



Memory map of XRAM area for LCU-FM PROM software with patch2.4 ver.292A from Feb. 2010:

Red area is critical for proper detection and repairing the SEU corruption

Address	Name of area	Size (bytes)	comments
0x0000 - 0x2791	Program memory with:	10130 bytes	
0x0000 - 0x0006	Start & int0 service	7	
0x0007 - 0x0012	not used	12	Empty
0x0013 - 0x001A	Int1 vector service	8	
0x001B - 0x00A2	Delays proc	136	
0x00A3 - 0x00D1	Not used	47	Contains 00H
0x00D2 - 0x00EE	Memory procedures	29	
0x00EF - 0x0112	CRC	36	Checksum calculation
0x0113 - 0x0147	Memory procedures	53	Modify XRAM
0x0148 - 0x0151	Memory procedures	10	
0x0152 - 0x0364	Not used	531	Contains 00H
0x0365 - 0x05DD	Tables procedures	633	Copy_safe_to_default, calc_param_addr
0x05DE - 0x06E4	LSU proc	263	tuning_macro, goto_standby
0x06E5 - 0x07C7	Mux proc	227	HK_request (measurements)
0x07C8 - 0x0842	Adc proc	123	HK_request (measurements)
0x0843 - 0x0B6D	supply proc	811	
0x0B6E - 0x0CE5	hardware proc	376	
0x0CE6 - 0x0F23	Hsk proc	574	
0x0CE6 - 0x0DE6	Hsk_jump, B0-B1	257	HK_request, B0xx
0x0CEC - 0x0CF1	Hsk_jump, B2-B3	6	HK_request, B2xx
0x0CF2 - 0x0D21	Hsk B0xx proc	48	hskB0xx jump table
0x0D22 - 0x0D51	Hsk B2xx proc	48	hskB2xx jump table
0x0D52 - 0x0D7B	Hsk request	42	Hsk procedure
0x0D7C - 0x0D8D	No_hsk proc	18	Used in B0xx
0x0D8E - 0x0DE6	Hsk B0xx proc	89	B0xx
0x0DE7 - 0x0E57	Hsk B1xx proc	113	B1xx
0x0E58 - 0x0F23	Hsk B2+B3, send proc	204	B2xx, B3xx
0x0F24 - 0x1649	comm proc	1830	
0x0F24 - 0x0F4E	Check_mode proc	43	Check mode procedure
0x0F4F - 0x0F51	jmp komendyF0xx	3	Comm jump table
0x0F52 - 0x0F57	jmp komendyF1-2	6	Comm jump table
0x0F58 - 0x0F5D	jmp komendyF3xx	6	Comm jump table
0x0F5E - 0x0FAB	Comm_F0-F00jump	78	Commands procedure
0x0FAC - 0x0FB1	Start-calc part_crc	6	Comm jump table
0x0FB2 - 0x0FBA	Comm_jump proc	9	Commands procedure
0x0FBB - 0x1032	Command_exec	120	Comm jump table



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0x1033 - 0x1081	Not used	79	Procedures used in DIAGNOSTIC
0x1082 - 0x10B1	standby proc	48	Goto_standby mode
0x10B2 - 0x10D5	normal proc	36	Goto_normal mode
0x10D6 - 0x10ED	diagnostic proc	24	Goto_diagnostic mode
0x10EE - 0x114D	FSW proc	96	Goto_FSW
0x114E - 0x116A	Default to safe proc	29	komF006 procedure
0x116B - 0x1187	Not used	28	Procedures used in DIAGNOSTIC
0x1188 - 0x119E	Reset error proc	29	komF006 procedure
0x119F - 0x11C1	Set main heat proc	35	Set main heater procedure
0x11C2 - 0x12B5	Not used	244	Procedures used in DIAGNOSTIC
0x12B6 - 0x12D0	Set LSU_DELTA_FREQ proc	27	Set LSU_DELTA procedure
0x12D1 - 0x1340	Not used	112	Procedures used in DIAGNOSTIC
0x1341 - 0x13AE	Table modification proc	110	Table modification procedure
0x13AF - 0x13F9	F3xx commands proc	75	Set RAMPAGE, CRC procedure
0x13FA - 0x1418	F3xx commands proc	31	
0x1419 - 0x14CE	macrocommands proc	182	Macro commands procedure
0x14CF - 0x1649	Not used	378	Test proc. remained in DIAGNOST
0x164A - 0x17BA	IVC proc	369	IV curie
0x17BB - 0x1A24	D2 loop proc	618	
0x1A25 - 0x1F8B	TM proc	1383	
0x1F8C - 0x2087	FSW proc	252	
0x2088 - 0x20CC	Start proc	69	
0x20CD - 0x2115	restart proc	73	From failure
0x2116 - 0x212C	Main loop proc	23	Main loop
0x212D - 0x2136	Abort command proc	10	Abort current command
0x2137 - 0x21AA	INT0 service	116	
0x21AB - 0x2228	INT1 service	126	Command service
0x2229 - 0x223F	Raise exception	23	exception
0x2240 - 0x2451	Tables (mux,bias	530	
0x2452 - 0x26F1	IVC tables	672	
0x26F2 - 0x2791	LSU tables	160	
0x2792 - 0x6B29	safety table	17304 bytes	
0x6B2A - 0x79F7	patch area memory buffer	3790 bytes	
0x6B2A - 0x6B41	Dissipative mode	24 bytes	
0x6B42 - 0x6B60	New power int	32 bytes	
0x6B61 - 0x6B67	Start partial_crc	7 bytes	
0x6B68 - 0x6B8B	Calc partial_crc	36 bytes	
0x6B8C - 0x79ED	Not used	3682 bytes	
0x79EE - 0x79F7	Jump to 0000	10 bytes	

Total critical area = 799 bytes in 13 blocks