

Renesas Microcomputer

H8S Family Selection Guide

H8S/2100 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers				Serial Interface		SSU/Special Serial I/O	CAN Channels	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions	Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer							Clock Sync./Clock Async.	I ² C-bus	IEBus	Input Only(Numbers)	CMOS I/O (Numbers)				
General-purpose	H8S/2100	H8S/2128S	HD6432127SXXXXFA	64K	2K	M	-	H8S/2000 core	65	50 (@20MHz)	-	-	DTC (85channels)	16M	-	-	-	10-bit x 8, 10-bit x 8 (expanded A/D input)	-	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	-	2	2	-	-	-	-	-	9	40	4	-	-	-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0064GB-A	
			HD6432127SXXXXFAI																																		-40 to 85	PRQP0064GB-A	
			HD6432127SXXXXPFS																																		-20 to 75	PRDP0064BB-A	
			HD6432127SXXXXPSI																																		-40 to 85	PTQP0080KC-A	
			HD6432127SXXXXTF																																		-20 to 75	PRQP0064GB-A	
			HD6432127SXXXXTFI																																		-40 to 85	PRDP0064BB-A	
			HD6432127SXXXXTFPFS																																		-40 to 85	PTQP0080KC-A	
			HD6432127SXXXXTFPSI																																		-20 to 75	PRQP0064GB-A	
			HD6432127SXXXXTFTF																																		-40 to 85	PRDP0064BB-A	
			HD6432127SXXXXTFTFI																																		-20 to 75	PTQP0080KC-A	
			HD6432127SXXXXTFTFPFS																																		-40 to 85	PRQP0064GB-A	
			HD6432127SXXXXTFTFPSI																																		-40 to 85	PRDP0064BB-A	
	HD6432127SXXXXTFTFTF	-20 to 75	PTQP0080KC-A																																				
	HD6432128SXXXXFA	128K	4K	M	-	H8S/2000 core	65	50 (@20MHz)	-	-	-	-	DTC (85channels)	16M	-	-	-	10-bit x 8, 10-bit x 8 (expanded A/D input)	-	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	-	2	2	-	-	-	-	9	40	4	-	-	-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0064GB-A		
	HD6432128SXXXXFAI																																			-40 to 85	PRQP0064GB-A		
	HD6432128SXXXXPFS																																			-20 to 75	PRDP0064BB-A		
	HD6432128SXXXXPSI																																			-40 to 85	PTQP0080KC-A		
	HD6432128SXXXXTF																																			-20 to 75	PRQP0064GB-A		
	HD6432128SXXXXTFI																																			-40 to 85	PRDP0064BB-A		
	HD6432128SXXXXTFPFS																																			-40 to 85	PTQP0080KC-A		
	HD6432128SXXXXTFPSI																																			-20 to 75	PRQP0064GB-A		
	HD6432128SXXXXTFTF																																			-40 to 85	PRDP0064BB-A		
	HD6432128SXXXXTFTFI																																			-20 to 75	PTQP0080KC-A		
	HD6432128SXXXXTFTFPFS																																			-40 to 85	PRQP0064GB-A		
HD6432128SXXXXTFTFPSI	-40 to 85																																			PRDP0064BB-A			
HD6432128SXXXXTFTFTF	-20 to 75	PTQP0080KC-A																																					

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 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2100 Series

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	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program	Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																	
General-purpose	H8S/2100	H8S/2134	HD6432130XXXFA	32K	M	-	H8S/2000 core	65	100 (@ 10MHz), 50 (@ 20MHz)	-	-	-	-	16M	-	-	-	10-bit x 8, 10-bit x 8 (expanded A/D input)	8-bit x 2	3(TMR0, TMR1, TMR2)	1(FRT)	-	2	3	-	-	-	-	-	-	-	9	57	9	-	-	-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 5.5V	-20 to 75	PRQP0080JB-A																		
			-40 to 85																																				PTQP0080KC-A																			
			HD6432130XXXFAI																																				2K	F	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A															
			HD6432130XXXTFI																																									64K	-	10MHz/3.0 to 5.5V	-20 to 75	PTQP0080KC-A										
			HD6432130XXXTF																																														M	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 5.5V	-40 to 85	PRQP0080JB-A						
			HD64F2132RFA20V																																																		96K	-	10MHz/2.7 to 3.6V	-40 to 85	PRQP0080JB-A	
			HD64F2132RFA10	-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 5.5V																																	-20 to 75																				PTQP0080KC-A
			HD64F2132RTF20V																																																							
			HD64F2132RTF10V																																				-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PRQP0080JB-A																
			HD6432132XXXFAI																																								4K	F	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PTQP0080KC-A											
			HD6432132XXXFA																																													128K	-	10MHz/2.7 to 3.6V	-40 to 85	PRQP0080JB-A						
			HD6432132XXXTFI																																																		M	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-20 to 75	PTQP0080KC-A		
			HD6432132XXXTF	-	10MHz/2.7 to 3.6V																																	-40 to 85																			PRQP0080JB-A	
			HD6432133SXXXFAI																																																							-
			HD6432133SXXXFA																																				-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																
			HD6432133SXXXTFI																																								-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A												
			HD6432133SXXXTF																																												-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A								
			HD6432133SXXXTFI																																																-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A				
			HD6432133SXXXTF	-	10MHz/2.7 to 3.6V																																	-20 to 75																	PRQP0080JB-A			
			HD64F2134AFA10V																																																					-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85
			HD64F2134AFA20V																																				-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																
			HD64F2134AVTF10V																																								-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-40 to 85	PTQP0080KC-A												
			HD64F2134ATF20V																																												-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A								
			HD64F2134ATF20V																																																-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-40 to 85	PTQP0080KC-A				
HD64F2134FA20V	-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																																						
HD64F2134VFA10V					-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																																		
HD64F2134TF20V									-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																														
HD64F2134VTF10													-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																										
HD6432134SXXXFAI																	-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																						
HD6432134SXXXFA																					-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																		
HD6432134SXXXTFI	-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																																						
HD6432134SXXXTF					-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																																		
HD6432134SXXXTFI									-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																														
HD6432134SXXXTF													-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																										
HD6432134SXXXTF																	-	10MHz/2.7 to 3.6V	-20 to 75	PRQP0080JB-A																																						
HD6432134SXXXTF																					-	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V, 10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																		

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H8S/2100 Series

Application	Device			Memory				CPU				DMA	External bus extension		Clock		ADC	DAC	Timers					Serial Interface			CAN				I/O Ports		On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package			
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special Serial I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)				External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug
General-purpose	H8S/2100	H8S/2134B	HD64F2134BFA20V	128K	4K	F		H8S/2000 core	65	50 (@20MHz)				16M				10-bit x 8	8-bit x 2	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	2	3	-								9	55	9			Yes	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A	
			HD64F2134BTF20V																																			PTQP0080KC-A			
			HD6432137SXXXXFA																																			10MHz/2.7 to 3.6V		PRQP0080JB-A	
			HD6432137SXXXXFAI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PTQP0080KC-A
			HD6432137SXXXXTF																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTR																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PTQP0080KC-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
			HD6432137SXXXXTFI																																			10MHz/2.7 to 3.6V		-40 to 85	PTQP0080KC-A
			HD6432137SXXXXTFI																																			20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PRQP0080JB-A
		HD6432137SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																				
		HD6432137SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A																																				
		HD6432137SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																				
		HD6432137SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A																																				
		HD6432137SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																				
		HD6432137SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A																																				
		HD6432137SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																				
		HD6432137SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A																																				
		HD6432137SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PTQP0080KC-A																																				
		HD6432138AFA10V	128K	4K	M	H8S/2000 core	65	100 (@10MHz), 50 (@20MHz)							DTC (86channels)	16M			10-bit x 8, 10-bit x 8 (expanded A/D input)	8-bit x 2	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	2	3	2							9	55	9			Yes	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0080JB-A	
		HD64F2138AFA20V																																				PTQP0080KC-A			
		HD64F2138ATF20V																																				10MHz/2.7 to 3.6V		-40 to 85	PRQP0080JB-A
		HD64F2138AVTF10V																																				20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PTQP0080KC-A
		HD64F2138AFA20V																																				10MHz/2.7 to 3.6V		-40 to 85	PRQP0080JB-A
		HD6432138SXXXXFA																																				20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		-20 to 75	PTQP0080KC-A
HD6432138SXXXXFAI	10MHz/2.7 to 3.6V	-40 to 85																																				PRQP0080JB-A			
HD6432138SXXXXFAI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75																																				PTQP0080KC-A			
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85																																				PRQP0080JB-A			
HD6432138SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75																																				PTQP0080KC-A			
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85																																				PRQP0080JB-A			
HD6432138SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75																																				PTQP0080KC-A			
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85																																				PRQP0080JB-A			
HD6432138SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75																																				PTQP0080KC-A			
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85																																				PRQP0080JB-A			
HD6432138SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PTQP0080KC-A																																						
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PRQP0080JB-A																																						
HD6432138SXXXXTFI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PTQP0080KC-A																																						
HD6432138SXXXXTFI	10MHz/2.7 to 3.6V	-40 to 85	PRQP0080JB-A																																						

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General-purpose	H8S/2100	H8S/2148	HD64F2147ATE20V	64K	2K	M		H8S/2000 core	65	100 (@ 10MHz), 50 (@ 20MHz)			DTC (8channels)	16M				10-bit x 8, 10-bit x 16 (expanded A/D input)	8-bit x 2	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	-	2	3					9	71	9			Yes	20MHz/4.5 to 5.5V	-20 to 75	PRQP0100KA-A																																					
			HD6432147SWXXXFA																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SVWXXXFA																																10MHz/2.7 to 3.6V																																							
			HD6432147SWXXXFAI																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SVWXXXFAI																																10MHz/2.7 to 3.6V																																							
			HD6432147SWXXXTE																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SVWXXXTE																																10MHz/2.7 to 3.6V																																							
			HD6432147SWXXXTEI																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SVWXXXTEI																																10MHz/2.7 to 3.6V																																							
			HD6432147SXXXFA																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SXXXFAI																																10MHz/2.7 to 3.6V																																							
			HD6432147SVXXXTE																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432147SXXXTEI																																10MHz/2.7 to 3.6V																																							
			HD64F2148AVFA10V																																F			4K		H8S/2000 core	65		DTC (8channels)	16M											8-bit x 2	4(TMR0, TMR1, TMRX, TMR Y)	1(FRT)	-	2	3											Yes	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V	-20 to 75	PRQP0100KA-A
			HD64F2148FA20V																																																																					20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		
			HD64F2148ATE20V																																																																					10MHz/2.7 to 3.6V		
			HD64F2148AVTE10V																																																																					20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		
			HD64F2148AVTE10V																																																																					10MHz/2.7 to 3.6V		
			HD64F2148FA20JV																																																																					20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		
			HD64F2148FA20JV																																																																					10MHz/3.0 to 5.5V		
			HD64F2148TE20V																																																																					20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		
			HD64F2148TE20V																																																																					10MHz/2.7 to 3.6V		
			HD64F2148VTE10V																																																																					20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V		
			HD64F2148VTE10V																																																																					10MHz/3.0 to 5.5V		
			HD6432148SWXXXFAI																																																																					10MHz/2.7 to 3.6V		
			HD6432148SWXXXFA																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432148SWXXXFA																																10MHz/2.7 to 3.6V																																							
			HD6432148SWXXXTEI																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432148SWXXXTE																																10MHz/2.7 to 3.6V																																							
			HD6432148SWXXXTEI																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
			HD6432148SXXXFAI																																10MHz/2.7 to 3.6V																																							
			HD6432148SXXXFA																																20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																							
HD6432148SXXXFA	10MHz/2.7 to 3.6V																																																																									
HD6432148SXXXFAI	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																																																									
HD6432148SXXXTEI	10MHz/2.7 to 3.6V																																																																									
HD6432148SXXXTE	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																																																									
HD6432148SXXXTEI	10MHz/2.7 to 3.6V																																																																									
HD6432148SXXXTE	20MHz/4.5 to 5.5V, 16MHz/4.0 to 5.5V																																																																									
HD6432148SXXXTEI	10MHz/2.7 to 3.6V																																																																									

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2100 Series

Application	Device			Memory				CPU				DMA		External bus extension	Clock		ADC	DAC	Timers				Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN		Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator				Watchdog Timer	Clock Sync./ Clock Async.					Channels	Ethernet		Input Only(Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG			
General-purpose	H8S/2100	H8S/2153	R4F2153VBR25KDV	512K	40K	F	-	H8S/2600 core	69	40(@25MHz)	16 x 16 - 32	-	-	DTC (86channels)	16M	-	Yes	-	10-bit x 8	-	4(TMR0, TMR1, TMRX, TMRV)	1(FRT)	-	2	4	-	-	-	-	-	-	9	53	17	Yes	Yes	Yes	25MHz/3.0 to 3.6V	-40 to 85	PLBG0112GA-A	
			R4F2153VBR25V						29(@34MHz)	-40 to 85																															
		H8S/2164	R4F2164VTE34DV	256K	H8S/2000 core	65	30(@33MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	95	33MHz/3.0 to 3.6V	-40 to 85	PTQP0144LC-A					
			R4F2164VTE34V			384K	50(@20MHz)																										2		2		20MHz/3.0 to 3.6V				
		H8S/2168	HD64F2168VTE33V	384K	H8S/2000 core	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	90	33MHz/3.0 to 3.6V	-20 to 75	PTQP0144LC-A				
			HD64F2167VTE33V																															512K		4(FRT,TPU x 3)		2	2	20MHz/3.0 to 3.6V	
		H8S/2189	R4F2189VTE20V	1M	6K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	85	20MHz/3.0 to 3.6V	-20 to 75	PTQP0144LC-A				
				6K																														2		2		20MHz/3.0 to 3.6V			

