3E2	ALL_FF			empty	0x53D36BD2	
0x3E3	ALL_FF			empty	0x53D36BD2	
0x3E4	ALL_FF			empty	0x53D36BD2	
0x3E5	ALL_FF			empty	0x53D36BD2	
0x3E6	ALL_FF			empty	0x53D36BD2	
0x3E7	ALL_FF			empty	0x53D36BD2	
0x3E8	ALL_FF			empty	0x53D36BD2	
0x3E9	ALL_FF			empty	0x53D36BD2	
0x3EA	ALL_FF			empty	0x53D36BD2	
0x3EB	ALL_FF			empty	0x53D36BD2	
0x3EC	ALL_FF			empty	0x53D36BD2	
0x3ED	ALL_FF			empty	0x53D36BD2	
0x3EE	ALL_FF			empty	0x53D36BD2	
0x3EF	ALL_FF			empty	0x53D36BD2	
0x3F0	ALL_FF			empty	0x53D36BD2	
0x3F1	ALL_FF			empty	0x53D36BD2	
0x3F2	ALL_FF			empty	0x53D36BD2	
0x3F3	ALL_FF			empty	0x53D36BD2	
0x3F4	ALL_FF			empty	0x53D36BD2	
0x3F5	ALL_FF			empty	0x53D36BD2	
0x3F6	ALL_FF			empty	0x53D36BD2	
0x3F7	ALL_FF			empty	0x53D36BD2	
0x3F8	ALL_FF			empty	0x53D36BD2	
0x3F9	ALL_FF			empty	0x53D36BD2	

0x3FA	ALL_FF			empty	0x53D36BD2	
0x3FB	ALL_FF			empty	0x53D36BD2	
0x3FC	ALL_FF			empty	0x53D36BD2	
0x3FD	ALL_FF			empty	0x53D36BD2	
0x3FE	ALL_FF			empty	0x53D36BD2	
0x3FF	ALL_FF			empty	0x53D36BD2	
0x800				41C Registers 0-3FF		
0x801				Registers 400-FFF (not utilized by the OS)		
0x802						
0x803						
0x804				41CL MMU registers		
0x805		<b>YBFR</b>		Memory Buffer		
0x806		<b>CFDB</b>		Memory Buffer or CFLDB location		
0x807						
0x808						
0x809						
0x80A						
0x80B						
0x80C						
0x80D						
0x80E						
0x80F						
0x810				Page 0 of Sector Buffer		
0x811				Page 1 of Sector Buffer		
0x812				Page 2 of Sector Buffer		
0x813				Page 3 of Sector Buffer		
0x814				Page 4 of Sector Buffer		
0x815				Page 5 of Sector Buffer		
0x816				Page 6 of Sector Buffer		
0x817				Page 7 of Sector Buffer		
0x818						
0x819						
0x81A						
0x81B						
0x81C						
0x81D						
0x81E						
0x81F						
0x820						
0x821						
0x822						
0x823						
0x824						
0x825						
0x826						

0x827						
0x828						
0x829						
0x82A						
0x82B						
0x82C						
0x82D						
0x82E						
0x82F						
0x830						
0x831						
0x832						
0x833						
0x834						
0x835						
0x836						
0x837						
0x838						
0x839						
0x83A						
0x83B						
0x83C						
0x83D						
0x83E						
0x83F						
0x840						
0x841						
0x842						
0x843						
0x844						
0x845						
0x846						
0x847						
0x848						
0x849						
0x84A						
0x84B						
0x84C						
0x84D						
0x84E						
0x84F						
0x850						
0x851						
0x852						
0x853						

0x854						
0x855						
0x856						
0x857						
0x858						
0x859						
0x85A						
0x85B						
0x85C						
0x85D						
0x85E						
0x85F						
0x860						
0x861						
0x862						
0x863						
0x864						
0x865						
0x866						
0x867						
0x868						
0x869						
0x86A						
0x86B						
0x86C						
0x86D						
0x86E						
0x86F						
0x870						
0x871						
0x872						
0x873						
0x874						
0x875						
0x876						
0x877						
0x878						
0x879						
0x87A						
0x87B						
0x87C						
0x87D						
0x87E						
0x87F						

