

# 41CL Memory Reference

07/31/24

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0x1F0	41ZL1	Z4DL	1	41Z Deluxe, pg 1, bnk 1	0x450E8CCC	

0x1F1	41ZL2			41Z Deluxe, pg 1, bnk 2	0x6AEF7732	
0x1F2	ITGDIFF	<b>FRID</b>	<b>18</b>	Fractional Integro-Differentiation	0x23F1B9F1	
0x1F3	RECURSE	<b>RCSN</b>	<b>9</b>	Recursion and Modular Math	0x6DE1126B	
0x1F4	41ZU1	<b>Z4DL</b>	<b>4</b>	41Z Deluxe, pg 2, bnk 1	0x9693CB4E	
0x1F5	41ZU2			41Z Deluxe, pg 2, bnk 2	0xBC624AFA	
0x1F6	GAMESB1	<b>GSB2</b>	<b>16</b>	HP-41 Games Solution Book 1/2, pg 1	0x843AD40C	
0x1F7	GAMESB2			HP-41 Games Solution Book 1/2, pg 2	0x53A51C5C	
0x1F8	ALL_FF			Reserved for User (V3/V4)	0x53D36BD2	
0x1F9	ALL_FF				0x53D36BD2	
0x1FA	ALL_FF				0x53D36BD2	
0x1FB	ALL_FF				0x53D36BD2	
0x1FC	ALL_FF				0x53D36BD2	
0x1FD	ALL_FF				0x53D36BD2	
0x1FE	ALL_FF				0x53D36BD2	
0x1FF	ALL_FF				0x53D36BD2	
0x200	ALL_FF			empty	0x53D36BD2	
0x201	HP41AOS	<b>4AOS</b>	<b>12</b>	HP-41 AOS	0x8B1AEA56	
0x202	XMEMXF	<b>XXMF</b>	<b>17</b>	X-mem Extended Functions	0x407CDBAC	
0x203	XMMTRX	<b>XXMA</b>	<b>17</b>	X-mem Matrix Applications	0x40F50C7D	
0x204	XMPPC	<b>XMPP</b>	<b>17</b>	X-mem PPC Applications	0xD59FCBFE	
0x205	PLAY1C	<b>MPOW</b>	<b>16</b>	Mark Power's Games	0XAD79CC6F	
0x206	VA-BOARD	<b>VBRD</b>	<b>10</b>	Valentin Albillo's Board Games	0xB2C54DB2	
0x207	VA-MATH	<b>VMTH</b>	<b>8</b>	Valentin Albillo's Math	0xB5EE5664	
0x208	TS4031	<b>TDSM</b>	<b>4</b>	TDS Surveying, pg 1	0xBF22F456	
0x209	TS4032		<b>10</b>	TDS Surveying, pg 2	0x9E8588CF	
0x20A	TS4033		<b>31</b>	TDS Surveying, pg 3	0x6A1C50CF	
0x20B	TS4034		<b>30</b>	TDS Surveying, pg 4	0x5F4775CF	
0x20C	TI2023	<b>TDSI</b>	<b>5</b>	TDS Instrument, pg 1	0xBD37F6EA	
0x20D	TI2024		<b>12</b>	TDS Instrument, pg 2	0x98D9A27A	
0x20E	TP2243	<b>TDSP</b>	<b>8</b>	TDS Plotter, pg 1	0x9801DAC7	
0x20F	TP2244		<b>9</b>	TDS Plotter, pg 2	0xF944C90F	
0x210	ASTRO10A	<b>1AST</b>	<b>23</b>	Astro-10000, pg 1	0x2E48A231	
0x211	ASTRO10B		<b>24</b>	Astro-10000, pg 2	0x730E6B4A	
0x212	DERIVEZ1	<b>ZDRV</b>	<b>21</b>	Z-Derive, pg 1	0x4DCBD05A	
0x213	DERIVEZ2		<b>22</b>	Z-Derive, pg 2	0x866E53AB	
0x214	PARDIFEQ	<b>BPDE</b>	<b>19</b>	Partial Differential Equations	0xFE4B118D	
0x215	ELLIPSOI	<b>BELP</b>	<b>21</b>	Ellipsoids	0xD86B4618	
0x216	INTGDIF1	<b>BIDQ</b>	<b>21</b>	Integration/Differentiation, pg 1	0x49EE6656	
0x217	INTGDIF2		<b>22</b>	Integration/Differentiation, pg 2	0xF4C37E75	
0x218	DRVITG1	<b>BDRV</b>	<b>31</b>	Derivatives and Integrals, pg 1	0xAF6F90E4	
0x219	DRVITG2			Derivatives and Integrals, pg 2	0xBA433F26	
0x21A	PRECNUT	<b>BPRN</b>	<b>9</b>	Precession & Nutation	0x37DF4FB8	
0x21B	ASTROREF	<b>BREF</b>	<b>9</b>	Astronomical Refraction	0x03468714	
0x21C	EPH2018A	<b>P18E</b>	<b>23</b>	Planetary Ephemerides 2018, pg 1	0xAA054808	
0x21D	EPH2018B		<b>24</b>	Planetary Ephemerides 2018, pg 2	0xAA4816ED	
0x21E	DERIVE1	<b>DRV4</b>	<b>31</b>	DERIVE41, pg 1	0x82B3A55F	
0x21F	DERIVE2			DERIVE41, pg 2	0x4D07F1E4	
0x220	RHODESII	<b>RDII</b>	<b>31</b>	RhodeSystem II	0xA9C03C67	
0x221	MORTAR	<b>MRTR</b>	<b>31</b>	MORTAR	0xCBFBA57	
0x222	RESERV_1	<b>VOI1</b>	<b>9</b>	Reservoir Engineering 1	0x28E6CA2F	
0x223	RESERV_2			Reservoir Engineering 2	0x9F444F1B	