★ : New product ★★ : Under development

*F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device		Memory			CPU			DMA	External bus extension	Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN		USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																																																											
	Series	Group	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock					Resolution x Channels	Resolution x Channels				8-bit	16-bit		Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.				Channels	Ethernet	Input Only (Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																																																				
General-purpose	H8S/2200	H8S/2212	HD6432210XXXFP	32K	M	-	H8S/2000 core	65	42 (@24MHz)	-	4	-	16M	Yes (USB: x2, x3)	Yes	10-bit x 6	-	-	3(TPU)	-	1	2	-	-	-	-	Yes	-	-	21	37	7	-	-	-	-	when using USB:24MHz/3.0 to 3.6V, when using USB:24MHz/3.0 to 3.6V, 16MHz/2.7 to 3.6V, 6MHz/2.4 to 3.6V	-20 to 75	PLQP0064KC-A																																																																							
			HD6432210XXXFPW																																		4K			-20 to 75																																																																						
			HD6432210SXXXFP**																																					-40 to 85																																																																						
			HD6432210SXXXFPW**																																					-20 to 75																																																																						
			HD6432210SXXXNP**																																					-40 to 85																																																																						
			HD6432210SXXXNPW**																																																																																																											
			HD64F2210CJFP24W																																		4K	M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																					
			HD64F2210CJFP24																																																																																																											
			HD64F2210CUNP24																																																																																																											
			HD64F2210CUNP24W																																																																																																											
			HD64F2211CJFP24W																																																																							8K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			HD64F2211CJFP24																																																																																																											
			HD64F2211CJFP24																																																																																																											
			HD64F2211CUNP24																																																																																																											
			HD64F2211CUNP24W																																																																																																											
			HD64F2211FP24V																																																																																																											
			HD64F2211FP24VW																																																																							64K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			HD64F2211NP24W																																																																																																											
			HD64F2211NP24W																																																																																																											
			HD64F2211NP24V																																																																																																											
			HD64F2211NP24VW																																																																																																											
			HD64F2211UFP24V	128K	F																														-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																									
			HD64F2211UNP24W																																																																																																											
			HD64F2211UNP24W																																																																																																											
			HD64F2211UNP24																																																																																																											
			HD64F2211UNP24																																																																																																											
			HD64F2212CJFP24W																																																																			12K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			HD64F2212CJFP24																																																																																																											
			HD64F2212CJFP24W																																																																																																											
			HD64F2212CUNP24																																																																																																											
HD64F2212CUNP24W																																																																																																														
HD64F2212FP24V																																																																																																														
HD64F2212FP24D																																																																																																														
HD64F2212FP24W																																																																																																														
HD64F2212NP24																																																																																																														
HD64F2212NP24D																																																																																																														
HD64F2212NP24W																																																																																																														
HD64F2212UFP24V																																																																																																														
HD64F2212UFP24V																																																																																																														
HD64F2212UFP24D																																																																																																														
HD64F2212UNP24W																																																																																																														
HD64F2212UNP24W																																																																																																														
HD64F2212UNP24D																																																																																																														
HD64F2212UNP24D																																																																																																														
Yes(E10A)	Yes		24MHz/3.0 to 3.6V	-20 to 75																																																																																																										

*: New product ** : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		I/O Ports		On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package									
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special Serial I/O	Channels	Ethernet	USB Function				LPC/ISA	LCD	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program	
General-purpose	H8S/2200	H8S/2218	HD6432217XXXBR	64K	8K	M		H8S/2000 core	65	-	6	-	16M	-	Yes(USB: x2,x3)	Yes	10-bit x 6	-	-	-	3(TPU)	-	1	-	-	-	-	-	-	-	-	24	69	7	-	-	Yes	Yes	Yes(E10A)	Yes	when using USB: 24MHz/3.0 to 3.6V, when not using USB: 24MHz/3.0 to 3.6V, 16MHz/2.7 to 3.6V, 6MHz/2.4 to 3.6V	-20 to 75	PLBG0112GA-A
			HD6432217XXXBRW																																							-40 to 85	PTQP0100LC-A
			HD6432217XXXTFW																																							-20 to 75	PLBG0112GA-A
			HD6432217XXXTF																																							-40 to 85	PTQP0100LC-A
			HD64F2217CUBR24																																							-20 to 75	PLBG0112GA-A
			HD64F2217CUBR24W																																							-40 to 85	PTQP0100LC-A
			HD64F2217CUTF24																																							-20 to 75	PLBG0112GA-A
			HD64F2217CUTF24W																																							-40 to 85	PTQP0100LC-A
			HD64F2218CUBR24W																																							-20 to 75	PLBG0112GA-A
			HD64F2218CUBR24																																							-40 to 85	PTQP0100LC-A
			HD64F2218CUBR24																																							-20 to 75	PLBG0112GA-A
			HD64F2218CUBR24W																																							-40 to 85	PTQP0100LC-A
			HD64F2218BR24V																																						-20 to 75	PLBG0112GA-A	
			HD64F2218BR24WV																																						-40 to 85	PTQP0100LC-A	
			HD64F2218BR24D																																						-20 to 75	PLBG0112GA-A	
			HD64F2218TF24V																																						-40 to 85	PTQP0100LC-A	
			HD64F2218TF24D																																						-20 to 75	PLBG0112GA-A	
			HD64F2218TF24WV																																						-40 to 85	PTQP0100LC-A	
			HD64F2218UBR24V																																						-20 to 75	PLBG0112GA-A	
			HD64F2218UBR24WV																																						-40 to 85	PTQP0100LC-A	
			HD64F2218UBR24D																																						-20 to 75	PLBG0112GA-A	
			HD64F2218UTF24WV																																						-40 to 85	PTQP0100LC-A	
			HD64F2218UTF24V																																						-20 to 75	PLBG0112GA-A	
			HD64F2218UTF24D																																						-40 to 85	PTQP0100LC-A	
			HD64F2218UTF24D																																						-20 to 75	PLBG0112GA-A	
			HD64F2214TE16V																																						12K	F	-
HD64F2214TF16V	-40 to 85	PTQP0100LC-A																																									
HD6432214XXXBR	-20 to 75	PLBG0112GA-A																																									
HD6432214XXXBRW	-40 to 85	PTQP0100KA-A																																									
HD6432214XXXTEI	-20 to 75	PLBG0112GA-A																																									
HD6432214XXXTE	-40 to 85	PTQP0100KA-A																																									
HD6432214XXXTF	-20 to 75	PLBG0112GA-A																																									
HD6432214XXXTFI	-40 to 85	PTQP0100LC-A																																									

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers			Serial Interface		SSU / Special Serial I/O	CAN Channels	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency / Supply Voltage	Operating Ambient Temperature (°C)	Package		
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash / EZData flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.							I ² C-bus	IEBus		Input Only (Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG				On-Chip Debug	On-Board Flash Program
General-purpose	H8S/2200	H8S/2227	HD6432223XXXFA	64K	4K	M			H8S/2000 core	65	74 (@13.5MHz)			DTC	16M		Yes	10-bit x 8		2(TMR)	3(TPU)		2	3								19	72	9				-20 to 75 -40 to 85	PRQP0100KA-A			
			HD6432223XXXFAI																																				PTQP0100KA-A			
			HD6432223XXXTE																																				PTQP0100KA-A			
			HD6432223XXXTEI																																				PTQP0100KA-A			
			HD6432223XXXTF																																				PTQP0100LC-A			
			HD6432223XXXTFI																																				PTQP0100KA-A			
			HD6432224XXXFA																																				PTQP0100KA-A			
			HD6432224XXXFAI																																				PTQP0100KA-A			
			HD6432224XXXTE																																				PTQP0100KA-A			
			HD6432224XXXTEI																																				PTQP0100LC-A			
			HD6432224XXXTF																																				PTQP0100LC-A			
			HD6432224XXXTFI																																				PTQP0100KA-A			
			HD6432225XXXFAI	PTQP0100KA-A																																						
			HD6432225XXXFAI	PTQP0100KA-A																																						
			HD6432225XXXTE	PTQP0100KA-A																																						
			HD6432225XXXTEI	PTQP0100LC-A																																						
			HD6432225XXXTF	PTQP0100KA-A																																						
			HD6432225XXXTFI	PTQP0100LC-A																																						
			HD64F2227TE13V	128K	F																																					
			HD64F2227TE13VI																																							PTQP0100KA-A
			HD64F2227TF13V																																							PTQP0100LC-A
			HD6432227XXXFA																																							PRQP0100JE-B
HD6432227XXXFAI	PRQP0100KA-A																																									
HD6432227XXXTE	PTQP0100KA-A																																									
HD6432227XXXTEI	PTQP0100KA-A																																									
HD6432227XXXTF	PTQP0100LC-A																																									
HD6432227XXXTFI	PTQP0100LC-A																																									

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer		Clock Sync./ Clock Async.	Input Only(Numbers)	CMOS I/O (Numbers)			
General-purpose	H8S/2200	H8S/2237	HD64322333XXXFI	64K	M	-	H8S/2000 core	65	74(@13.5MHz)	-	-	-	DTC	16M	-	-	Yes	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	-	2	4	-	-	-	-	-	19	72	9	-	-	-	13.5MHz/2.7 to 3.6V, 6.25MHz/2.2 to 3.6V	-20 to 75	PRQP0100JE-B	
			HD64322333XXXFI																																		-40 to 85	PRQP0100KA-A	
			HD64322333XXXFA																																		-20 to 75	PTQP0100KA-A	
			HD64322333XXXFAI																																		-40 to 85	PTQP0100LC-A	
			HD64322333XXXTE																																		-20 to 75	PRQP0100JE-B	
			HD64322333XXXTEI																																		-40 to 85	PTQP0100KA-A	
			HD64322333XXXTF																																		-20 to 75	PRQP0100KA-A	
			HD64322335XXXFI																																		-40 to 85	PTQP0100LC-A	
			HD64322335XXXFA																																		-20 to 75	PRQP0100JE-B	
			HD64322335XXXFAI																																		-40 to 85	PTQP0100KA-A	
			HD64322335XXXTE																																	-20 to 75	PRQP0100KA-A		
			HD64322335XXXTEI																																	-40 to 85	PTQP0100LC-A		
			HD64322337XXXFI																																	-20 to 75	PRQP0100JE-B		
			HD64322337XXXFI																																	-40 to 85	PTQP0100KA-A		
			HD64322337XXXFA																																	-20 to 75	PRQP0100KA-A		
			HD64322337XXXFAI																																	-40 to 85	PTQP0100LC-A		
			HD64322337XXXTE																																	-20 to 75	PRQP0100JE-B		
			HD64322337XXXTEI																																	-40 to 85	PTQP0100KA-A		
			HD64322337XXXTF																																	-20 to 75	PRQP0100KA-A		
			HD6432237F10V																																	16K	O	HD6472237FA10V	10MHz/2.7 to 3.6V
HD6472237TE10V	-40 to 85	PTQP0100KA-A																																					

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		SSU/Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																															
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																							
General-purpose	H8S/2200	H8S/2288B	HD6432236BXXXXXF	128K	8K	M							DTC	16M			Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)		2	4	2							19	72	9			Yes	13.5MHz/2.7 to 5.5V	-20 to 75	PRQP0100JE-B																																						
			HD6432236BXXXXXF1																																				-40 to 85	PRQP0100KA-A																																						
			HD6432236BXXXXFA																																				-20 to 75	PTQP0100KA-A																																						
			HD6432236BXXXXFA1																																				-40 to 85	PTQP0100LC-A																																						
			HD6432236BXXXXTE																																				-20 to 75	PRQP0100JE-B																																						
			HD6432236BXXXXTE1																																				-40 to 85	PRQP0100KA-A																																						
			HD6432236BXXXXTF																																				-20 to 75	PTQP0100LC-A																																						
			HD6432236BXXXXTF1																																				-40 to 85	PRQP0100JE-B																																						
			HD6432236BXXXXFA																																				-20 to 75	PTQP0100KA-A																																						
			HD6432236BXXXXFA1																																				-40 to 85	PTQP0100LC-A																																						
			HD6432236BXXXXTE																																				-20 to 75	PRQP0100JE-B																																						
			HD6432236BXXXXTE1																																				-40 to 85	PRQP0100KA-A																																						
			HD6432236BXXXXTF																																				-20 to 75	PTQP0100LC-A																																						
			HD6432236BXXXXTF1																																				-40 to 85	PRQP0100JE-B																																						
			HD64F22388FA131V																																				256K	16K	M		F	H8S/2000 core	65	74(@13.5MHz)					DTC	16M			Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)		2	4	2												Yes	13.5MHz/3.0 to 5.5V	-20 to 75	PRQP0100KA-A
			HD64F22388FA13V																																																																										-40 to 85	PRQP0100KA-A
			HD64F22388TE13V																																																																										-20 to 75	PTQP0100LC-A
			HD64F22388TF13V																																																																										-40 to 85	PRQP0100JE-B
			HD64322388BXXXXXF																																																																										-20 to 75	PTQP0100KA-A
			HD64322388BXXXXXF1																																																																										-40 to 85	PRQP0100KA-A
			HD64322388BXXXXFA																																																																										-20 to 75	PTQP0100KA-A
			HD64322388BXXXXFA1																																																																										-40 to 85	PRQP0100JE-B
			HD64322388BXXXXTE																																																																										-20 to 75	PTQP0100LC-A
			HD64322388BXXXXTE1																																																																										-40 to 85	PRQP0100JE-B
			HD64322388BXXXXTF																																																																										-20 to 75	PTQP0100LC-A
			HD64322388BXXXXTF1																																																																										-40 to 85	PRQP0100JE-B
			HD64322388BXXXXFA																																																																										-20 to 75	PTQP0100KA-A
			HD64322388BXXXXFA1																																																																										-40 to 85	PRQP0100KA-A
			HD64322388BXXXXTE																																																																										-20 to 75	PTQP0100KA-A
			HD64322388BXXXXTE1																																																																										-40 to 85	PRQP0100KA-A
HD64322388BXXXXTF	-20 to 75	PTQP0100LC-A																																																																												
HD64322388BXXXXTF1	-40 to 85	PRQP0100LC-A																																																																												

