

■ Self RAM list of Flash Self-Programming Library for RL78 Family

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This document is a list of Self RAM area which are needed when using the following library (European Release/Japanese Release) of RL78 Family.
Target region of "European Release" and "Japanese Release" differs.

● European Release Target region: Americas/ Brazil/ Europe/ Middle East/ Africa		Library Note		Representation in List	
Flash Self-programming Library Type T01		FSL T01			
Data Flash Access Library Type T04 (Pico)		FDL T04			
Data Flash Access Library FDL - T01		FDL T01			
Data Flash Access Library Type T02 (Tiny)		FDL T02			
EEPROM Emulation Library EEL - T01		EEL T01			
EEPROM Emulation Library Type T02 (Tiny)		EEL T02			

● Japanese Release Target region: Japan/ Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan		Library Note		Representation in List	
Flash Self-programming Library (Code Flash Library) Type01		FSL Type01			
Data Flash Library Type04		FDL Type04			
EEPROM Emulation Library Pack01		EEL Pack01			
EEPROM Emulation Library Pack02		EEL Pack02			

Note: Do not allocate the stack area, data buffers for use by the flash library, arguments of library functions, branch destinations in the processing of vectored interrupts, or destinations or sources for DMA transfer to the area from FFE20H to FFEDFH when performing Self-programming or rewriting of the data flash memory.

-: Since MCU has a dedicated area for Self RAM, reservation of Self RAM area is unnecessary.