0x224	RESERV_3	VOI3	10	Reservoir Engineering 3	0xD645BC8E	
0x225	RESERV_4			Reservoir Engineering 4	0xFE783137	
0x226	RESERV_5	VOI5	11	Reservoir Engineering 5	0x2DF9DBDC	
0x227	RESERV_6			Reservoir Engineering 6	0x9F314E40	
0x228	BVS-1	BVLU	3	Business Valuation	0x00CA7A88	
0x229	CMA-1	CMGT	6	Capital Management	0xE0152D43	
0x22A	FCAST1-1	FCS1	10	Forecaster-1	0x8FCB260B	
0x22B	FCAST3-1	FCS3	10	Forecaster-3	0x0B200938	
0x22C	HPP-1	HPPA	8	Hypothetical Probate Plus, pg 1	0x7A54301D	
0x22D	HPP-2		12	Hypothetical Probate Plus, pg 2	0xD0F71013	
0x22E	RACETR-1	RCTR	21	Racetrack	0x843AE9F7	
0x22F	DSTAT	DSTY	10	Data & Statistics	0xA959E01D	
0x230	MBK-EP-1	MBKF	3	MBK-EPROM, pg 1	0x4826340F	
0x231	MBK-EP-2		13	MBK-EPROM, pg 2	0xA2D159B1	
0x232	MBK-EP-3		14	MBK-EPROM, pg 3	0x9FA6E938	
0x233	ALL_00		N/A	blank (loaded as MBK-EPROM, pg 4)	0xD666D0E4	
0x234	LOUDSPKR	LDSP	10	Loudspeaker Design	0xBF8FA07	
0x235	TOULMATH	TTOU	12	Toulouse Math	0x75C2D553	
0x236	MISC31	JMBA	31	Cocktail41, pg 1	0x62A78008	
0x237	MISC32			Cocktail41, pg 2	0x7ACF9916	
0x238	BUDER1-1	BUD1	10	Buderus 1, pg 1	0xA9FE9A7C	
0x239	BUDER1-2		21	Buderus 1, pg 2	0x208F6360	
0x23A	DRP16K-1	DRPS	31	Drilling Rig Platform, pg 1	0x6F499FA7	
0x23B	DRP16K-2		31	Drilling Rig Platform, pg 2	0x07CB574F	
0x23C	DRP16K-3		31	Drilling Rig Platform, pg 3	0x168F261A	
0x23D	DRP16K-4		31	Drilling Rig Platform, pg 4	0xB8D836CD	
0x23E	GE126A-1	GEDA	9	Geodata 126A, pg 1	0xE2041AAF	
0x23F	GE126A-2		10	Geodata 126A, pg 2	0xC135517C	
0x240	LOGANA-1	LOGA	21	LOGANA, pg 1	0x7922945A	
0x241	LOGANA-2		31	LOGANA, pg 2	0x93FBB965	
0x242	41ENS-1	ENS1	21	41 ENS, pg 1	0xD07FEABB	
0x243	41ENS-2		31	41 ENS, pg 2	0x22B2FD27	
0x244	ASTRO1	ASTU	31	Astro-1	0x3C4908FD	
0x245	RADIAK-1	RADA	21	RADIAK	0x923A822D	
0x246	AMASTRO	ASTI	24	Amateur Astronomy	0xD0FEE85B	
0x247	SWORDS	IGSW	24	Gladiator Arena Game	0xB0EEDC5D	
0x248	IRPR-1B	IPRT	29	HP Infrared Printer Module, bnk 1	0xE8D475FB	
0x249	IRPR-3B			HP Infrared Printer Module, bnk 2	0x54FD2405	
0x24A	PRINTER	WPRT	29	HP 82143A Printer	0x88E517ED	
0x24B	ILMOD-1H	HILM	28	HP-IL Module	0xC646538A	
0x24C	WAND-1F	HWND	27	HP Barcode Wand	0x30C16379	
0x24D	ILPRT-2E	HILN	29	HP-IL Module Printer functions	0xC4FC4699	
0x24E	CARDR-1G	RCRD	30	HP-41 Card Reader	0xC1604FD1	
0x24F	INITRSU	IRSU	4	Eramco RSU Initialization	0x99674EFA	
0x250	OS41-1	OSBK	16	programs from Ted Bowers' book, pg 1	0xC9803E77	
0x251	OS41-2			programs from Ted Bowers' book, pg 2	0x55294914	
0x252	GMAC1	GMAQ	31	GMAC 1	0x7D17D183	
0x253	HDISASM	HDIS	9	HEPAX Disassembler	0x76DAFD70	
0x254	SOLVIT	UTIL	16	SOLVIT and XM Utilities	0x84F17D17	
0x255	DIVER	DIVE	16	Diving	0x2585F2AD	
0x256	MCTEST	MTST	3	Mctest	0x19AF1854	