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers				Serial Interface	I ² C-bus		SSU/ Special I/O	CAN		Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions		Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																				
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																								
General-purpose	H8S/2200	H8S/2238R	HD6432236RWXXXFA	128K	8K	M											Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)		2	4							19	72	9			Yes	13.5MHz/2.7 to 3.6V, 6.25MHz/2.2 to 3.6V	-20 to 75	PRQP0100KA-A																																							
			HD6432236RWXXXFAI																																			-40 to 85	PTQP0100KA-A																																							
			HD6432236RWXXXTE																																			-20 to 75	PTQP0100KA-A																																							
			HD6432236RWXXXTEI																																			-40 to 85	PTQP0100KA-A																																							
			HD6432236RWXXXTF																																			-20 to 75	PTQP0100LC-A																																							
			HD6432236RWXXXTFI																																			-40 to 85	PTQP0100KA-A																																							
			HD6432236RXXXFA																																			-20 to 75	PRQP0100KA-A																																							
			HD6432236RXXXFAI																																			-40 to 85	PTQP0100KA-A																																							
			HD6432236RXXXTE																																			-20 to 75	PTQP0100KA-A																																							
			HD6432236RXXXTEI																																			-40 to 85	PTQP0100LC-A																																							
			HD6432236RXXXTF																																			-20 to 75	PTQP0100LC-A																																							
			HD6432236RXXXTFI																																			-40 to 85	PTQP0100LC-A																																							
			HD64F2238RBR13V																																			16K	M					H8S/2000 core	65	74(@13.5MHz)				DTC	16M			Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)		2	4													Yes	13.5MHz/2.7 to 3.6V, 6.25MHz/2.2 to 3.6V	-20 to 75	PLBG0112GA-A	
			HD64F2238RBR13VW																																																																									6.25MHz/2.2 to 3.6V	-20 to 75	PRQP0100KA-A
			HD64F2238RBR6V																																																																									13.5MHz/2.7 to 3.6V	-20 to 75	PTQP0100KA-A
			HD64F2238RFA13V																																																																									13.5MHz/2.7 to 3.6V	-40 to 85	PRQP0100KA-A
			HD64F2238RFA13VW																																																																									6.25MHz/2.2 to 3.6V	-20 to 75	PTQP0100KA-A
			HD64F2238RTE13V																																																																									13.5MHz/2.7 to 3.6V	-40 to 85	PTQP0100KA-A
			HD64F2238RTE13VW																																																																									6.25MHz/2.2 to 3.6V	-20 to 75	PTQP0100LC-A
			HD64F2238RTF6V																																																																									13.5MHz/2.7 to 3.6V	-20 to 75	PTQP0100KA-A
			HD64F2238RTF6VW																																																																									6.25MHz/2.2 to 3.6V	-40 to 85	PTQP0100KA-A
			HD64F2238RTF13V																																																																									13.5MHz/2.7 to 3.6V	-20 to 75	PTQP0100LC-A
			HD64F2238RTF13VW																																																																									6.25MHz/2.2 to 3.6V	-40 to 85	PTQP0100KA-A
			HD6432236RWXXXFA																																																																									16K	M	
HD6432236RWXXXFAI	-20 to 75	PTQP0100KA-A																																																																												
HD6432236RWXXXTE	-40 to 85	PTQP0100KA-A																																																																												
HD6432236RWXXXTEI	-20 to 75	PTQP0100LC-A																																																																												
HD6432236RWXXXTF	-40 to 85	PTQP0100KA-A																																																																												
HD6432236RWXXXTFI	-20 to 75	PTQP0100LC-A																																																																												
HD6432236RXXXFA	-40 to 85	PRQP0100KA-A																																																																												
HD6432236RXXXFAI	-20 to 75	PTQP0100KA-A																																																																												
HD6432236RXXXTE	-40 to 85	PTQP0100KA-A																																																																												
HD6432236RXXXTEI	-20 to 75	PTQP0100LC-A																																																																												
HD6432236RXXXTF	-40 to 85	PTQP0100KA-A																																																																												
HD6432236RXXXTFI	-20 to 75	PTQP0100LC-A																																																																												

★ : New product ★★ : Under development
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H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer										Clock Sync./ Clock Async.	Input Only (Numbers)		CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug			
General-purpose	H8S/2200	H8S/2245	HD6412240FA20V	-	L		H8S/2000 core	65	50 (@20MHz)	-	-	-	DTC	16M	-	-	-	10-bit x 4	-	2(TMR)	3(TPU)	-	1	3	-	-	-	-	-	-	12	75	9	-	-	-	20MHz/4.5 to 5.5V	-20 to 75	PRQP0100KA-A			
			HD6412240FA13V																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6412240FA20V																																				20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6412240TE13V																																				13MHz/2.7 to 5.5V	-20 to 75	PTQP0100KA-A	
			HD6412240TE20V																																				13MHz/2.7 to 5.5V	-20 to 75	PRQP0100KA-A	
			HD6432241RXXXFA																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432241RXXXTEI																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432241RXXXTE																																				20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6432242XXXFAI																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432242XXXTE																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432242XXXTEI																																				20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6432242XXXXFAI																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432242XXXXTE																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432242XXXXTEI																																				20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6432243XXXFA																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432243XXXFAI																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432243XXXTEI																																				20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6432243XXXTE																																				20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432244XXXFA																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-20 to 75	PRQP0100KA-A	
			HD6432244XXXFAI																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432244XXXTEI																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-20 to 75	PTQP0100KA-A	
			HD6432244XXXTE																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PRQP0100KA-A	
			HD6432245XXXFAI																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PTQP0100KA-A	
			HD6432245XXXTEI																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-20 to 75	PTQP0100KA-A	
			HD6432245XXXTE																																				20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PRQP0100KA-A	
HD6432246XXXFAI	20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PTQP0100KA-A																																							
HD6432246XXXTEI	20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-20 to 75	PTQP0100KA-A																																							
HD6432246XXXTE	20MHz/4.5 to 5.5V, 13MHz/2.7 to 5.5V	-40 to 85	PRQP0100KA-A																																							
HD6472246FA10V	10MHz/2.7 to 5.5V	-20 to 75	PRQP0100KA-A																																							
HD6472246FA20V	20MHz/4.5 to 5.5V	-40 to 85	PRQP0100KA-A																																							
HD6472246FA20V	20MHz/4.5 to 5.5V	-20 to 75	PRQP0100KA-A																																							
HD6472246FA10V	10MHz/2.7 to 5.5V	-40 to 85	PTQP0100KA-A																																							
HD6472246TE10V	10MHz/2.7 to 5.5V	-20 to 75	PTQP0100KA-A																																							
HD6472246TE20V	20MHz/4.5 to 5.5V	-40 to 85	PTQP0100KA-A																																							
HD6472246TE20V	20MHz/4.5 to 5.5V	-20 to 75	PTQP0100KA-A																																							

★: New product ★★: Under development
 *F: Flash memory version, L: ROM-less version, M: Mask ROM version, O: One-time PROM version, Qz: QzROM version

H8S/2200 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface		SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																															
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator							Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG				On-Chip Debug	On-Board Flash Program																													
General-purpose	H8S/2200	H8S/2258	HD6432256WXXXF	128K	8K	M	-	H8S/2000 core	65	74 (@13.5MHz)	-	-	DTC	16M	-	-	Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)	-	2	4	1	-	-	-	-	19	72	9	-	-	Yes	13.5MHz/4.5 to 5.5V	-20 to 75	PRQP0100JE-B																																	
			HD6432256WXXXFI																																		-40 to 85	PRQP0100KA-A																																	
			HD6432256WXXXFA																																		-20 to 75	PRQP0100KA-A																																	
			HD6432256WXXXFAL																																		-40 to 85	PRQP0100JE-B																																	
			HD6432256WXXXTE																																		-20 to 75	PRQP0100KA-A																																	
			HD6432256WXXXTEI																																		-40 to 85	PRQP0100KA-A																																	
			HD64322566XXXFI																																		-20 to 75	PRQP0100JE-B																																	
			HD64322566XXXFI																																		-40 to 85	PRQP0100KA-A																																	
			HD64322566XXXFA																																		-20 to 75	PRQP0100JE-B																																	
			HD64322566XXXTE																																		-40 to 85	PRQP0100KA-A																																	
			HD64322566XXXTEI																																		-20 to 75	PRQP0100KA-A																																	
			HD64F2258FA13V																																		256K	16K	M	-	H8S/2000 core	65	74 (@13.5MHz)	-	-	DTC	16M	-	-	Yes	10-bit x 8	8-bit x 2	4(TMR)	6(TPU)	-	2	4	1	-	-	-	-	19	72	9	-	-	Yes	13.5MHz/4.5 to 5.5V	-20 to 75	PRQP0100JE-B
			HD64F2258FA13V																																																																			-40 to 85	PRQP0100KA-A
			HD6432258WXXXFI																																																																			-20 to 75	PRQP0100JE-B
			HD6432258WXXXFI																																																																			-40 to 85	PRQP0100KA-A
			HD6432258WXXXFA																																																																			-20 to 75	PRQP0100JE-B
			HD6432258WXXXFA																																																																			-40 to 85	PRQP0100KA-A
			HD6432258WXXXTE																																																																			-20 to 75	PRQP0100JE-B
			HD6432258WXXXTEI																																																																			-40 to 85	PRQP0100KA-A
			HD64322588XXXFI																																																																			-20 to 75	PRQP0100JE-B
			HD64322588XXXFI																																																																			-40 to 85	PRQP0100KA-A
			HD64322588XXXFA																																																																			-20 to 75	PRQP0100JE-B
			HD64322588XXXFA																																																																			-40 to 85	PRQP0100KA-A
			HD64322588XXXTE																																																																			-20 to 75	PRQP0100JE-B
HD64322588XXXTEI	-40 to 85	PRQP0100KA-A																																																																					

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 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S Super Low Power Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package				
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer		Clock Sync./ Clock Async.	Input Only (Numbers)	CMOS I/O (Numbers)				Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program	
General-purpose	H8S Super Low Power	H8S/2264	HD6432262WXXXFA	64K	2K	M	-	H8S/2000 core	65	48.8 (@20.5MHz)	-	-	-	16M	-	-	Yes	10-bit x 10	-	2(TMR0, TMR1)	2(TPU)	-	2	3	1	-	-	-	-	-	40seg x 4com	11	59	13	-	-	-	20.5MHz/4.0 to 5.5V, 13.5MHz/2.7 to 5.5V	-20 to 75	PRQP0100KA-A			
			HD6432262WXXXFAW																						-40 to 85														PTQP0100LC-A				
			HD6432262WXXXTFW																						-20 to 75														PRQP0100KA-A				
			HD6432262WXXXTF																						-20 to 75														PTQP0100LC-A				
			HD6432262XXXFA																						-40 to 85														PRQP0100KA-A				
			HD6432262XXXFAW																						-20 to 75														PTQP0100LC-A				
			HD6432262XXXTF																						-40 to 85														PRQP0100KA-A				
			HD6432262XXXTFW																						-20 to 75														PTQP0100LC-A				
			HD6432264WXXXFA	128K	4K	M	-	H8S/2000 core	65	48.8 (@20.5MHz)	-	-	-	16M	-	-	16M	-	-	Yes	10-bit x 10	-	2(TMR0, TMR1)	2(TPU)	-	2	3	1	-	-	-	-	-	40seg x 4com	11	59	13		-	-	-	-20 to 75	PRQP0100KA-A
			HD6432264WXXXFAW																									-40 to 85														PTQP0100LC-A	
			HD6432264WXXXTF																									-20 to 75														PRQP0100KA-A	
			HD6432264WXXXTFW																									-20 to 75														PTQP0100LC-A	
			HD6432264XXXFA																									-40 to 85														PRQP0100KA-A	
			HD6432264XXXFAW																									-20 to 75														PTQP0100LC-A	
			HD6432264XXXTF																									-40 to 85														PRQP0100KA-A	
			HD6432264XXXTFW																									-20 to 75														PTQP0100LC-A	