## NOTES:

1. Flash memory starts at page 0x000, and RAM memory starts at page 0x800.
2. This memory map (for Flash memory only) does not apply to V2 41CL boards. Although much of the mapping is identical, there is a separate Memory Reference for V2 41CL boards.
3. **V3 and V4 41CL boards contain Flash memory with addresses 0x000000 through 0x1FFFFFF. Only V5 41CL boards contain Flash memory with addresses 0x200000 through 0x3FFFFFF.**
4. A blank page in Flash memory is different from an empty page in Flash memory. A blank page contains 0x0000 in every location, and can be safely plugged into a Port. An empty (erased or unprogrammed) page contains 0xFFFF in every location, which will lock up the 41CL when plugged into a Port. A blank page has a YCRC value of 0xD666D0E4, while an empty page has a YCRC value of 0x53D36BD2.
5. Flash memory is always erased by sectors. Normally a sector consists of eight pages, and sector boundaries are highlighted in the table. Either the the top sector or the bottom sector is unique, and is erased by subsector. Refer to the *41CL Update Functions* documentation for the details.

# RAM Memory Details

Physical Address	Contents	Used for
0x800000 - 0x800003	Register 000	T register
0x800004 - 0x800007	Register 001	Z register
0x800008 - 0x80000B	Register 002	Y register
0x80000C - 0x80000F	Register 003	X register
0x800010 - 0x800013	Register 004	L register
0x800014 - 0x800017	Register 005	ALPHA register 1-7
0x800018 - 0x80001B	Register 006	ALPHA register 8-14
0x80001C - 0x80001F	Register 007	ALPHA register 15-21
0x800020 - 0x800023	Register 008	ALPHA register 22-28
0x800024 - 0x800027	Register 009	temp ALPHA scratch
0x800028 - 0x80002B	Register 00A	OS functions
0x80002C - 0x80002F	Register 00B	
0x800030 - 0x800033	Register 00C	
0x800034 - 0x800037	Register 00D	
0x800038 - 0x80003B	Register 00E	FLAG register
0x80003C - 0x80003F	Register 00F	OS functions
0x800040 - 0x8000FF	Registers 10 - 3F	not visible to OS
0x800100 - 0x800103	Register 040	X-Memory
0x800104 - 0x800107	Register 041	
.	.	
.	.	
0x8002F8 - 0x8002FB	Register 0BE	
0x8002FC - 0x8002FF	Register 0BF	
0x800300 - 0x800303	Register 0C0	
0x800304 - 0x800307	Register 0C1	
.	.	
.	.	
0x8007F8 - 0x8007FB	Register 1FE	Key Assign Buffer, Alarm Buffer, I/O Buffers, Program memory Data
0x8007FC - 0x8007FF	Register 1FF	
0x800800 - 0x800803	Register 200	
0x800804 - 0x800807	Register 201	
0x800808 - 0x80080B	Register 202	X-Memory
.	.	
.	.	
0x800BB8 - 0x800BBB	Register 2EE	
0x800BBC - 0x800BBF	Register 2EF	

0x800BC0 - 0x800C03	Registers 2F0 - 300		not visible to OS
0x800C04 - 0x800C07	Register 301		X-Memory
0x800C08 - 0x800C0B	Register 302		
.	.		
0x800FB8 - 0x800FBB	Register 3EE		
0x800FBC - 0x800FBF	Register 3EF		
0x800FC0 - 0x800FFF	Registers 3F0 - 3FF		not visible to OS
0x801000 - 0x801FFF	Registers 400 - 7FF		Expanded Memory 1
0x802000 - 0x802FFF	Registers 800 - BFF		Expanded Memory 2
0x803000 - 0x803FFF	Registers C00 - FFF		Expanded Memory 3
0x804000	41C Register Address		REGADD
0x804001 - 0x80400B	reserved		
0x80400C	Page 0 MMU registers (only one bank)	set 0	Page 0 MMU data
0x80400D		set 1	
0x80400E		set 2	
0x80400F		set 3	
0x804010 - 0x804017	41CL Extra/Extreme functions internal use		
0x804018	Turbo Mode storage location		Light Sleep
0x804019	41CL Extra/Extreme functions internal use		
0x80401A	CPU ST[14:8] storage location		Light Sleep
0x80401B	reserved		
0x80401C	Page 1 MMU register (only one bank)	set 0	Page 1 MMU data
0x80401D		set 1	
0x80401E		set 2	
0x80401F		set 3	
0x804020 - 0x80402B	41CL Memory Functions internal use		
0x80402C	Page 2 MMU register (only one bank)	set 0	Page 2 MMU data
0x80402D		set 1	
0x80402E		set 2	
0x80402F		set 3	
0x804030	Page 4 MMU register dynamic storage		
0x804031 - 0x80403B	41CL Update Functions internal use		
0x80403C	Page 3 MMU register (only one bank)	set 0	Page 3 MMU data
0x80403D		set 1	
0x80403E		set 2	
0x80403F		set 3	