0x257	83TRINH	TRIH	9	83trinh	0x0C499145	
0x258	BSH1	BSHM	21	Bausparkasse Swabisch Hall EPROM, pg 1	0x1DB37BF5	
0x259	BSH2		31	Bausparkasse Swabisch Hall EPROM, pg 2	0x884F4099	
0x25A	BSH3		15	Bausparkasse Swabisch Hall EPROM, pg 3	0xA12A0934	
0x25B	BSH4		16	Bausparkasse Swabisch Hall EPROM, pg 4	0x6C0743C9	
0x25C	DERIVE41	DRVP	21	DERIVE41	0xD10B4A6C	
0x25D	DIFFGEO5		31	DIFF GEOM	0xD37FC5E6	
0x25E	PRISMTH1	QMTH	13	Prisma Math	0x0B712962	
0x25F	PRISMTH2		13	Prisma Math	0x9F2DBA29	
0x260	ST_DMNGO	SDMO	31	Ste. Domingo	0xE5193871	
0x261	ELLIPREF	BEPT	10	Ellipsoidal Refraction	0x747BFB61	
0x262	-EQN_LIB	ELIB	11	Equation Library	0xE238C874	
0x263	FISHSTOK	FSTK	16	Fish Stock Calculations	0x3FF6E27C	
0x264	LATLON	LTLN	9	Geodetics	0x47F821AE	
0x265	RIPRAP	RRAP	13	RIPRAP Engineering	0x68C9CD7A	
0x266	PAPERS1	PAPZ	10	Logging & Agricultural Engineering, pg 1	0x642A4569	
0x267	PAPERS2		16	Logging & Agricultural Engineering, pg 2	0x21A7E82C	
0x268	E-6A_1	E-6A	21	E-6A Weight & Balance, pg 1	0x30B8DDA3	
0x269	E-6A_2		31	E-6A Weight & Balance, pg 2	0xCAEE69CA	
0x26A	E-6A_3		10	E-6A Weight & Balance, pg 3	0xD09ED147	
0x26B	E-6A_4		9	E-6A Weight & Balance, pg 4	0xB3066F07	
0x26C	AP550-3L	TGT3	21	AP550 A3 Targeting, pg 1	0x30BD2647	
0x26D	AP550-3U		31	AP550 A3 Targeting, pg 2	0x6079942F	
0x26E	E3AFMS-1	E3AF	21	E-3A Flight Management System, pg 1	0xD06E207D	
0x26F	E3AFMS-2		31	E-3A Flight Management System, pg 2	0xE43B37DC	
0x270	SESASOL1	SESA	16	Struct. Engineering Systems Analysis, pg 1	0x932FECB4	
0x271	SESASOL2			Struct. Engineering Systems Analysis, pg 2	0xD49C6111	
0x272	FRNCHADV	FADV	12	French Adventure	0x1FE4DCAA	
0x273	DIVINAT	DIVN	9	Divination	0x0C9A108A	
0x274	SWPENG1	SWP5	12	Swap Disk Engineering Programs, pg 1	0xDCBDA43C	
0x275	SWPENG2			Swap Disk Engineering Programs, pg 2	0x6B451837	
0x276	ABRAFRA1	ABRD	1	Abrasives Formulation, pg 1	0x7BBD79C2	
0x277	ABRAFRA2		2	Abrasives Formulation, pg 2	0xF482C450	
0x278	IPALL1	MINV	21	Merchantile Mutual Investment Pac, pg 1	0xE8E72558	
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0x27A	CALCS1	MLMU	31	Merchantile Mutual Live Mortgages, pg 1	0xAC98424D	
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0x27C	BBALL1	UPBB	9	User Library Programs - Baseball, pg 1	0x08DC3400	
0x27D	BBALL2			User Library Programs - Baseball, pg 2	0x593A02D7	
0x27E	IMSSYS4L	IMS4	31	IMS System-4, pg 1	0x6B2D0D27	
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0x280	PAGE1	120M	31	120mm Mortar, pg 1, bnk 1	0x0DAC60D8	
0x281	PAGE12		31	120mm Mortar, pg 1, bnk 2	0x18CD73C2	
0x282	KACHELN1	MWK5	12	Buderus Kachelofen, pg 1	0x96A7F26B	
0x283	KACHELN2		13	Buderus Kachelofen, pg 2	0x393E05E0	
0x284	PAGE2	120M	21	120mm Mortar, pg 2, bnk 1	0xCCF0EDF6	
0x285	PAGE22		21	120mm Mortar, pg 2, bnk 2	0xA18AC786	
0x286	441ZL	441Z	1	Library-4 HP41Z, pg 1	0x8243464F	
0x287	441ZU		4	Library-4 HP41Z, pg 2	0x326EE777	
0x288	2024AUG	CEPH	24	Ephemerides 2024 August	0xA2ACD9D1	07/31/24