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2200 Series

Application	Device			Memory		CPU			DMA	External bus extension	Clock		ADC	DAC	Timers		Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																												
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller										PLL	Subclock		Resolution x Channels	Resolution x Channels	8-bit				16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	Input Only (Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																			
General-purpose	H8S/2200	H8S/2268	HD64F2265FA13WV	128K	4K	F	-	H8S/2000 core	65	49 (@20.5MHz)	-	-	DTC	16M	-	-	-	-	-	-	-	-	-	-	-	-	18	67	14	-	-	Yes	-	13.5MHz/3.0 to 5.5V	-40 to 85	PRQP0100KA-A																										
			HD64F2266FA13V																																																											
			HD64F2266FA20V																																																											
			HD64F2266TE13V		8K																																256K	16K	13.5MHz/3.0 to 5.5V	-20 to 75	PTQP0100KA-A																					
			HD64F2266FA13V																																																											
			HD64F2266TF13V																																																											
			HD64F2266TF20V		20.5MHz/4.5 to 5.5V																														-40 to 85	PRQP0100KA-A																										
			HD64F2268FA13V																																																											
			HD64F2268FA13WV																																																											
			HD64F2268FA20V																																																											
			HD64F2268FA20WV																																																											
			HD64F2268TE13WV																																					-20 to 75	PTQP0100KA-A																					
			HD64F2268TE13V																																																											
			HD64F2268TE20V																																																											
			HD64F2268TE20WV																																20.5MHz/3.0 to 5.5V	-20 to 75				PTQP0100KA-A																						
HD64F2268TF20WV																																																														
HD64F2268TF13WV																																																														
HD64F2268TF13V	13.5MHz/3.0 to 5.5V	-40 to 85	PTQP0100LC-A																																																											
HD64F2268TF20WV																																																														
HD64F2268TF20V																																																														
HD64F2280F20BV	64K	2K	M	-		50 (@20MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20MHz/4.5 to 5.5V	-20 to 75	PRQP0100JE-B																												
HD64F2280RF20BV																																																														
HD64F2282F20V	128K	4K			10-bit x 8																														10-bit x 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HD6432282XXXF																																																														

: New product ★: Under development
 *F: Flash memory version, L: ROM-less version, M: Mask ROM version, O: One-time PROM version, Qz: QzROM version

H8S/2300 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface	I ² C-bus	IEBus	SSU/Special I/O		CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																															
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer				Clock Sync./Clock Async.	SSU/Special I/O						Channels	Ethernet		USB Function	LPC/ISA	LCD				Input Only (Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																										
General-purpose	H8S/2300	H8S/2329	HD6412320VF25V	4K	L		H8S/2000 core	65	40(@25MHz)	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	1	3	-	1(Multiprocessor communication function)	-	-	-	-	9	86	9(NMI, IRQx 8)	-	-	-		25MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																				
			HD6412320VF25V																																		-40 to 85																																					
			HD6412320VF20V																																		-20 to 75																																					
			HD6412320VF20DV																																		20MHz/2.7 to 3.6V		-40 to 85	PTQP0120LA-A																																		
			HD6412320VFTE25V																																		25MHz/3.0 to 3.6V		-20 to 75																																			
			HD6412320VFTE25V																																		20MHz/2.7 to 3.6V		-40 to 85	PRQP0128KB-A																																		
			HD6412321VF20V																																		25MHz/3.0 to 3.6V		-20 to 75																																			
			HD6412321VF25V																																		20MHz/2.7 to 3.6V		-40 to 85	PTQP0120LA-A																																		
			HD6412321VFTE20V																																		25MHz/3.0 to 3.6V		-40 to 85																																			
			HD6412321VFTE25V																																		20MHz/2.7 to 3.6V		-20 to 75	PRQP0128KB-A																																		
			HD6412322RVF25V																																		25MHz/3.0 to 3.6V		-40 to 85																																			
			HD6412322RVF25V																																		20MHz/2.7 to 3.6V		-20 to 75	PTQP0120LA-A																																		
			HD6412322RVTE20V																																		25MHz/3.0 to 3.6V		-40 to 85																																			
			HD6412322RVTE25V																																		20MHz/2.7 to 3.6V		-20 to 75	PRQP0128KB-A																																		
			HD6412324SVF25																																		25MHz/3.0 to 3.6V		-20 to 75																																			
			HD6412324SVTE20																																		20MHz/2.7 to 3.6V		-40 to 85	PTQP0120LA-A																																		
			HD6412324SVTE25																																		25MHz/3.0 to 3.6V		-40 to 85																																			
			HD6432323XXXFI																																		32K		M	-	H8S/2000 core	65	40(@25MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	1	3	-	1(Multiprocessor communication function)	-	-	-	-	9	86	9(NMI, IRQx 8)	-	-	-	25MHz/3.0 to 3.6V, 20MHz/2.7 to 3.6V	-40 to 85	PRQP0128KB-A	
			HD6432327XXXFI																																		128K																																			-20 to 75		
			HD6432327XXXFI																																		-40 to 85																																					
			HD6432327XXXTE																																		8K																																			-20 to 75		PTQP0120LA-A
			HD6432328BF25V																																																																					-40 to 85		
			HD64F2328BFV25V																																		8K																																			-20 to 75		PRQP0128KB-A
			HD64F2328BFV25V																																																																					-40 to 85		
			HD64F2328BFVTE25V																																		256K																																			-20 to 75		PTQP0120LA-A
			HD64F2328BFVTE25V																																																																					-40 to 85		
			HD6432328XXXFI																																		8K																																			-20 to 75		PRQP0128KB-A
			HD6432328XXXFI																																																																					-40 to 85		
			HD6432328XXXTE																																		8K																																			-20 to 75		PTQP0120LA-A
			HD6432328XXXTE																																																																					-40 to 85		
			HD6432328XXXTE																																		384K																																			-20 to 75		PRQP0128KB-A
			HD64F2329BFV25V																																																																					-40 to 85		
			HD64F2329BFV25V																																		32K																																			-20 to 75		PTQP0120LA-A
			HD64F2329BFVTE25																																																																					-40 to 85		
			HD64F2329BFVTE25V																																		32K																																			-20 to 75		PRQP0128KB-A
			HD64F2329BFVTE25V																																																																					-40 to 85		
HD64F2329EVF25V	512K	-20 to 75	PTQP0120LA-A																																																																							
HD64F2329EVTE25V		-40 to 85																																																																								
HD64F2329VF25V	512K	-20 to 75	PRQP0128KB-A																																																																							
HD64F2329VF25V		-40 to 85																																																																								
HD64F2329VFTE25V	8K	F	-	H8S/2000 core	65	40(@25MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	1	3	-	1(Multiprocessor communication function)	-	-	-	-	9	86	9(NMI, IRQx 8)	-	-	-	25MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																						
HD64F2328VF25V	8K																																		-40 to 85																																							

★ : New product ★★ : Under development

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H8S/2300 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		SSU/Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																																
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																								
General-purpose	H8S/2350		HD6412350F20IV	-	2K	L		H8S/2000 core	65	50 (@20MHz)	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	-	6(TPU)	16(shared with DMAC, DTC, TMR, TPU)	2	-	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	20MHz/4.5 to 5.5V	-40 to 85	PRQP0128KB-A																																							
			HD6412350F20V																																				-20 to 75	PTQP0120LA-A																																							
			HD6412350TE20IV																																				-40 to 85	PTQP0120LA-A																																							
			HD6412350TE20V																																																																												
			HD6412350F10V																																																																												
			HD6412350TE13V																																																																												
			HD6432351XXXFI																																																																												
			HD6432351XXXTE																																																																												
			HD6432351XXXTEI																																																																												
			HD6432351XXXTEI																																																																												
	HD6432393XXXFI	32K	4K	M		H8S/2000 core	65	50 (@20MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	-	6(TPU)	16(shared with DMAC, DTC, TMR, TPU)	1	-	-	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	20MHz/4.5 to 5.5V, 13MHz/3.0 to 5.5V, 10MHz/2.7 to 5.5V	-40 to 85	PRQP0128KB-A																																						
	HD6432393XXXFI																																							-20 to 75	PTQP0120LA-A																																						
	HD6432393XXXTEI																																							-40 to 85	PTQP0128KB-A																																						
	HD6432393XXXTE																																							-20 to 75	PTQP0120LA-A																																						
	HD6432393XXXTEI																																							-40 to 85	PTQP0128KB-A																																						
	HD6432353XXXFI																																							64K	2K	M		H8S/2355	65	50 (@20MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	-	6(TPU)	16(shared with DMAC, DTC, TMR, TPU)	3	-	-	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	20MHz/4.5 to 5.5V, 13MHz/3.0 to 5.5V, 10MHz/2.7 to 5.5V	-40 to 85	PRQP0128KB-A
	HD6432353XXXTEI																																																																													-20 to 75	PTQP0120LA-A
	HD6432353XXXTE																																																																													-40 to 85	PTQP0128KB-A
	HD6432353XXXFI																																																																													-20 to 75	PTQP0120LA-A
	HD6432353XXXTEI																																																																													-40 to 85	PTQP0128KB-A
HD6432355XXXFI	128K	4K	M		H8S/2000 core	65	50 (@20MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	-	6(TPU)	16(shared with DMAC, DTC, TMR, TPU)	1	-	-	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	20MHz/4.5 to 5.5V, 13MHz/3.0 to 5.5V, 10MHz/2.7 to 5.5V	-40 to 85																																							PRQP0128KB-A	
HD6432355XXXTEI																																							-20 to 75																																							PTQP0120LA-A	
HD6432355XXXTE																																							-40 to 85																																							PTQP0128KB-A	
HD6432355XXXFI																																							-20 to 75																																							PTQP0120LA-A	
HD6432355XXXTEI																																							-40 to 85																																							PTQP0128KB-A	
HD6472355F20V																																							O				H8S/2000 core	65	50 (@20MHz)	-	-	-	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	-	6(TPU)	16(shared with DMAC, DTC, TMR, TPU)	1	-	-	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	20MHz/4.5 to 5.5V	-40 to 85	PRQP0128KB-A	
HD6472355TE20V																																																																													-40 to 85	PTQP0120LA-A	

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H8S/2300 Series

Application	Device			Memory		CPU			DMA		External bus extension		Clock		ADC	DAC	Timers				Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN		Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package						
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	SSU/ Special Serial I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program	Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package					
General-purpose	H8S/2300	H8S/2357	HD6412352F13V	-	8K	F	-	H8S/2000 core	65	50 (@20MHz)	-	4	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	3	-	1(Multiprocessor communication function)	-	-	-	-	-	8	87	9(NMI, IRQ x 8)	-	-	-	-	-	-	-	-	13MHz/3.0 to 5.5V	-20 to 75	PRQP0128KB-A	
			HD6412352F20V																																									20MHz/4.5 to 5.5V		PTQP0120LA-A	
			HD6412352TE20V																																									13MHz/3.0 to 5.5V		PTQP0120LA-A	
			HD64F2357F20IV																																									20MHz/4.5 to 5.5V		-40 to 85	PRQP0128KB-A
			HD64F2357F20V																																									20MHz/4.5 to 5.5V		-20 to 75	PTQP0120LA-A
			HD64F2357TE20IV																																									20MHz/4.5 to 5.5V		-40 to 85	PTQP0120LA-A
	HD64F2357TE20V	13MHz/3.0 to 5.5V	-20 to 75	PRQP0128KB-A																																											
	HD64F2357VF13IV	13MHz/3.0 to 5.5V	-20 to 75	PTQP0120LA-A																																											
	HD64F2357VF13V	13MHz/3.0 to 5.5V	-40 to 85	PRQP0128KB-A																																											
	HD64F2357VE13V	13MHz/3.0 to 5.5V	-20 to 75	PTQP0120LA-A																																											
	HD64F2357VE13V	13MHz/3.0 to 5.5V	-40 to 85	PRQP0128KB-A																																											
	HD6432357XXXFI	13MHz/3.0 to 5.5V	-20 to 75	PTQP0120LA-A																																											
	HD6432357XXXTEI	13MHz/3.0 to 5.5V	-40 to 85	PRQP0128KB-A																																											
	HD6432357XXXTE	13MHz/3.0 to 5.5V	-20 to 75	PTQP0120LA-A																																											
	HD6412390F20IV	-	32K	L	50 (@20MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	HD6412390F20V																																											4K	PRQP0128KB-A		
	HD6412390TE20V																																											4K	PTQP0120LA-A		
	HD6412392F20V																																											8K	PRQP0128KB-A		
HD6412392F20IV	8K																																											PTQP0120LA-A			
HD6412392TE20V	8K																																											PRQP0128KB-A			
HD6412394F20V	8K	PTQP0120LA-A																																													
HD6412394F20WV	256K	8K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
HD6412394TE20V																																														8K	PRQP0128KB-A
HD64F2398F20W																																														8K	PTQP0120LA-A
HD64F2398F20																																														8K	PRQP0128KB-A
HD64F2398TE20																																														8K	PTQP0120LA-A
HD6432398XXXFW																																														8K	PRQP0128KB-A
HD6432398XXXFI	8K	PTQP0120LA-A																																													
HD6432398XXXTEI	8K	PRQP0128KB-A																																													
HD6432398XXXTE	8K	PTQP0120LA-A																																													