0x804040	Page 4, Bank 1 MMU registers	set 0	Page 4 MMU data
0x804041		set 1	
0x804042		set 2	
0x804043		set 3	
0x804044	Page 4, Bank 3 MMU registers	set 0	
0x804046		set 1	
0x804046		set 2	
0x804047		set 3	
0x804048	Page 4, Bank 2 MMU registers	set 0	
0x804049		set 1	
0x80404A		set 2	
0x80404B		set 3	
0x80404C	Page 4, Bank 4 MMU registers	set 0	
0x80404D		set 1	
0x80404E		set 2	
0x80404F		set 3	
0x804050 - 0x804053	Page 5, Bank 1 MMU registers	sets 0-3	Page 5 MMU data
0x804054 - 0x804057	Page 5, Bank 3 MMU registers	sets 0-3	
0x804058 - 0x80405B	Page 5, Bank 2 MMU registers	sets 0-3	
0x80405C - 0x80405F	Page 5, Bank 4 MMU registers	sets 0-3	
0x804060 - 0x804063	Page 6, Bank 1 MMU registers	sets 0-3	Page 6 MMU data
0x804064 - 0x804067	Page 6, Bank 3 MMU registers	sets 0-3	
0x804068 - 0x80406B	Page 6, Bank 2 MMU registers	sets 0-3	
0x80406C - 0x80406F	Page 6, Bank 4 MMU registers	sets 0-3	
.	.		.
0x8040E0 - 0x8040E3	Page E, Bank 1 MMU registers	sets 0-3	Page E MMU data
0x8040E4 - 0x8040E7	Page E, Bank 3 MMU registers	sets 0-3	
0x8040E8 - 0x8040EB	Page E, Bank 2 MMU registers	sets 0-3	
0x8040EC - 0x8040EF	Page E, Bank 4 MMU registers	sets 0-3	
0x8040F0 - 0x8040F3	Page F, Bank 1 MMU registers	sets 0-3	Page F MMU data
0x8040F4 - 0x8040F7	Page F, Bank 3 MMU registers	sets 0-3	
0x8040F8 - 0x8040FB	Page F, Bank 2 MMU registers	sets 0-3	
0x8040FC - 0x8040FF	Page F, Bank 4 MMU registers	sets 0-3	
0x804100 - 0x804FFF	41CL functions internal use		
0x805000 - 0x805FFF	Memory Buffer (1 4Kx16 page)		
0x806000 - 0x806FFF	CFLDB location		
0x807000 - 0x80FFFF	User RAM (9 4Kx16 pages)		
0x810000 - 0x817FFF	Sector Buffer (8 4Kx16 pages)		
0x818000 - 0x87FFFF	User RAM (104 4Kx16 pages)		

**NOTES:**

1. Each seven-byte 41C register is stored in four successive memory locations:

bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
addr lsb																
00	Byte 1								Byte 0							
01	Byte 3								Byte 2							
10	Byte 5								Byte 4							
11	unused								Byte 6							

2. Each MMU entry is stored in a single memory location:

bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	EN	LCK	MULTI	A23	A22	A21	A20	A19	A18	A17	A16	A15	A14	A13	A12	

Bit 15 is the Enable (EN) bit. If this bit is zero, the MMU entry is ignored and the corresponding page and bank will be fetched from a Port.

Bit 14 is the Lock (LCK) bit, used only with the 41CL Extreme Functions. If this bit is set to one the entry cannot be changed, except with either the **UNLOCK** function or the **MMUCLR** function.

Bits 13 and 12 are the Multi-page Image (MULTI) bits, used only with the *41CL Extreme Functions*. These bits are managed automatically by the **PLUG** and **PPLUG** functions, with the following meanings:

13	12	MULTI
0	0	Not part of a multi-page image
0	1	First page of a multi-page image
1	1	Middle page of a multi-page image
1	0	Last page of a multi-page image

Bits 11-0 hold the twelve address bits to be substituted for the Page address (bits 15-12) portion of the logical address, to create the physical address.

3. MMU register sets 1-3 are used only by the *41CL Extreme Functions*.