0x289	2024JUL	<b>LEPH</b>	<b>24</b>	Ephemerides 2024 July	0x273858D8	07/31/24
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	TOOLING	<b>TOOL</b>	<b>21</b>	Tooling Pac	0x7BA826C5	
0x291	AD_ASTR	<b>ASTL</b>	<b>10</b>	Ad Astra	0x900FEDA1	
0x292	ANCHORAG	<b>WLAA</b>	<b>31</b>	Anchorage, Alaska Water Level	0xB18750AB	
0x293	CHEMIST2	<b>2CHM</b>	<b>14</b>	Chemistry 3	0x01FA8184	
0x294	IOBOARD	<b>KBIO</b>	<b>21</b>	Klug Book I/O Board	0xCFA866C6	
0x295	ILRACK	<b>KBIL</b>	<b>21</b>	Klug Book IL Rack	0x7D541893	
0x296	AUDIO1	<b>KBAU</b>	<b>20</b>	Klug Book Audio, pg 1	0xE4E9462A	
0x297	AUDIO2		<b>21</b>	Klug Book Audio, pg 2	0xB1734C2D	
0x298	STRUCT1	<b>DESB</b>	<b>16</b>	HP-41 Structural Design Sol'n Book, Pg 1	0x3A83FC4B	
0x299	STRUCT2			HP-41 Structural Design Sol'n Book, pg 2	0xF842553D	
0x29A	DATALOD1	<b>DESV</b>	<b>20</b>	HP-41 Structural Design Sol'n Tables, pg 1	0xB8F73644	
0x29B	DATALOD2			HP-41 Structural Design Sol'n Tables, pg 2	0xB900470D	
0x29C	DATALOD3			HP-41 Structural Design Sol'n Tables, pg 3	0x3FF20EFA	
0x29D	DATALOD4			HP-41 Structural Design Sol'n Tables, pg 4	0x87A2097B	
0x29E	ASTROM2	<b>2AST</b>	<b>31</b>	ASTRO*ROM 2	0xCA478918	
0x29F	PEET	<b>GAMF</b>	<b>9</b>	PEET Games	0x0D52BF8E	
0x2A0	KHP4LIB	<b>BIN4</b>	<b>N/A</b>	HP-41 Binary Calculator library-4	0xF59EAD04	
0x2A1	KHPBIN	<b>KBIN</b>	<b>16</b>	HP-41 Binary Calculator	0x5933521B	
0x2A2	SEABAT1	<b>BSEA</b>	<b>16</b>	Sea Battles, pg 1	0xE9848193	
0x2A3	SEABAT2			Sea Battles, pg 2	0xCD8D752E	
0x2A4	SHOM1	<b>WLP5</b>	<b>31</b>	Water Level in 5 Ports, pg 1	0x14B7D9E7	
0x2A5	SHOM2		<b>32</b>	Water Level in 5 Ports, pg 2	0x9AC22F29	
0x2A6	PAPERS21	<b>ENG2</b>	<b>16</b>	Diverse Engineering Papers, pg 1	0x1A8FBEEC	
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0x2A8	LOGPAC_1	<b>LPAK</b>	<b>31</b>	LOG PAC, pg 1	0xED1E2F3D	
0x2A9	LOGPAC_2		<b>4</b>	LOG PAC, pg 2	0x11BA614D	
0x2AA	LOGPAC_3		<b>9</b>	LOG PAC, pg 3	0xB946CBA4	
0x2AB	LOGPAC_4		<b>10</b>	LOG PAC, pg 4	0x8FB58460	
0x2AC	DIST7_1	<b>DST5</b>	<b>1</b>	District 7, pg 1	0xB6DE2868	
0x2AD	DIST7_2		<b>2</b>	District 7, pg 2	0x44DB710F	
0x2AE	DIST7_3		<b>3</b>	District 7, pg 3	0xC36A2563	
0x2AF	DIST7_4		<b>7</b>	District 7, pg 4	0x1B00A452	
0x2B0	COGO_PGC	<b>SVY2</b>	<b>4</b>	COGO Programs, pg 1	0x0648D8D5	
0x2B1	COGO_PGD		<b>10</b>	COGO Programs, pg 2	0x5528FE19	
0x2B2	COGO_PGE		<b>31</b>	COGO Programs, pg 3	0xF183D28F	
0x2B3	COGO_PGF		<b>30</b>	COGO Programs, pg 4	0x31302A25	
0x2B4	LANDERS	<b>LNDR</b>	<b>16</b>	Planet Lander Games	0x8DF1E9A2	
0x2B5	MMINDS	<b>MIND</b>	<b>17</b>	Master Minds Games	0xD2F69C86	
0x2B6	HANGMEN	<b>GMAN</b>	<b>15</b>	Hangman Games	0xC8D08081	
0x2B7	NBODY	<b>BNBD</b>	<b>13</b>	Gravitational N-body Problem	0x666BD4FB	
0x2B8	C141BL	<b>141B</b>	<b>22</b>	C141B FSC, pg 1	0xDE1B6C26	
0x2B9	C141BU		<b>31</b>	C141B FSC, pg 2	0xB2D15B96	
0x2BA	TINKER1	<b>TAFB</b>	<b>21</b>	Tinker AFB, pg 1	0xD06E207D	
0x2BB	TINKER2		<b>31</b>	Tinker AFB, pg 2	0xE43B37DC	