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H8S/2300 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers			Serial Interface		SSU/Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program							
General-purpose	H8S/2300	H8S/2388	HD6412363VF33V	-	16K	M	-	H8S/2000 core	65	30 (@ 33MHz)	-	4	-	DTC	16M	-	Yes	-	10-bit x 10	8-bit x 2	2(TMR)	6(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	-	1(Multiprocessor communication function)	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD6412363VTE33V	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD64F2360VTE34DV							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD64F2360VTE34V	F						30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PTQP0120LA-A					
			HD6432365WXXXF							29 (@ 34MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD6432365WXXXFW	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD6432365WXXXTEW							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD6432365WXXXTE	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD6432365XXXTE							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD6432365XXXFW	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD6432365XXXTEW							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD6432365XXXTE	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD64F2361VTE34V							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD64F2361VTE34VW	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
			HD64F2362VTE34DV							30 (@ 33MHz)																											-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A					
			HD64F2362VTE34V	F						29 (@ 34MHz)																											Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A					
HD64F2362VTE34VW	30 (@ 33MHz)	-	-		33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							
HD64F2367VF33VW	F	29 (@ 34MHz)	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A																																							
HD64F2367VF33V		30 (@ 33MHz)	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							
HD64F2367VTE33VW	F	29 (@ 34MHz)	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A																																							
HD64F2367VTE33V		30 (@ 33MHz)	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							
HD64F2364VTE34V	F	29 (@ 34MHz)	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A																																							
HD64F2364VTE34DV		30 (@ 33MHz)	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							
HD64F2364VTE34VW	F	29 (@ 34MHz)	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A																																							
HD64F2368VTE34VW		30 (@ 33MHz)	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							
HD64F2368VTE34DV	F	29 (@ 34MHz)	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0120LA-A																																							
HD64F2368VTE34V		30 (@ 33MHz)	-	-	33MHz/3.0 to 3.6V	-20 to 75	PRQP0128KB-A																																							

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H8S/2300 Series

Application	Device		Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special I/O	CAN Channels	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package				
	Series	Group	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subblock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator										Watchdog Timer	Clock Sync./ Clock Async.		Input Only(Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG				On-Chip Debug	On-Board Flash Program		
General-purpose	H8S/2300	H8S/2378R	-	16K	F	-	H8S/2000 core	65	-	4	DTC	16M	Yes	Yes	-	10-bit x 16	2(TMR)	6(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	-	1(Multiprocessor communication function)	-	-	-	-	-	17	96	17(NMI, IRQ x 16)	-	Yes	Yes	33MHz/3.0 to 3.6V	-	-	33MHz/3.0 to 3.6V	-20 to 75	PLQP0144KC-A				
																																							-		-	33MHz/3.0 to 3.6V	-40 to 85	
																																							Yes		Yes	34MHz/3.0 to 3.6V	-20 to 75	PTLG0145JB-A
																																							-		-	33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KC-A
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-20 to 75	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	PTLG0145JB-A
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	PLQP0144KC-A
																																							-		-	34MHz/3.0 to 3.6V	-20 to 75	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	PTLG0145JB-A
																																							-		-	34MHz/3.0 to 3.6V	-20 to 75	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-20 to 75	PLQP0144KC-A
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	PTLG0145JB-A
																																							-		-	34MHz/3.0 to 3.6V	-20 to 75	
																																							-		-	34MHz/3.0 to 3.6V	-40 to 85	

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory		CPU			DMA		External bus extension		Clock		ADC		DAC		Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN		USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package	
	Series	Group	Part No.	ROM (bytes)	RAM (bytes) ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator					Watchdog Timer	Clock Sync./ Clock Async.				Channels	Ethernet		Input Only(Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG				On-Chip Debug
General-purpose	H8S/2400	H8S/2424	R4S24241DFPV	48K	L	-	H8S/2600 core	69	30 (@33MHz)	16 x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	-	33MHz/4.5 to 5.5V	-40 to 85	PLQP0120LA-A
			R4S24241NFPV																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24241NVFPV																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24241DVFPV																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24241DFAU																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24241DVFAU																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24241NFAU																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24241NVFAU																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24242DFPV																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24242VFPV																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24242DFPV																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24242DFPV																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24242DFFAU																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24242DFFAU																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4S24242DFFAU																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4S24242NFFAU																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4F24245NVFPV																																			33MHz/4.5 to 5.5V	-40 to 85	
			R4F24245NVFPV																																			33MHz/3.0 to 3.6V	-20 to 75	
			R4F24245DFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24245DFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24245NFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24245NFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24248DFPV	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24248DFPV	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24248DFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24248DFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24248NFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24248NFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24248DFPV	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24248DFPV	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24248DFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24248DFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24249DFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24249DFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
			R4F24249NFFAU	33MHz/4.5 to 5.5V	-40 to 85																																			
			R4F24249NFFAU	33MHz/3.0 to 3.6V	-20 to 75																																			
R4F24249DFPV	33MHz/4.5 to 5.5V	-40 to 85																																						
R4F24249DFPV	33MHz/3.0 to 3.6V	-20 to 75																																						

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application		Device			Memory		CPU			DMA		External bus extension		Clock		ADC	DAC	Timers				Serial Interface	SSU/ Special I/O		CAN		I/O Ports			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																																																													
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ EZdata flash	CPU	Basic instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	Channels	Ethernet	USB Function	LPC/ISA	LCD				Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																																																							
General-purposes	H8S/2400	H8S/2425	R4F24255DWFPU	48K	F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PLQP0120LA-A																																																																								
			R4F24255DWFPAU																																			33MHz/4.5 to 5.5V																																																																										
			R4F24255DVFPAU																																			33MHz/3.0 to 3.6V																																																																										
			R4F24255NVFPAU																																			33MHz/4.5 to 5.5V																																																																										
			R4F24255NVFPFU																																			384K	F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0120LA-A																																				
			R4F24255DVFPFU																																																																							33MHz/4.5 to 5.5V																																						
			R4F24255DVFPU																																																																							64K	F	Yes	H8S/2600 core	69	30 (@ 33MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	33MHz/4.5 to 5.5V	-20 to 75	PLQP0120LA-A
			R4F24255DVFPAU																																																																																																											25MHz/2.7 to 3.6V		
			R4F24255NVFPAU	33MHz/3.0 to 3.6V																																																																																																												
			R4F24255NVFPFU	33MHz/4.5 to 5.5V																																																																																																												
			R4F24256DWFPU	64K																																		F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	25MHz/2.7 to 3.6V																																					-40 to 85	PLQP0120KA-A	
			R4F24256DWFPAU																																																																						33MHz/4.5 to 5.5V																																							
			R4F24256DVFAU																																																																						33MHz/3.0 to 3.6V																																							
			R4F24256NVFAU																																																																						33MHz/4.5 to 5.5V																																							
			R4F24256NVFPFU																																																																						512K	F	Yes	H8S/2600 core	69	30 (@ 33MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0120LA-A	
			R4F24256DVFPAU																																																																																																										33MHz/4.5 to 5.5V			
			R4F24256NVFPAU																																																																																																										25MHz/2.7 to 3.6V			
			R4F24256NVFPFU																																																																																																										33MHz/3.0 to 3.6V			
			R4F24258DWFPU	48K																																		F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes																																					25MHz/2.7 to 3.6V	-40 to 85	PLQP0120KA-A	
			R4F24258DWFPAU																																																																																																										33MHz/4.5 to 5.5V			
			R4F24258DVFAU																																																																																																										33MHz/3.0 to 3.6V			
			R4F24258NVFAU																																																																																																										33MHz/4.5 to 5.5V			
			R4F24258NVFPFU																																																																						64K	F	Yes	H8S/2600 core	69	30 (@ 33MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0120LA-A	
			R4F24258DVFPAU																																																																																																										33MHz/4.5 to 5.5V			
			R4F24258NVFPAU																																																																																																										25MHz/2.7 to 3.6V			
			R4F24258NVFPFU																																																																																																										33MHz/3.0 to 3.6V			
			R4F24259DWFPU	64K																																		F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes																																					25MHz/2.7 to 3.6V	-40 to 85	PLQP0120KA-A	
			R4F24259DWFPAU																																																																																																										33MHz/4.5 to 5.5V			
R4F24259NVFPAU	33MHz/3.0 to 3.6V																																																																																																															
R4F24259NVFPFU	33MHz/4.5 to 5.5V																																																																																																															
R4F24259DVFPU	512K	F	Yes		H8S/2600 core	69	30 (@ 33MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes																																				33MHz/3.0 to 3.6V	-20 to 75	PLQP0120LA-A																																					
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R4F24259NVFPFU																																																																									33MHz/3.0 to 3.6V																																							
R4F24259DVFPU	64K	F	Yes	H8S/2600 core	69	30 (@ 33MHz)	16x 16 - 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	Yes	33MHz/4.5 to 5.5V	-20 to 75	PLQP0120LA-A																																																																									
R4F24259NVFPAU																																					33MHz/3.0 to 3.6V																																																																											
R4F24259NVFPFU																																					25MHz/2.7 to 3.6V																																																																											
R4F24259DVFPU																																					33MHz/4.5 to 5.5V																																																																											

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 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application		Device			Memory				CPU				DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		SSU / Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage		Operating Ambient Temperature (°C)		Package
		Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash / EZData flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subblock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU / Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program											
General-purpose	H8S/2400	H8S/2426		R4S24261DFQV	48K	L	-	H8S/2600 core	69	30 (@33MHz)	16 x 16 ~ 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes			33MHz/4.5 to 5.5V	-40 to 85	PLQP0144KA-A							
				-20 to 75																																															
				33MHz/3.0 to 3.6V																																						-40 to 85	PTLG0145JB-A								
				-20 to 75																																															
				33MHz/4.5 to 5.5V																																						-40 to 85	PLQP0144KA-A								
				-20 to 75																																															
				33MHz/3.0 to 3.6V																																						-40 to 85	PTLG0145JB-A								
				-20 to 75																																															
				33MHz/4.5 to 5.5V																																						-40 to 85	PTLG0145JB-A								
				-20 to 75																																															
				33MHz/3.0 to 3.6V																																						-40 to 85	PLQP0144KA-A								
				-20 to 75																																															
				33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																													
				-20 to 75																																															
				33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																													
				-20 to 75																																															
				33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																													
				-20 to 75																																															
				33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																													
				-20 to 75																																															
				33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																													
				-20 to 75																																															
				33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																													
				-20 to 75																																															
				33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																													
				-20 to 75																																															
				33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																													
				-20 to 75																																															
				33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																													
-20 to 75																																																			
33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																	
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33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																																	
-20 to 75																																																			
33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																	
-20 to 75																																																			
33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																																	
-20 to 75																																																			
33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																	
-20 to 75																																																			
33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																																	
-20 to 75																																																			
33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																	
-20 to 75																																																			
33MHz/4.5 to 5.5V	-40 to 85	PTLG0145JB-A																																																	
-20 to 75																																																			
33MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																	
-20 to 75																																																			

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 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																						
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug				On-Board Flash Program																																					
General-purpose	H8S/2400	H8S/2426R	R4S24261NVRFQV	-	48K	L	-	H8S/2600 core	69	30 (@33MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0144KA-A																																						
			R4S24261DVRFQV																																					-40 to 85	PTLG0145JB-A																																						
			R4S24261DVRLPV																																					-20 to 75	PLQP0144KA-A																																						
			R4S24261NVRLPV																																					-40 to 85	PTLG0145JB-A																																						
			R4S24262NVRFQV																																					-20 to 75	PLQP0144KA-A																																						
			R4S24262DVRFQV																																					-40 to 85	PTLG0145JB-A																																						
			R4S24262DVRLPV																																					-20 to 75	PLQP0144KA-A																																						
			R4S24262NVRLPV																																					-40 to 85	PTLG0145JB-A																																						
			R4F24265NVRLPV																																					F	Yes	128K	48K	F	Yes	H8S/2600 core	69	30 (@33MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0144KA-A
			R4F24265DVRFQV																																																																											-40 to 85	PTLG0145JB-A
			R4F24265DVRLPV																																																																											-20 to 75	PLQP0144KA-A
			R4F24265NVRLPV																																																																											-40 to 85	PTLG0145JB-A
			R4F24266DVRFQV																																																																											-20 to 75	PLQP0144KA-A
			R4F24266DVRLPV																																																																											-40 to 85	PTLG0145JB-A
			R4F24266NVRLPV																																																																											-20 to 75	PLQP0144KA-A
			R4F24266NVRFQV																																																																											-40 to 85	PTLG0145JB-A
R4F24268DVRFQV	256K	Yes	64K	48K	F	Yes	H8S/2600 core	69	30 (@33MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0144KA-A																																								
R4F24268DVRLPV																																						-40 to 85	PTLG0145JB-A																																								
R4F24268NVRLPV																																						-20 to 75	PLQP0144KA-A																																								
R4F24268NVRFQV																																						-40 to 85	PTLG0145JB-A																																								
R4F24269DVRFQV	64K	Yes	64K	48K	F	Yes	H8S/2600 core	69	30 (@33MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	33MHz/3.0 to 3.6V	-20 to 75	PLQP0144KA-A																																								
R4F24269DVRLPV																																						-40 to 85	PTLG0145JB-A																																								
R4F24269NVRLPV																																						-20 to 75	PLQP0144KA-A																																								
R4F24269NVRFQV																																						-40 to 85	PTLG0145JB-A																																								