MCU Group	Memory size (bytes)			Self RAM areas note1								Target MCU name					
	Code flash memory	RAM	Data flash memory	FSL T01		FDL T04		FDL T01		FDL T02		EEL T01		EEL Pack02			
				Self RAM size 1Kbytes	Self RAM size 136bytes	Self RAM size 192bytes	Self RAM size 160bytes	Self RAM size 1022bytes (max) note2	Self RAM size 384bytes (max) note3	Self RAM size 384bytes (max) note3	Self RAM size 384bytes (max) note3	EEL Pack02	EEL T02				
RL78/D1A	24K	2K	8K	-	-	-	-	-	-	-	-	-	-	R5F10CGB			
	32K	2K	8K	-	-	-	-	-	-	-	-	-	-	R5F10CGC, R5F10DGC			
	48K	3K	8K	-	note4	-	-	-	-	-	-	-	-	R5F10Cx(x = G, L, M), R5F10DxD(x = G, L, M)			
	64K	4K	8K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	R5F10CME, R5F10DxE(x = G, L, M)			
	64K	4K	8K	-	-	-	-	-	-	-	-	-	-	R5F10DPE			
	96K	6K	8K	-	-	-	-	-	-	-	-	-	-	R5F10DMF, R5F10DPF			
	128K	8K	8K	-	-	-	-	-	-	-	-	-	-	R5F10DMG, R5F10DPG			
	256K	16K	8K	FBB00H- FC2FFH	note5	FBB00H- FBF87H	FBB00H- FBFBFH	FBB00H- FB9FH	FBB00H- FC2FDH	FBB00H- FC07FH	FBB00H- FC07FH	FBB00H- FC07FH	FBB00H- FC07FH	R5F10DMJ, R5F10TPJ, R5F10DPJ			
	256K	16K	8K	-	-	-	-	-	-	-	-	-	-	R5F10DSJ			
	384K	20K	8K	-	-	-	-	-	-	-	-	-	-	R5F10DPK, R5F10DSK			
RL78/F12	512K	24K	8K	F9F00H- FA2FFH	note5	F9F00H- F9F87H	F9F00H- F9FBFH	F9F00H- F9FH	F9F00H- FA2FDH	F9F00H- FA07FH	F9F00H- FA07FH	F9F00H- FA07FH	F9F00H- FA07FH	R5F10DPL, R5F10DSL			
	8K	512	4K	-	-	-	-	-	-	Not supported	-	-	-	R5F10968			
	16K	1K	4K	-	-	-	-	-	-	-	-	-	-	R5F109xA(x = 6, A, B, G, L)			
	24K	1.5K	4K	-	-	-	-	-	-	-	-	-	-	R5F109xB(x = 6, A, B, G, L)			
	32K	2K	4K	-	-	-	-	-	-	-	-	-	-	R5F109xC(x = 6, A, B, G, L)			
	48K	3K	4K	-	note4	-	-	-	-	-	-	-	-	R5F109xD(x = 6, A, B, G, L)			
RL78/F13	64K	4K	4K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	R5F10AmA(m = 6, A, B, G)			
	16K	1K	4K	-	-	-	-	-	-	-	-	-	-	R5F10AmC(m = 6, A, B, G, L), R5F10BnC(n = A, B, G, L)			
	32K	2K	4K	-	-	-	-	-	-	-	-	-	-	R5F10AmD(m = 6, A, B, G, L), R5F10BnD(n = A, B, G, L)			
	48K	3K	4K	-	note4	-	-	-	-	-	-	-	-	R5F10AmE(m = 6, A, B, G, L)			
	64K	4K	4K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	FEF00H- FF07FH	R5F10AmE(m = A, B, G, L, M)			
	64K	4K	4K	-	-	-	-	-	-	-	-	-	-	R5F10AmF(m = G, L, M), R5F10BnF(n = A, B, G, L, M)			
RL78/F14	96K	8K	4K	FDF00H- FE2FFH	note5	FDF00H- FDF87H	FDF00H- FDFBFH	FDF00H- FDF9FH	FDF00H- FE2FDH	FDF00H- FE07FH	FDF00H- FE07FH	FDF00H- FE07FH	FDF00H- FE07FH	R5F10PmD(m = A, B, G)			
	96K	8K	4K	-	-	-	-	-	-	-	-	-	-	R5F10PmE(m = A, B, G, L, M, P)			
	128K	10K	8K	-	-	-	-	-	-	-	-	-	-	R5F10PpF			
	128K	16K	8K	-	-	-	-	-	-	-	-	-	-	R5F10PmG(m = G, L, M, P)			
	256K	20K	8K	FAF00H- FB2FFH	note5	FAF00H- FAF87H	FAF00H- FAFBFH	FAF00H- FAF9FH	FAF00H- FB2FDH	FAF00H- FB07FH	FAF00H- FB07FH	FAF00H- FB07FH	FAF00H- FB07FH	R5F10Pmu(m = G, L, M, P)			
	256K	20K	8K	-	-	-	-	-	-	-	-	-	-	R5F113mG(m = P, T)			
RL78/F15	128K	10K	8K	-	-	-	-	-	-	-	-	-	-	R5F113mH(m = P, T)			
	192K	16K	8K	-	-	-	-	-	-	-	-	-	-	R5F113mJ(m = P, T)			
	256K	20K	8K	-	-	-	-	-	-	-	-	-	-	R5F113mK(m = G, L, M, P, T)			
	384K	26K	16K	-	-	-	-	-	-	-	-	-	-	R5F113mL(m = G, L, M, P, T)			
	512K	32K	16K	F7F00H- F82FFH	note5	F7F00H- F7F87H	F7F00H- F7FBFH	F7F00H- F7FH	F7F00H- F82FDH	F7F00H- F807FH	F7F00H- F807FH	F7F00H- F807FH	F7F00H- F807FH	R5F113mN(m = G, L, M, P, T)			
RL78/G10	1K	128	None	Not supported								R5F10Yx4(x = 1, 4)					
	2K	256	None	Not supported								R5F10Yx6(x = 1, 4)					
	4K	512	None	Not supported								R5F10Yx7(x = 1, 4)					