0x2BC	AP550-2	TGT2	10	AP550 A2 Targeting	0x28A0B775	
0x2BD	ALL_FF			empty	0x53D36BD2	
0x2BE	WPNEFF_L	WPNE	21	Weapon Effects, pg 1	0xE4C89BC9	
0x2BF	WPNEFF_U		31	Weapon Effects, pg 2	0xAA5B6B68	
0x2C0	DURPRG1	DURR	11	Accident Forensics Engineering, pg 1	0x8B79F34A	
0x2C1	DURPRG2		12	Accident Forensics Engineering, pg 2	0xDEADC029	
0x2C2	DURPRG3		13	Accident Forensics Engineering, pg 3	0x77B633AB	
0x2C3	DURPRG4		14	Accident Forensics Engineering, pg 4	0xD490AD1A	
0x2C4	DURPRG5	DURU	15	Accident Forensics Engineering, pg 5	0x1E10D12D	
0x2C5	DURPRG6		16	Accident Forensics Engineering, pg 6	0x19D0167B	
0x2C6	DURPRG7		17	Accident Forensics Engineering, pg 7	0xE0A78D24	
0x2C7	ALL_00		N/A	blank (loaded as Acc. Forens. Eng, pg 8)	0xD666D0E4	
0x2C8	HELICOP1	HELI	10	Helicopters, pg 1	0x9A2BBE2A	
0x2C9	HELICOP2		11	Helicopters, pg 2	0xDAE69350	
0x2CA	HELICOP3		11	Helicopters, pg 3	0xFF880C05	
0x2CB	ALL_00		N/A	blank (loaded as Helicopters, pg 4)	0xD666D0E4	
0x2CC	RAMPAGE	RM PG	15	RAMpage	0x74520970	
0x2CD	AMCOSX4	AOSX	5	LIBRARY-4 AMC-OSX	0xA8B65DDE	
0x2CE	GONG1	GONH	10	GONG Report, pg 1	0xA0CE681B	
0x2CF	GONG2		20	GONG Report, pg 2	0xC84E2EEC	
0x2D0	AFDC1L	AFDE	16	AFDC1, pg 1	0xE8F9A42E	
0x2D1	AFDC1U		17	AFDC1, pg 2	0x84C6B256	
0x2D2	AFDC2L	AFDF	18	AFDC2, pg 1	0xD8530171	
0x2D3	AFDC2U		19	AFDC2, pg 2	0x69A18873	
0x2D4	B52DEX	B52B	21	Boeing B-52, pg 1	0xE78B04BD	
0x2D5	B52DIO		31	Boeing B-52, pg 2	0xA014A069	
0x2D6	FACCL	FACC	10	300889 FACC, pg 1	0xFBB19D07	
0x2D7	FACCU		11	300889 FACC, pg 2	0x9B205EEC	
0x2D8	L119L	L119	21	AFDC-L119, pg 1	0xE19AFE10	
0x2D9	L119U		31	AFDC-L119, pg 2	0x7BD2A484	
0x2DA	KC135_1L	K135	21	KC135 Weight & Balance, pg 1	0xC69D63BD	
0x2DB	KC135_1U		31	KC135 Weight & Balance, pg 2	0xE6E1F56A	
0x2DC	KC135_2		16	KC135 Weight & Balance, pg 3	0xC19C79A9	
0x2DD	ALL_00		N/A	blank (loaded as KC135 W&B, pg 4)	0xD666D0E4	
0x2DE	USPSL	USPS	21	DEL SERV 1, pg 1	0x5DAF1F6C	
0x2DF	USPSU		31	DEV SERV 1, pg 2	0xA99532C3	
0x2E0	APAC1	P3BC	9	Aviation Pac for P3B/C, pg 1	0xF1D2CC95	
0x2E1	APAC2		31	Aviation Pac for P3B/C, pg 2	0x82DB2775	
0x2E2	APAC3		21	Aviation Pac for P3B/C, pg 3	0x825B3038	
0x2E3	APAC4		9	Aviation Pac for P3B/C, pg 4	0xF1D2CC95	
0x2E4	SEAKING	SEAK	21	SeaKing	0x0F256BCD	
0x2E5	ALL_FF			empty	0x53D36BD2	
0x2E6	SOLARS1	SOLS	9	Solar System, pg 1	0x424CA059	
0x2E7	SOLARS2		20	Solar System, pg 2	0xBC58FAAF	
0x2E8	BBS1	BBSC	11	Bank Beratungs Software, pg 1	0x506EB229	
0x2E9	BBS2		12	Bank Beratungs Software, pg 2	0xCB4ED3ED	
0x2EA	BBS3		13	Bank Beratungs Software, pg 3	0x7D295934	
0x2EB	BBS4		14	Bank Beratungs Software, pg 4	0xA441583F	
0x2EC	CMT_1	CMT1	31	CMT-100 Eprom Test, pg 1	0x40C2CF42	
0x2ED	CMT_2			CMT-100 Eprom Test, pg 2	0xA1C2F451	
0x2EE	CMT_3			CMT-100 Eprom Test, pg 3	0x42B276C5	