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU				DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		SSU/Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions		Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program								
General-purpose	H8S/2400	H8S/2427	R4F24275DWLVP	48K	F	Yes	H8S/2600 core	69	40 (@ 25MHz)	16 x 16 → 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A							
			R4F24275DWFQJ																																			33MHz/4.5 to 5.5V		PLQP0144KA-A							
			R4F24275DPLVP																																			33MHz/3.0 to 3.6V		PTLG0145JB-A							
			R4F24275DVLVP																																			33MHz/4.5 to 5.5V									
			R4F24275NLPV																																			30 (@ 33MHz)		33MHz/3.0 to 3.6V	-20 to 75						
			R4F24275NVLVP																																												
			R4F24275NVFQJ																																			384K		-	33MHz/3.0 to 3.6V	-40 to 85					
			R4F24275DVFQJ																																												
			R4F24275NFQJ																																			64K		-	33MHz/4.5 to 5.5V	-20 to 75					
			R4F24275DFQJ																																												
			R4F24276DWLVP																																			40 (@ 25MHz)		25MHz/2.7 to 3.6V	-40 to 85						
			R4F24276DWFQJ																																												
			R4F24276DPLVP																																			30 (@ 33MHz)		33MHz/3.0 to 3.6V	PTLG0145JB-A						
			R4F24276DVLVP																																												
			R4F24276NLPV																																			30 (@ 33MHz)		33MHz/4.5 to 5.5V	-20 to 75						
			R4F24276NVLVP																																												
			R4F24276NVFQJ																																			512K		-	33MHz/3.0 to 3.6V	-40 to 85					
			R4F24276DVFQJ																																												
			R4F24276DFQJ																																			64K		-	33MHz/4.5 to 5.5V	-20 to 75					
			R4F24276NFQJ																																												
			R4F24278DWLVP																																			40 (@ 25MHz)		25MHz/2.7 to 3.6V	-40 to 85						
			R4F24278DWFQJ																																												
			R4F24278DPLVP																																			30 (@ 33MHz)		33MHz/3.0 to 3.6V	PTLG0145JB-A						
			R4F24278DVLVP																																												
			R4F24278NLPV																																			30 (@ 33MHz)		33MHz/4.5 to 5.5V	-20 to 75						
			R4F24278NVLVP																																												
			R4F24278NVFQJ																																			512K		-	33MHz/3.0 to 3.6V	-40 to 85					
			R4F24278DFQJ																																												
R4F24278NFQJ	64K	-	33MHz/4.5 to 5.5V	-20 to 75																																											
R4F24278DVFQJ																																															
R4F24279DWLVP	40 (@ 25MHz)	25MHz/2.7 to 3.6V	-40 to 85																																												
R4F24279DWFQJ																																															
R4F24279DPLVP	30 (@ 33MHz)	33MHz/3.0 to 3.6V	PTLG0145JB-A																																												
R4F24279DVLVP																																															
R4F24279NLPV	30 (@ 33MHz)	33MHz/4.5 to 5.5V	-20 to 75																																												
R4F24279NVLVP																																															
R4F24279DFQJ	512K	-	33MHz/3.0 to 3.6V	-40 to 85																																											
R4F24279NFQJ																																															
R4F24279DVFQJ	64K	-	33MHz/4.5 to 5.5V	-20 to 75																																											
R4F24279NFQJ																																															
R4F24279NVFQJ	512K	-	33MHz/3.0 to 3.6V	-40 to 85																																											
R4F24279DVFQJ																																															
R4F24279NVFQJ	64K	-	33MHz/3.0 to 3.6V	-20 to 75																																											
R4F24279NVFQJ																																															

★ : New product ★★ : Under development

*F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		SSU/Special I/O		CAN		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																										
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																		
General-purpose	H8S/2400	H8S/2427R	RAF24275DWRLPV	48K	F	Yes	H8S/2600 core	69	40 (@25MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A																																	
			RAF24275DWRVFOU						PLQP0144KA-A																																																																
			RAF24275DVRLPV						33MHz/3.0 to 3.6V																													-20 to 75	PTLG0145JB-A																																		
			RAF24275NVRLPV																																			PLQP0144KA-A																																			
			RAF24275NVRVFOU																																			PTLG0145JB-A																																			
			RAF24275DVRVFOU						25MHz/2.7 to 3.6V																													-40 to 85	PTLG0145JB-A																																		
			RAF24275DVRLPV																																			PLQP0144KA-A																																			
			RAF24275DWRVFOU																																			PTLG0145JB-A																																			
			RAF24276DWRLPV						64K																													F	Yes	H8S/2600 core	69	40 (@25MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A
			RAF24276DWRVFOU																																							PLQP0144KA-A																															
			RAF24276DVRLPV																																							33MHz/3.0 to 3.6V																													-20 to 75	PTLG0145JB-A	
			RAF24276NVRLPV																																																																				PLQP0144KA-A		
			RAF24276NVRVFOU	PTLG0145JB-A																																																																					
			RAF24276DVRVFOU	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A																																																																			
			RAF24276DVRLPV		PLQP0144KA-A																																																																				
			RAF24276DWRVFOU		PTLG0145JB-A																																																																				
			RAF24276NVRLPV	48K	F	Yes	H8S/2600 core	69	40 (@25MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A																																	
			RAF24276DWRVFOU						PLQP0144KA-A																																																																
			RAF24276DVRLPV						33MHz/3.0 to 3.6V																													-20 to 75	PTLG0145JB-A																																		
			RAF24276NVRLPV																																			PLQP0144KA-A																																			
			RAF24276NVRVFOU																																			PTLG0145JB-A																																			
			RAF24276DVRVFOU						25MHz/2.7 to 3.6V																													-40 to 85	PTLG0145JB-A																																		
			RAF24276DVRLPV	PLQP0144KA-A																																																																					
			RAF24276DWRVFOU	PTLG0145JB-A																																																																					
RAF24278DWRLPV	512K	F	Yes	H8S/2600 core	69	40 (@25MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A																																				
RAF24278DWRVFOU						PLQP0144KA-A																																																																			
RAF24278DVRLPV						33MHz/3.0 to 3.6V																													-20 to 75	PTLG0145JB-A																																					
RAF24278NVRLPV																																			PLQP0144KA-A																																						
RAF24278NVRVFOU																																			PTLG0145JB-A																																						
RAF24278DVRVFOU						25MHz/2.7 to 3.6V																													-40 to 85	PTLG0145JB-A																																					
RAF24278DVRLPV																																			PLQP0144KA-A																																						
RAF24278DWRVFOU																																			PTLG0145JB-A																																						
RAF24279DWRLPV						64K																													F	Yes	H8S/2600 core	69	40 (@25MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	Yes	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A			
RAF24279DWRVFOU																																							PLQP0144KA-A																																		
RAF24279DVRLPV																																							33MHz/3.0 to 3.6V																													-20 to 75	PTLG0145JB-A				
RAF24279NVRLPV																																																																				PLQP0144KA-A					
RAF24279NVRVFOU	PTLG0145JB-A																																																																								
RAF24279DVRVFOU	25MHz/2.7 to 3.6V	-40 to 85	PTLG0145JB-A																																																																						
RAF24279DVRLPV		PLQP0144KA-A																																																																							
RAF24279DWRVFOU		PTLG0145JB-A																																																																							

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package			
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	SSU/ Special Serial I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program	Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package		
General-purpose	H8S/2400	H8S/2454	R4S24541NVFPV	48K	L	-	H8S/2600 core	69	31(@32MHz)	16 × 16 → 32	4	-	DTC	16M	-	Yes	-	10-bit x 10 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	1(Multiprocessor communication function)	-	-	Yes	-	-	11	83	9(NMI, IRQ x 8)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-20 to 75	PLQP0120LA-A		
			R4S24541DVFPV																																						-40 to 85			
			R4S24541NVFAU																																						-20 to 75		PLQP0120KA-A	
			R4S24541DVFAU																																						-40 to 85			
			R4S24542NVFPV	64K	F	Yes																																			-20 to 75		PLQP0120LA-A	
			R4S24542DVFPV																																									-40 to 85
			R4S24542NVFAU																																									-20 to 75
			R4S24542DVFAU																																									-40 to 85
			R4F24545NVFAU	48K	F	Yes																																			-20 to 75		PLQP0120KA-A	
			R4F24545DVFPV																																									-20 to 75
			R4F24548NVFAU																																									-40 to 85
			R4F24548DVFAU																																									-20 to 75
			R4F24548NVFPV	256K	F	Yes																																			-20 to 75		PLQP0120LA-A	
			R4F24548DVFPV																																									-40 to 85
			R4F24549NVFAU																																									-20 to 75
			R4F24549DVFAU																																									-40 to 85
			R4F24549NVFPV	64K	F	Yes																																			-20 to 75		PLQP0120KA-A	
			R4F24549DVFAU																																									-40 to 85
			R4F24549NVFPV																																									-20 to 75
			R4F24549DVFPV																																									-40 to 85

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 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																																																													
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer		Clock Sync./ Clock Async.	Input Only(Numbers)	CMOS I/O (Numbers)				Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																																																										
General-purpose	H8S/2400	H8S/2456	R4S24561DV FQV	-	48K	L	-	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																																											
			R4S24561NV FQV																																					-20 to 75	PTLG0145JB-A																																																																											
			R4S24561NV LPV																																					-40 to 85	PLQP0144KA-A																																																																											
			R4S24561DV LPV																																					-20 to 75	PTLG0145JB-A																																																																											
			R4S24562NV FQV																																					-40 to 85	PLQP0144KA-A																																																																											
			R4S24562DV FQV																																					-20 to 75	PTLG0145JB-A																																																																											
			R4S24562NV LPV																																					-40 to 85	PLQP0144KA-A																																																																											
			R4S24562DV LPV																																					-20 to 75	PTLG0145JB-A																																																																											
			R4F24565NV FQV																																					F	Yes	128K	48K	F	Yes	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																					
			R4F24565DV FQV																																																																											-20 to 75	PTLG0145JB-A																																					
			R4F24565NV LPV																																																																											-40 to 85	PLQP0144KA-A																																					
			R4F24565DV LPV																																																																											-20 to 75	PTLG0145JB-A																																					
			R4F24568NV FQV																																																																											256K	Yes	48K	F	Yes	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A
			R4F24568DV FQV																																																																																																																-20 to 75	PTLG0145JB-A
			R4F24568NV LPV																																																																																																																-40 to 85	PLQP0144KA-A
			R4F24568DV LPV																																																																																																																-20 to 75	PTLG0145JB-A
R4F24569NV FQV	64K	Yes	48K	F	Yes	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	-	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																																													
R4F24569DV FQV																																						-20 to 75	PTLG0145JB-A																																																																													
R4F24569NV LPV																																						-40 to 85	PLQP0144KA-A																																																																													
R4F24569DV LPV																																						-20 to 75	PTLG0145JB-A																																																																													

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																																																																																				
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer		Clock Sync./ Clock Async.	Input Only(Numbers)	CMOS I/O (Numbers)				Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																																																																																	
General-purpose	H8S/2400	H8S/2468R	R4S24561DVRFQV	48K	L	-	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																																																																			
			R4S24561NVRFQV																																				-20 to 75																																																																																																				
			R4S24561DVRPLPV																																				-40 to 85																																																																																																				
			R4S24561NVRPLPV																																				-20 to 75																																																																																																				
			R4S24562NVRFQV	64K	L	-																																	H8S/2600 core		69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PTLG0145JB-A																																																																		
			R4S24562NVRPLPV																																																																					-20 to 75																																																																			
			R4S24562DVRFQV																																																																					-40 to 85																																																																			
			R4S24562DVRPLPV																																																																					-20 to 75																																																																			
			R4F24565NVRFQV	128K	F	Yes																																																																		H8S/2600 core		69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																	
			R4F24565NVRPLPV																																																																																																						-20 to 75																																		
			R4F24566DVRPLPV																																																																																																						-40 to 85																																		
			R4F24568DVRPLPV																																																																																																						-20 to 75																																		
			R4F24568NVRPLPV	256K	F	Yes																																																																																																			H8S/2600 core		69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PTLG0145JB-A
			R4F24568DVRFQV																																																																																																																																							-20 to 75	
			R4F24568NVRFQV																																																																																																																																							-40 to 85	
			R4F24569DVRPLPV																																																																																																																																							-20 to 75	
R4F24569NVRPLPV	64K	F	Yes	H8S/2600 core	69	31(@32MHz)	16 x 16 - 32	4	2	DTC	16M	Yes	Yes	-	10-bit x 16 (2Unit)	8-bit x 2	2(TMR)	12(TPU)	16 (shared with DMAC, DTC, TMR, TPU)	1	5	4	-	-	Yes	-	-	18	96	17(NMI, IRQ x 16)	-	Yes	-	Yes	32MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A																																																																																																						
R4F24569DVRFQV																																				-20 to 75																																																																																																							
R4F24569NVRFQV																																				-40 to 85																																																																																																							
R4F24569NVRPLPV																																				-20 to 75																																																																																																							

★ : New product ★★ : Under development

*F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2400 Series

Application	Device			Memory				CPU			DMA		External bus extension	Clock		ADC	DAC	Timers			Serial Interface			SSU/ Special Serial I/O	CAN								Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package					
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	Channels	Ethernet	USB Function	LPC/ISA	LCD				Input Only/(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug
General-purpose	H8S/2462	R4F2462VFC34DV R4F2462VFC34V	512K	40K	F	-	H8S/2600 core	69	29 (@34MHz)	16 x 16 - 32	-	-	DTC	16M	-	Yes (x 4)	Yes	10-bit x 8	-	4(TMR)	1 (free run)	-	2	3	6	-	1(SSU)	-	1	Yes (LPC)	-	9	106	33	Yes	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PLQP0144KA-A
																																							-20 to 75	
	H8S/2463	R4F2463VTE34DV R4F2463VTE34V	512K	40K	F	-	H8S/2600 core	69	29 (@34MHz)	16 x 16 - 32	-	-	DTC	16M	-	Yes (x 4)	Yes	10-bit x 8	-	4(TMR)	1 (free run)	-	2	3	6	-	1(SSU)	-	1	Yes (LPC)	-	9	106	33	Yes	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PTQP0144LC-A
																																							-20 to 75	
	H8S/2472	R4F2472VBR34DV R4F2472VBR34V	512K	40K	F	-	H8S/2600 core	69	29 (@34MHz)	16 x 16 - 32	-	-	DTC	16M	-	Yes (x 4)	Yes	10-bit x 8	-	4(TMR)	1 (free run)	-	2	3	6	-	1(SSU)	-	1	Yes (LPC)	-	9	110	33	Yes	Yes	Yes	34MHz/3.0 to 3.6V	-40 to 85	PLBG0176GA-A
																																							-20 to 75	