MCU Group	Memory size (bytes)			Self RAM areas note1								Target MCU name	
	Code flash memory	RAM	Data flash memory	FSL T01		FDL T04	FDL T01	FDL T02	EEL T01	EEL Pack01	EEL Pack02	EEL T02	
				Self RAM size 1Kbytes		Self RAM size 136bytes	Self RAM size 192bytes	Self RAM size 160bytes	Self RAM size 1022bytes (max) note2	Self RAM size 384bytes (max) note3	Self RAM size 384bytes (max) note3	Self RAM size 384bytes (max) note3	
RL78/G13A	384K	24K	8K	-	-	-	-	-	-	-	-	-	R5F140xK(x = F, G, L, P)
	512K	32K	8K	F7F00H- F82FFH	note5	F7F00H- F7F87H	F7F00H- F7FBFH	F7F00H- F7F9FH	F7F00H- F82FDH	F7F00H- F807FH	F7F00H- F807FH	R5F140xL(x = F, G, L, P)	
RL78/G14	16K	2.5K	4K	-	-	-	-	-	-	-	-	-	R5F104xA(x = A-C, E-G)
	32K	4K	4K	-	-	-	-	-	-	-	-	-	R5F104xC(x = A-C, E-G, J, L)
	48K	5.5K	4K	FE900H- FECFFF	note5	FE900H- FE987H	FE900H- FE9BFH	FE900H- FE99FH	FE900H- FECFDH	FE900H- FEA7FH	FE900H- FEA7FH	R5F104xD(x = A-C, E-G, J, L)	
	64K	5.5K	4K	FE900H- FECFFF	note5	FE900H- FE987H	FE900H- FE9BFH	FE900H- FE99FH	FE900H- FECFDH	FE900H- FEA7FH	FE900H- FEA7FH	R5F104xE(x = A-C, E-G, J, L)	
	96K	12K	8K	-	-	-	-	-	-	-	-	-	R5F104xF(x = A-C, E-G, J, L, M, P)
	128K	16K	8K	-	-	-	-	-	-	-	-	-	R5F104xG(x = A-C, E-G, J, L, M, P)
	192K	20K	8K	-	-	-	-	-	-	-	-	-	R5F104xH(x = E-G, J, L, M, P)
	256K	24K	8K	F9F00H- FA2FFH	note5	F9F00H- F9F87H	F9F00H- F9FBFH	F9F00H- F9F9FH	F9F00H- FA2FDH	F9F00H- FA07FH	F9F00H- FA07FH	R5F104xJ(x = F, G, J, L, M, P)	
RL78/G1A	384K	32K	8K	-	-	-	-	-	-	-	-	-	R5F104xK(x = G, L, M, P)
	512K	48K	8K	F3F00H- F42FFH	note5	F3F00H- F3F87H	F3F00H- F3FBFH	F3F00H- F3F9FH	F3F00H- F42FDH	F3F00H- F407FH	F3F00H- F407FH	R5F104xL(x = G, L, M, P)	
	16K	2K	4K	-	-	-	-	-	-	-	-	-	R5F10ExA(x = 8, B, G)
	32K	2K	4K	-	-	-	-	-	-	-	-	-	R5F10ExC(x = 8, B, G, L)
RL78/G1C	48K	3K	4K	-	note4	-	-	-	-	-	-	-	R5F10ExD(x = 8, B, G, L)
	64K	4K	4K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	R5F10ExE(x = 8, B, G, L)	
RL78/G1D	32K	5.5K	2K	FE900H- FECFFF	note5	FE900H- FE987H	FE900H- FE9BFH	FE900H- FE99FH	Not supported	FE900H- FEA7FH	R5F10JxC(x = B, G), R5F10KxO(x = B, G)		
	128K	12K	8K	-	-	-	-	-	-	-	-	-	R5F11AGG
	192K	16K	8K	-	-	-	-	-	-	-	-	-	R5F11AGH
RL78/G1E	256K	20K	8K	FAF00H- FB2FFH	note5	FAF00H- FAF87H	FAF00H- FAFBFH	FAF00H- FAF9FH	FAF00H- FB2FDH	FAF00H- FB07FH	FAF00H- FB07FH	R5F11AGJ	
	32K	2K	4K	-	-	-	-	-	-	-	-	-	R5F10FxC(x = L, M)
	48K	3K	4K	-	note4	-	-	-	-	-	-	-	R5F10FxD(x = L, M)
	64K	4K	4K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	R5F10FxE(x = L, M)	
RL78/G1F	32K	5.5K	4K	FE900H- FECFFF	note5	FE900H- FE987H	FE900H- FE9BFH	FE900H- FE99FH	FE900H- FECFDH	FE900H- FEA7FH	FE900H- FEA7FH	R5F11BxO(x = 7, B, C, G, L)	
	64K	5.5K	4K	FE900H- FECFFF	note5	FE900H- FE987H	FE900H- FE9BFH	FE900H- FE99FH	FE900H- FECFDH	FE900H- FEA7FH	FE900H- FEA7FH	R5F11BxE(x = 7, B, C, G, L)	