0x2EF	CMT_4			CMT-100 Eprom Test, pg 4	0x67C06D58	
0x2F0	MDC_ROM1	<b>IMDC</b>	<b>15</b>	MDC ROM, pg 1	0xF57E7183	
0x2F1	MDC_ROM2		<b>16</b>	MDC ROM, pg 2	0xE30D7C76	
0x2F2	MDC_ROM3		<b>17</b>	MDC ROM, pg 3	0x9D7A9261	
0x2F3	ALL_00		<b>N/A</b>	blank (loaded as MDC ROM, pg 4)	0xD666D0E4	
0x2F4	AV1	<b>AV1Q</b>	<b>31</b>	AV1	0xC2AD790B	
0x2F5	MW6KOELN	<b>MWK9</b>	<b>1</b>	MW6KOELN	0x8AD12636	
0x2F6	ALL_FF			empty	0x53D36BD2	
0x2F7	ALL_FF			empty	0x53D36BD2	
0x2F8	HEPX1-1F	<b>HPXQ</b>	<b>7</b>	experimental HEPAX 1F, bnk 1	0x5306B115	
0x2F9	HEPX2-1D			HEPAX 1D, bnk 2	0xE9ACACBA	
0x2FA	HEPX3-1D			HEPAX 1D, bnk 3	0x5C548CF8	
0x2FB	HEPX4-1D			HEPAX 1D, bnk 4	0x88B25201	
0x2FC	XLIB4_B1	<b>X4LB</b>	<b>N/A</b>	C/CV-compatible Library-4, bnk 1	0x9B994ED8	
0x2FD	XLIB4_B2			C/CV-compatible Library-4, bnk 2	0xF5930A27	
0x2FE	ALL_FF			empty	0x53D36BD2	
0x2FF	ALL_FF			empty	0x53D36BD2	
0x300	X16C_B1	<b>X16C</b>	<b>16</b>	HP-16C Emulator -1A, bnk 1 (XLIB4)	0xD9F272B6	
0x301	X16C_B2			HP-16C Emulator -1A, bnk 2 (XLIB4)	0x92E694C4	
0x302	HP-16C_3			HP-16C Emulator -1A, bnk 3	0xE576C6D8	
0x303	X16C_B4			HP-16C Emulator -1A, bnk 4 (XLIB4)	0x8219EFF8	
0x304	XOSX_B1	<b>XOSX</b>	<b>5</b>	OS/X Bank-Switched, bnk 1 (XLIB4)	0xD42A10C0	
0x305	XOSX_B2			OS/X Bank-Switched, bnk 2 (XLIB4)	0x3A6DAB4C	
0x306	XOSX_B3			OS/X Bank-Switched, bnk 3 (XLIB4)	0x13ED60F2	
0x307	XOSX_B4			OS/X Bank-Switched, bnk 4 (XLIB4)	0xB95E3FE2	
0x308	XSMAT_41	<b>XSM4</b>	<b>3</b>	Sandmath 4x4, pg 1, bnk 1 (XLIB4)	0xA6F7794B	
0x309	XSMAT_42			Sandmath 4x4, pg 1, bnk 2 (XLIB4)	0xB9442372	
0x30A	XSMAT_43			Sandmath 4x4, pg 1, bnk 3 (XLIB4)	0xC9F4EA8D	
0x30B	XSMAT_44			Sandmath 4x4, pg 1, bnk 4 (XLIB4)	0xEF76184A	
0x30C	XHLMT_41		<b>2</b>	Sandmath 4x4, pg 2, bnk 1 (XLIB4)	0x844E5CEA	
0x30D	XHLMT_42			Sandmath 4x4, pg 2, bnk 2 (XLIB4)	0x67250149	
0x30E	XHLMT_43			Sandmath 4x4, pg 2, bnk 3 (XLIB4)	0x57146507	
0x30F	XHLMT_44			Sandmath 4x4, pg 2, bnk 4 (XLIB4)	0x3A850B3E	
0x310	X41Z_L1	<b>XZ41</b>	<b>1</b>	41Z Deluxe, pg 1, bnk 1 (XLIB4)	0x4B314004	
0x311	X41Z_L2			41Z Deluxe, pg 1, bnk 2 (XLIB4)	0x9BD16C0D	
0x312	XMTPL_11	<b>XMTI</b>	<b>22</b>	Matrix/Polynomial, pg 1, bnk 1 (XLIB4)	0xB892AFC1	
0x313	XMTPL_12			Matrix/Polynomial, pg 1, bnk 2 (XLIB4)	0x5438012D	
0x314	X41Z_U1	<b>XZ41</b>	<b>4</b>	41Z Deluxe, pg 2, bnk 1 (XLIB4)	0x0B444381	
0x315	X41Z_U2			41Z Deluxe, pg 2, bnk 2 (XLIB4)	0xD00E3208	
0x316	XMTPL_21	<b>XMTI</b>	<b>24</b>	Matrix/Polynomial, pg 2, bnk 1 (XLIB4)	0x1E634DC5	
0x317	XMTPL_22			Matrix/Polynomial, pg 2, bnk 2 (XLIB4)	0xE0765840	
0x318	XWARP_B1	<b>XCRE</b>	<b>21</b>	Warp-core, bnk 1 (XLIB4)	0xADB85DBA	
0x319	XWARP_B2			Warp-core, bnk 2 (XLIB4)	0x133E8E91	
0x31A	XWARP_B3			Warp-core, bnk 3 (XLIB4)	0x23158D58	
0x31B	XALPHA44	<b>XAPH</b>	<b>6</b>	Alpha (XLIB4)	0xB21590D4	
0x31C	XEVAL_EQ	<b>XSLV</b>	<b>31</b>	Formula Evaluation Equations (XLIB4)	0xD8ADA569	
0x31D	XEVAL_VF	<b>XFVF</b>	<b>30</b>	Formula Evaluation (XLIB4)	0x6FDA66D0	
0x31E	XRAMPAGX	<b>XRPG</b>	<b>17</b>	RAMpage X (XLIB4)	0xF7851BDF	
0x31F	XTBOX4L	<b>XTOO</b>	<b>13</b>	Toolbox (XLIB4)	0xF8B0EC46	
0x320	XSIROM	<b>WSIR</b>	<b>27</b>	Solve & Integrate (XLIB4)	0x99B419FE	