★ : New product ★★ : Under development

*F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2500 Series

Application	Device			Memory				CPU			DMA		External bus extension	Clock		ADC	DAC	Timers				Serial Interface		SSU/Special I/O	CAN		USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions	Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package																														
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator		Watchdog Timer	Clock Sync./Clock Async.				I ² C-bus	IEBus	Channels	Ethernet	Input Only(Numbers)					CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																										
General-purpose	H8S/2500	H8S/2506	HD64F2505BR26DV	384K	32K	F	-	H8S/2000 core	65	38(@26MHz)	-	-	-	DTC	16M	Yes (x1, x2)	Yes	10-bit x 16	8-bit x 2	4(TMR)	6(TPU)	-	2	5	2	-	-	-	-	16	104	9	-	-	Yes	26MHz/3.0 to 5.5V	-40 to 85	PLBG0176GA-A																														
			HD64F2506FC26DV	384K																																		PRQP0144KB-A																														
			HD64F2506BR26DV	512K																																		PLBG0176GA-A																														
	HD64F2551BR26DV	384K	24K	PLBG0176GA-A																																																																
	HD64F2551FC26DV	512K	32K	PRQP0144KB-A																																																																
	HD64F2552BR26DV	512K	32K	PLBG0176GA-A																																																																
	HD64F2552FC26DV	512K	32K	PRQP0144KB-A																																																																
	HD64F2556FC20DV	512K	32K	50(@20MHz)	20MHz/3.0 to 5.5V																																	PRQP0144KB-A																														

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2600 Series

Application	Device			Memory				CPU				DMA		External bus extension	Clock		ADC	DAC	Timers				Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package								
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.			Channels				Input Only(Numbers)	CMOS I/O (Numbers)		Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program													
General-purpose	H8S/2600	H8S/2602	HD6432601XXXFA**	64K	4K	M	-	H8S/2600 core	69	50(@20MHz)	16 x 16 - 32	-	-	DTC	16M	-	Yes(x 1, x 2, x 4)	-	10-bit x 12	-	-	-	8 (shared with TPU + PPG)	3	-	-	-	-	-	12	44	7(NMI)+ IRQ(6))	-	Yes (PC break)	-	20MHz/4.5 to 5.5V				-20 to 75	PRQP0080JD-A									
			HD6432602XXXFA**	128K																																						F	-20 to 75	-40 to 85						
			HD64F2602FA20WV																																										M	-20 to 75	-40 to 85			
			HD6432602XXFA**																																							F						-20 to 75	-40 to 85	
			HD6432603XXXFA**																																										64K					M
			HD64F2604FA20WV	F																																						-20 to 75								
		HD6432604XXFA**	M		-20 to 75	-40 to 85																																												
		HD64F2604FA20V		F															-20 to 75	-40 to 85																														
		HD6432604XXFA**	F																		-20 to 75	-40 to 85																												
		HD6432605WXXXFA**		128K																				M	-20 to 75	-40 to 85																								
		HD6432606WXXXFA**	F																								-20 to 75	-40 to 85																						
		HD64F2607WF20WV																						M					-20 to 75	-40 to 85																				
	HD64F2607WF20V	F	-20 to 75		-40 to 85																																													
	HD6432607WXXXFA**			F		-20 to 75	-40 to 85																																											
	HD6432607WXXXFA**	M						-20 to 75	-40 to 85																																									
	HD6432608XXXFA**			128K						M	-20 to 75	-40 to 85																																						
	HD6432609XXXFA**	F											-20 to 75	-40 to 85																																				
	HD64F2609FC20WV									M					-20 to 75	-40 to 85																																		
	HD64F2609FC20V	F	-20 to 75		-40 to 85																																													
	HD6432609XXXFA**			M		-20 to 75	-40 to 85																																											
HD6432609XXXFA**	F	-20 to 75						-40 to 85																																										
HD6432609XXXFA**				M					-20 to 75	-40 to 85																																								
HD6432609XXXFA**	F												-20 to 75	-40 to 85																																				
HD6432609XXXFA**				M											-20 to 75	-40 to 85																																		
HD6432609XXXFA**	F		-20 to 75		-40 to 85																																													
HD6432609XXXFA**				M		-20 to 75	-40 to 85																																											
HD6432609XXXFA**	F	-20 to 75						-40 to 85																																										
HD6432609XXXFA**				M					-20 to 75	-40 to 85																																								
HD6432609XXXFA**	F										-20 to 75	-40 to 85																																						
HD6432609XXXFA**				M									-20 to 75	-40 to 85																																				
HD6432609XXXFA**	F		-20 to 75		-40 to 85																																													
HD6432609XXXFA**				M		-20 to 75	-40 to 85																																											
HD6432609XXXFA**	F	-20 to 75						-40 to 85																																										
HD6432609XXXFA**				M					-20 to 75	-40 to 85																																								
HD6432609XXXFA**	F										-20 to 75	-40 to 85																																						
HD6432609XXXFA**				M									-20 to 75	-40 to 85																																				
HD6432609XXXFA**	F		-20 to 75		-40 to 85																																													
HD6432609XXXFA**				M		-20 to 75	-40 to 85																																											
HD6432609XXXFA**	F	-20 to 75						-40 to 85																																										
HD6432609XXXFA**				M					-20 to 75	-40 to 85																																								
HD6432609XXXFA**	F										-20 to 75	-40 to 85																																						
HD6432609XXXFA**				M									-20 to 75	-40 to 85																																				
HD6432609XXXFA**	F		-20 to 75		-40 to 85																																													
HD6432609XXXFA**				M		-20 to 75	-40 to 85																																											
HD6432609XXXFA**	F	-20 to 75						-40 to 85																																										
HD6432609XXXFA**				M					-20 to 75	-40 to 85																																								

★ : New product ★★ : Under development

*F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2600 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface		I ² C-bus	IEBus	SSU/ Special I/O	CAN Channels	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																													
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator									Watchdog Timer	Clock Sync./ Clock Async.		Input Only(Numbers)	CMOS I/O (Numbers)	Boundary Scan/JTAG				On-Chip Debug	On-Board Flash Program																											
General-purpose	H8S/2612	H8S/2612	HD6432611XXXFA	64K	M	-	H8S/2600 core	69	50 (@ 20MHz)	16 x 16 → 32	-	-	DTC	16M	-	Yes(x 1, x 2, x 4)	-	10-bit x 12	-	-	-	8(shared with TPU +PPG)	1	3	-	-	1	-	-	-	12	44	7(NMI+ IRQ(6))	Yes (PC break)	-	20MHz/4.5 to 5.5V	-20 to 75	PRQP0080JD-A																															
			HD6432614XXXFA	4K	F								HD6432612FA20V									DTC												8(shared with TPU +PPG)																																			
			HD6432612XXXFA										128K									8K												M					40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	Yes	8-bit x 4	4(TMR)	Yes	2	2	1(Multiprocessor communication function)	9	9(NMI+ IRQ(6))	-	25MHz/3.0 to 3.6V, 16MHz/3.0 to 3.6V	-20 to 75, -40 to 85	PRQP0128KB-A														
			HD6432616XXXFA										128K																										M	35.7 (@ 28MHz)	-	-	Yes(x 1, x 2, x 4)	-	-	-	1	-	-	-	9(NMI+ IRQ(6))	-	28MHz/4.5 to 5.5V	-20 to 75	PRQP0128KB-A														
			HD6432631VXXXF																			192K												12K						40 (@ 25MHz), 62.5 (@ 16MHz)	-	-	Yes	10-bit x 16	8-bit x 4	4(TMR)	Yes	5	-	1(Multiprocessor communication function)	9	-	25MHz/3.0 to 3.6V, 16MHz/3.0 to 3.6V	-20 to 75, -40 to 85	PTQP0120LA-A														
			HD6432632VXXXTE																																					H8S/2633			F				40 (@ 25MHz), 62.5 (@ 16MHz)									4	DTC	Yes(x 1, x 2, x 4)	Yes	8-bit x 4	4(TMR)	8(shared with TPU +PPG)	2	2	-	9(NMI+ IRQ(6))	Yes (PC break)	16MHz/3.0 to 3.6V, 25MHz/3.0 to 3.6V, 16MHz/3.0 to 3.6V	-20 to 75
		HD6432632XXXFF	16K	16K	35.7 (@ 28MHz)								4																										DTC								Yes(x 1, x 2, x 4)									Yes	Yes	4(TMR)	-	-	-	-	9(NMI+ IRQ(6))	Yes	25MHz/3.0 to 3.6V	-40 to 85	PRQP0128KB-A		
		HD6432695XXXFF	256K		M																	40 (@ 25MHz), 62.5 (@ 16MHz)												4						DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-		-	-	-	9(NMI+ IRQ(6))	-	25MHz/3.0 to 3.6V, 16MHz/3.0 to 3.6V	-20 to 75, -40 to 85	PTQP0120LA-A														
		HD6432632WXXXFF		H8S/2633									F									40 (@ 25MHz), 62.5 (@ 16MHz)																	4								DTC									Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-
		HD6432632WXXXTE																				H8S/2633																																															
		HD64F2633F16V		H8S/2633									F																										40 (@ 25MHz), 62.5 (@ 16MHz)								4									DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-
		HD64F2633F25V	H8S/2633		M																	35.7 (@ 28MHz)												4					DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-		-	-	-	-	-	-	-															
	HD64F2633TE16V	H8S/2633		M		40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																																															
	HD64F2633TE25V		H8S/2633		M	40 (@ 25MHz), 62.5 (@ 16MHz)																	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																															
	HD64F2633RF28JV	H8S/2633		M		40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																																															
	HD64F2633RF28V		H8S/2633		M	35.7 (@ 28MHz)																	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																															
	HD64F2633RF28V	H8S/2633		M		40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																																															
	HD64F2633RTE28V		H8S/2633		M	40 (@ 25MHz), 62.5 (@ 16MHz)																	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																															
	HD6432633WXXXFF	H8S/2633		M		40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																																															
	HD6432633WXXXTE		H8S/2633		M	40 (@ 25MHz), 62.5 (@ 16MHz)																	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																															
	HD6432633XXXFF	H8S/2633		M		40 (@ 25MHz), 62.5 (@ 16MHz)	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																																															
	HD6432633XXXTE		H8S/2633		M	40 (@ 25MHz), 62.5 (@ 16MHz)																	4	DTC	Yes	10-bit x 16	8-bit x 4	4(TMR)	-	-	-	-	-	-	-	-	-	-																															

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2600 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																														
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit									Programmable Pulse Generator	Watchdog Timer		Clock Sync./ Clock Async.	Input Only(Numbers)	CMOS I/O (Numbers)				Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																											
General-purpose	H8S/2600	H8S/2636	HD64F2636F20V	128K	4K	F	-	H8S/2600 core	69	50 (@20MHz)	16 x 16 - 32	-	DTC	16M	-	Yes(x 1, x 2, x 4)	-	10-bit x 12	8-bit x 2	-	6(TPU)	8(shared with TPU+ PPG)	2	3	-	-	2	-	-	-	-	12	72	7(NMI+ IRQ(6))	-	Yes (PC break)	Yes	20MHz/4.5 to 5.5V	-20 to 75	PRQP0128KB-A																													
			HD64F2636UF20V			M											-																																																				
			HD6432636XXXF			-											-																																																				
			HD6432636UXXXF			-											-																																																				
		HD64F2638F20V	256K	16K	F	-											-								-												-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD64F2638UF20V			M	-																																																															
		HD6432638XXXF			-	-																																																															
		HD6432638UXXXF			-	-																																																															
		HD64F2639UF20V	256K	16K	F	-											-								-												-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		HD64F2639UF20V			M	-																																																															
		HD6432639UXXXF			-	-																																																															
		HD6432639WXXXF			-	-																																																															
	HD64F2630UF20V	384K	16K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																
	HD64F2630UF20V			M	-																																																																
	HD6432630XXXF			-	-																																																																
	HD6432630UXXXF			-	-																																																																

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H8S/2600 Series

Application	Device			Memory		CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package																																					
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels									8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins				Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program																																		
General-purpose	H8S/2600	H8S/2643	HD6432641WXXXFC	128K	8K	M	-	H8S/2600 core	69	40 (@ 25MHz), 62.5 (@ 16MHz)	4	-	DTC	16M	-	Yes(x 1, x 2, x 4)	Yes	10-bit x 16	8-bit x 4	4(TMR)	6(TPU)	8(shared with TPU+ PPG)	2	2	-	-	-	-	16	96	9(NMI+ IRQ(8))	-	Yes (PC break)	Yes	-	25MHz/3.0 to 3.6V, 16MHz/3.0 to 3.6V	-20 to 75	PRQP0144KB-A																																						
			HD6432641WXXXTF																																			PRQP0128KB-A																																						
			HD6432641XXXTF																																																																									
			HD6432642WXXXFC	192K	12K																																																																							
			HD6432642WXXXTF																																																																									
			HD6432642XXXTF																																																																									
			HD6432642XXXFC	256K	16K																																	F	M																																					
			HD64F2643FC16V																																																																									
			HD64F2643TF25V																																																																									
			HD64F2643TF16V																																																																									
			HD64F2643FC25V																																																																									
			HD6432643WXXXTF																																																																									
			HD6432643XXXFC	H8S/2646	HD6432645XXXFC																																	64K	2K																																					
			HD6432647XXXFC		64K																																	2K																																						
			HD64F2648RFC20V		H8S/2648																																	HD6432648XXXFC	128K	4K	F																																			
HD6432648XXXFC	M																																																																											