RL78/G1G note6	8K	1.5K	None	FF900H- FFC7FH	note5	FF900H- FFC7FH	note5	Not supported	FF900H- FEA7FH	R5F11ExB(x = A, B, F)			
	16K	1.5K	None	FF900H- FFC7FH	note5	FF900H- FFC7FH	note5	Not supported	FF900H- FEA7FH	R5F11ExA(x = A, B, F)			
RL78/G1H	256K	24K	8K	-	-	-	-	-	-	-	-	-	R5F11FLJ
	384K	32K	8K	-	-	-	-	-	-	-	-	-	R5F11FLK
	512K	48K	8K	F3F00H- F42FFH	note5	F3F00H- F3F87H	F3F00H- F3FBFH	F3F00H- F3F9FH	F3F00H- F42FDH	F3F00H- F407FH	F3F00H- F407FH	R5F11FLL	
RL78/G1M	4K	512	None	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	FF900H- FEA7FH	R5F11W67		
	8K	1K	None	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	FF900H- FEA7FH	R5F11W68		
RL78/G1N	4K	512	None	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	FF900H- FEA7FH	R5F11Y67		
	8K	1K	None	Not supported	Not supported	Not supported	Not supported	Not supported	Not supported	FF900H- FEA7FH	R5F11Y68		
RL78/G1P note6	16K	1.5K	2K	FF900H- FFC7FH	note5	FF900H- FF987H	FF900H- FF9BFH	FF900H- FF99FH	Not supported	FF900H- FEA7FH	R5F11ZxA(x = 7, B)		
	64K	5.5K	4K	-	-	-	-	-	-	FF900H- FEA7FH	R5F11NME		
RL78/H1D	96K	5.5K	4K	-	-	-	-	-	-	FF900H- FEA7FH	R5F11xF(x= NG, NL, NM, PL)		
	128K	5.5K	4K	-	-	-	-	-	-	FF900H- FEA7FH	R5F11xG(x= NG, NL, NM, PL)		
	128K	8K	4K	FDF00H- FE2FFH	note5	FDF00H- FDF87H	FDF00H- FDFBFH	FDF00H- FDF9FH	FDF00H- FE2FDH	FDF00H- FE07FH	FDF00H- FE07FH	R5F11RMG	
	32K	2K	4K	-	-	-	-	-	-	FF900H- FEA7FH	R5F1076C, R5F107AC		
RL78/I1A	64K	4K	4K	FEF00H- FF2FFH	note5	FEF00H- FEF87H	FEF00H- FEFBFH	FEF00H- FEF9FH	FEF00H- FF2FDH	FEF00H- FF07FH	FEF00H- FF07FH	R5F107AE, R5F107DE	
	128K	8K	None	FDF00H- FE2FFH	note5	Not supported	Not supported	Not supported	Not supported	FF900H- FEA7FH	R5F10MM, R5F10MPE		
RL78/I1C	64K	6K	2K	-	-	-	-	-	Not supported	FF900H- FEA7FH	R5F10NME(x = L, M), R5F11TLE		
	128K	8K	2K	FDF00H- FE2FFH	note5	FDF00H- FDF87H	FDF00H- FDFBFH	FDF00H- FDF9FH	Not supported	FF900H- FEA7FH	R5F10NxG(x = L, M), R5F11TLG		
	128K	8K	2K	-	-	-	-	-	Not supported	FF900H- FEA7FH	R5F10NPG		
	256K	16K	2K	FBF00H- FC2FFH	note5	FBF00H- FBF87H	FBF00H- FBFBFH	FBF00H- FBF9FH	Not supported	FF900H- FEA7FH	R5F10NxJ(x = M, P)		
RL78/I1D	512K	32K	2K	F7F00H- F82FFH	note5	F7F00H- F7F87H	F7F00H- F7FBFH	F7F00H- F7F9FH	Not supported	FF900H- FEA7FH	F7F00H- F807FH	R5F10NxL(x = M, P)	
	8K	768	2K	-	-	-	-	-	Not supported	FF900H- FEA7FH	R5F117x8(x = 6, 7, A)		
	16K	2K	2K	-	note4	-	-	-	Not supported	FF900H- FEA7FH	R5F117xA(x = 6, 7, A, B, G)		
RL78/I1E	32K	3K	2K	FF300H- FF6FFH	note5	FF300H- FF387H	FF300H- FE3BFH	FF300H- FF39FH	FF300H- FF47FH	FF300H- FF47FH	R5F117xC(x = A, B, G)		
	32K	8K	4K	FDF00H- FE2FFH	note5	FDF00H- FDF87H	FDF00H- FDFBFH	FDF00H- FDF9FH	FDF00H- FE2FDH	FDF00H- FE07FH	FDF00H- FE07FH	R5F11CxO(x = B, C)	
RL78/L12 note6	8K	1K	2K	FFB00H- FCC7FH	note5	-	-	-	Not supported	FF900H- FEA7FH	R5F10Rx8(x = B, F, G, J)		
	16K	1K	2K	FFB00H- FCC7FH	note5	-	-	-					