0x321	XRANDOM	WRAN	6	Random Numbers (XLIB4)	0x324F832A	
0x322	XCPXMTRX	WMTZ	13	Complex Matrices (XLIB4)	0xA6A2B607	
0x323	XADVMTH	WMTH	12	Advantage Math (XLIB4)	0x531347C2	
0x324	XDBLDOWN	XDBD	1	Dual Stack (XLIB4)	0xE4504FE1	
0x325	XXROM	WXRO	31	XROM (XLIB4)	0x34FA30C3	
0x326	XXMEMXF	WXMf	17	X-mem Extended Functions (XLIB4)	0x3E52275E	
0x327	XXMTWIN	WXTI	20	X-mem TWIN (XLIB4)	0x42BB9184	
0x328	HEPX4H_1	WHPX	7	HEPAX 4H, bnk 1	0x098EFF9E	
0x329	XHEPX_B2			HEPAX 4H, bnk 2 (XLIB4)	0x8475676B	
0x32A	HEPX4H_3			HEPAX 4H, bnk 3	0x0330CD6E	
0x32B	HEPX4H_4			HEPAX 4H, bnk 4	0xDEA6DD4B	
0x32C	XPIE	XPIY	9	Dual Numbers and Double Stack (XLIB4)	0x6F826247	
0x32D	XYRGAPPS	XRGQ	21	YREG Applications (XLIB4)	0xDC85A6AF	
0x32E	XTVM	XTVZ	22	Time Value of Money (XLIB4)	0xB287704F	
0x32F	XSERIES	XSEJ	18	Sums & Series (XLIB4)	0x59749DB1	
0x330	BALLIST	PROJ	10	Ballistic Programs	0xA9B7179F	
0x331	CIPW	CIPW	16	Cation Norm	0x22040A97	
0x332	HAMDIST	HAMZ	10	HAM Distances	0xC9220727	
0x333	ODES	ODES	10	ODE Papers	0x86D4022A	
0x334	BAFFLED	BFL5	20	Loudspeaker Design	0x54A2B71B	
0x335	ALL_FF			empty	0x53D36BD2	
0x336	ALL_FF			empty	0x53D36BD2	
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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	
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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	
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0x353	ALL_FF			empty	0x53D36BD2	

0x354	ALL_FF			empty	0x53D36BD2	
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0x356	ALL_FF			empty	0x53D36BD2	
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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	
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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	
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0x378	ALL_FF			empty	0x53D36BD2	
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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	
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0x381	ALL_FF			empty	0x53D36BD2	
0x382	ALL_FF			empty	0x53D36BD2	
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0x385	ALL_FF			empty	0x53D36BD2	
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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	
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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	
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0x3AB	ALL_FF			empty	0x53D36BD2	
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0x3B1	ALL_FF			empty	0x53D36BD2	
0x3B2	ALL_FF			empty	0x53D36BD2	
0x3B3	ALL_FF			empty	0x53D36BD2	
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0x3B8	ALL_FF			empty	0x53D36BD2	

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0x3BB	ALL_FF			empty	0x53D36BD2	
0x3BC	ALL_FF			empty	0x53D36BD2	
0x3BD	ALL_FF			empty	0x53D36BD2	
0x3BE	ALL_FF			empty	0x53D36BD2	
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0x3D6	ALL_FF			empty	0x53D36BD2	
0x3D7	ALL_FF			empty	0x53D36BD2	
0x3D8	ALL_FF			empty	0x53D36BD2	
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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			Reserved for User	0x53D36BD2	
0x3E1	ALL_FF				0x53D36BD2	
0x3E2	ALL_FF				0x53D36BD2	
0x3E3	ALL_FF				0x53D36BD2	
0x3E4	ALL_FF				0x53D36BD2	
0x3E5	ALL_FF				0x53D36BD2	
0x3E6	ALL_FF				0x53D36BD2	
0x3E7	ALL_FF				0x53D36BD2	
0x3E8	ALL_FF			Reserved for User	0x53D36BD2	
0x3E9	ALL_FF				0x53D36BD2	
0x3EA	ALL_FF				0x53D36BD2	
0x3EB	ALL_FF				0x53D36BD2	

0x3EC	ALL_FF				0x53D36BD2	
0x3ED	ALL_FF				0x53D36BD2	
0x3EE	ALL_FF				0x53D36BD2	
0x3EF	ALL_FF				0x53D36BD2	
0x3F0	ALL_FF			Reserved for User	0x53D36BD2	
0x3F1	ALL_FF				0x53D36BD2	
0x3F2	ALL_FF				0x53D36BD2	
0x3F3	ALL_FF				0x53D36BD2	
0x3F4	ALL_FF				0x53D36BD2	
0x3F5	ALL_FF				0x53D36BD2	
0x3F6	ALL_FF				0x53D36BD2	
0x3F7	ALL_FF				0x53D36BD2	
0x3F8	ALL_FF			Reserved for User	0x53D36BD2	
0x3F9	ALL_FF				0x53D36BD2	
0x3FA	ALL_FF				0x53D36BD2	
0x3FB	ALL_FF				0x53D36BD2	
0x3FC	ALL_FF				0x53D36BD2	
0x3FD	ALL_FF				0x53D36BD2	
0x3FE	ALL_FF				0x53D36BD2	
0x3FF	ALL_FF				0x53D36BD2	
0x800				41C Registers 0-3FF		
0x801				Registers 400-FFF (not utilized by the OS) also known as Expanded Memory		
0x802						
0x803						
0x804				41CL MMU registers		
0x805		<b>YBFR</b>		41CL Memory Buffer		
0x806		<b>CFDB</b>		Memory Buffer or CFLDB location		
0x807						
0x808						
0x809						
0x80A						
0x80B						
0x80C		<b>YFNC</b>		Reserved for custom YFNZ or YFNX		
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						
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0x837						
0x838						
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0x83A						
0x83B						
0x83C						
0x83D						
0x83E						
0x83F						
0x840						
0x841						
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0x847						
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0x849						
0x84A						
0x84B						
0x84C						
0x84D						
0x84E						
0x84F						
0x850						
0x851						

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0x866						
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0x868						
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0x879						
0x87A						
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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	Key Assign Buffer, Alarm Buffer, I/O Buffers, Program memory Data
0x800304 - 0x800307	Register 0C1	
.	.	
.	.	
0x8007F8 - 0x8007FB	Register 1FE	
0x8007FC - 0x8007FF	Register 1FF	
0x800800 - 0x800803	Register 200	not visible to OS

0x800804 - 0x800807	Register 201		X-Memory
0x800808 - 0x80080B	Register 202		
.	.		
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 registers (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 registers (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 registers (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	
0x804045		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 - 0x8041FF	MMU registers, sets 4-7		MMU data
0x804200 - 0x8042FF	MMU registers, sets 8-B		MMU data
0x804300 - 0x8043FF	MMU registers, sets C-F		MMU data
0x804400 - 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	Z23	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 meaning
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-F are used only by the *41CL Extreme Functions*. The arrangement of MMU register sets 4-7, 8-B and C-F is identical to the arrangement for sets 0-3 as shown in the RAM Memory Details.