: New product ★: Under development
 *F: Flash memory version, L: ROM-less version, M: Mask ROM version, O: One-time PROM version, Qz: QzROM version

H8S/2600 Series

Application	Device			Memory				CPU				DMA		External bus extension		Clock		ADC	DAC	Timers				Serial Interface	I ² C-bus	IEBus	SSU/ Special Serial I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins	On-chip debugging functions			Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package	
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Subclock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer									Clock Sync./ Clock Async.	Input Only (Numbers)		CMOS I/O (Numbers)	Boundary Scan/JTAG	On-Chip Debug				On-Board Flash Program
General-purpose	H8S/2600	H8S/2655	HD64326558XXTE	64K	128K	4K	-	H8S/2600 core	69	50 (@20MHz)	16 x 16 - 32	4	-	DTC	16M	-	-	-	10-bit x 8	8-bit x 2	2(TMR)	6(TPU)	Yes	1	3	-	-	1(Multiprocessor communication function)	-	-	-	-	8	74	9	-	-	-	20MHz/4.5 to 5.5V, 10MHz/2.7 to 5.5V	-20 to 75	PTQP0120LA-A	
			HD6432655XXXFX																																					M	-40 to 85	PRQP0128KB-A
			HD6432655XXXFI																																						-20 to 75	PTQP0144LC-A
			HD6432655XXXTTE																																						-40 to 85	PTQP0120LA-A
			HD6472655RFIV																																						-40 to 85	PTQP0144LC-A
			HD6472655RFV																																						-20 to 75	PRQP0128KB-A
			HD6472655RVFV																																					O	-40 to 85	PTQP0144LC-A
			HD6472655RTEV																																						-20 to 75	PTQP0128KB-A
			HD6472655RTEV																																						-40 to 85	PRQP0128KB-A
			HD6472655RVTEV																																						-20 to 75	PTQP0120LA-A
			HD6472655RVTEV																																						-40 to 85	PRQP0144KC-A
			HD6472655RVTEV																																						-20 to 75	PTQP0120LA-A
			HD6472655RVTEV																																						-40 to 85	PRQP0144KC-A
			HD6472655RVTEV																																						-20 to 75	PTQP0120LA-A
			HD6472655RVTEV																																						-40 to 85	PRQP0144KC-A

★ : New product ★★ : Under development
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H8S/2600 Series

Application	Device			Memory		CPU			DMA		External bus extension		Clock		ADC		DAC		Timers			Serial Interface		I ² C-bus		SSU/ Special Serial I/O		CAN		Ethernet		USB Function		LPC/ISA		LCD		I/O Ports		External Interrupt Pins			On-chip debugging functions		Operating Frequency/ Supply Voltage	Operating Ambient Temperature (°C)	Package
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./ Clock Async.	I ² C-bus	IEBus	SSU/ Special Serial I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG	On-Chip Debug	On-Board Flash Program								
Safety	H8S/2600	H8S/2612	HD6432611XXXXFAK HD6432611XXXXFAJ HD6432614XXXXFAK HD6432614XXXXFAJ HD6432612FA20JV	64K	M	-	H8S/2600 core	50 (@20MHz)	-	-	-	-	DTC	-	-	-	-	-	-	-	-	8(shared with TPU+ PPG)	1	-	-	-	-	-	-	-	-	-	-	12	44	-	-	-	-	Yes (PC break)	-	20MHz/4.5 to 5.5V	-40 to 125 -40 to 105 -40 to 85	PRQP0080JD-A			
			HD64F2612FA20LV HD64F2612FA20KV HD6432612XXXXFAK HD6432612XXXXFAJ HD6432616XXXXFAK HD6432616XXXXFAJ	4K	F	-		50 (@20MHz)	-	-	DTC	-	-	-	-	-	-	-	-	-	-	-	-	8(shared with TPU+ PPG)	1	-	-	-	-	-	-	-	-	-	-	-	-	Yes (PC break)	-	20MHz/4.5 to 5.5V	-40 to 125 -40 to 105 -40 to 85						
			HD64F2615FA20K HD64F2615FA20JV HD64F2615FA20L HD64F2615FA20V**	64K	4K	F		41.7 (@24MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	20MHz/4.5 to 5.5V 24MHz/4.5 to 5.5V	-40 to 125 -40 to 105 -40 to 85					
			HD6432615XXXXFAK HD6432615XXXXFAJ HD6432616XXXXFAK HD6432616XXXXFAJ	4K	M	-		41.7 (@24MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		
			HD64F2628FA24JV	128K	8K	F		-	-	-	-	-	-	-	-	DTC	-	-	-	-	-	-	-	-	8(shared with TPU+ PPG)	1	2	-	-	-	-	-	-	-	-	-	-	-	Yes (PC break)	Yes	24MHz/4.5 to 5.5V	-40 to 85					
			HD6432628XXXXFAK HD6432695XXXXFJ HD6432695XXXXFL	192K	8K	M		-	-	-	-	35.7 (@28MHz)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

H8S/2600 Series

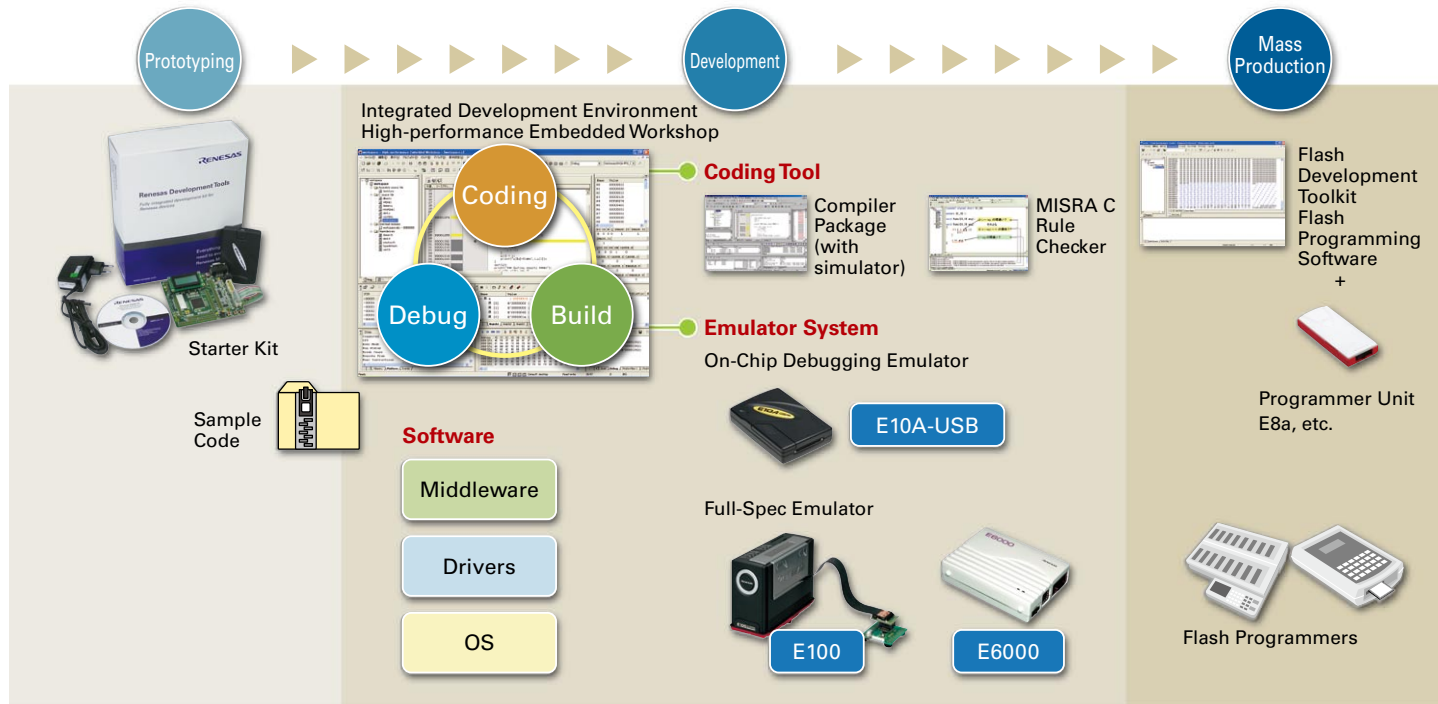
Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC	DAC	Timers			Serial Interface		SSU / Special I/O	CAN	Ethernet	USB Function	LPC/ISA	LCD	I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency / Supply Voltage	Operating Ambient Temperature (°C)	Package																																																																		
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash / EZdata flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator							Watchdog Timer	Clock Sync./ Clock Async.	I²C-bus	IEBus	Input Only (Numbers)	CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG				On-Chip Debug	On-Board Flash Program																																																																
Dashboard	H8S/2600	H8S/2630	HD64F2630F20JV HD64F2630F16LV HD64F2630UF16LV HD64F2630UF20JV HD64F2630WF20JV HD64F2630WF16LV HD6432630XXXFL HD6432630XXXFL HD6432630UXXXFL HD6432630UXXXFL HD6432630WXXXFL HD6432630WXXXFL	384K	16K	F	-	H8S/2600 core	69	50 (@20MHz)	16 x 16 - 32	-	-	DTC	16M	Yes(x 1, x 2, x 4)	-	-	8-bit x 2	-	-	8 (shared with TPU+ PPG)	2	3	-	-	-	-	-	12	72	7(NMI+ IRQ(6))	-	Yes (PC break)	-	-	20MHz/4.5 to 5.5V	-40 to 85	PRQP0128KB-A																																																																			
																																					Yes	16MHz/4.5 to 5.5V		-40 to 105																																																																		
																																					-	20MHz/4.5 to 5.5V		-40 to 85																																																																		
																																					-	16MHz/4.5 to 5.5V		-40 to 105																																																																		
																																					-	20MHz/4.5 to 5.5V		-40 to 85																																																																		
																																					-	16MHz/4.5 to 5.5V		-40 to 105																																																																		
				-	20MHz/4.5 to 5.5V	-40 to 85																																																																																																				
				-	16MHz/4.5 to 5.5V	-40 to 105																																																																																																				
				-	20MHz/4.5 to 5.5V	-40 to 85																																																																																																				
				-	16MHz/4.5 to 5.5V	-40 to 105																																																																																																				
				-	20MHz/4.5 to 5.5V	-40 to 85																																																																																																				
				-	16MHz/4.5 to 5.5V	-40 to 105																																																																																																				
		H8S/2635	HD6432634XXXFL HD64F2635F20J HD6432635XXXFL HD6432635XXXFL	128K	6K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20MHz/4.5 to 5.5V	-40 to 85																																																																				
																																					M	192K		M	-	-	Yes(128 division)	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																						
				H8S/2636	HD64F2636F16LV HD64F2636F20JV HD64F2636UF20JV HD64F2636UF16LV HD6432636XXXFL HD6432636XXXFL HD6432636UXXXFL HD6432636UXXXFL	128K	4K																														F	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																			
																																																																								M	128K	M	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
						H8S/2638	HD64F2638F16LV HD64F2638F20JV HD64F2638UF16LV HD64F2638UF20JV HD64F2638WF20JV HD64F2638WF16LV HD6432638XXXFL HD6432638XXXFL HD6432638UXXXFL HD6432638UXXXFL HD6432638WXXXFL HD6432638WXXXFL																														256K	16K																																		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
																																																																																																										M
		H8S/2639	HD64F2639UF16LV HD64F2639UF20JV HD64F2639WF20JV HD64F2639WF16LV HD6432639UXXXFL HD6432639UXXXFL HD6432639WXXXFL HD6432639WXXXFL	256K	16K	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																		-																																		
																																																																									M																																	256K
				H8S/2639	HD64F2639UF16LV HD64F2639UF20JV HD64F2639WF20JV HD64F2639WF16LV HD6432639UXXXFL HD6432639UXXXFL	256K	16K																																	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-																																	-
		H8S/2639	HD64F2639UF16LV HD64F2639UF20JV HD64F2639WF20JV HD64F2639WF16LV HD6432639UXXXFL HD6432639UXXXFL	256K	16K	M	-																																	-	-																																	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
																																																																																																								M	256K	

★ : New product ★★ : Under development
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H8S/2600 Series

Application	Device			Memory				CPU			DMA		External bus extension		Clock		ADC		DAC		Timers				Serial Interface		I/O Ports		External Interrupt Pins			On-chip debugging functions			Operating Frequency/Supply Voltage	Operating Ambient Temperature (°C)	Package			
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time(ns)	Multiplier	DMAC (channels)	EXDMAC	DTC/DMACII	Address Space (Bytes)	SDRAM controller	PLL	Sublock	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Programmable Pulse Generator	Watchdog Timer	Clock Sync./Clock Async.	I ² C-bus	IEBus	SSU/Special Serial I/O	Channels	Ethernet	USB Function	LPC/ISA	LCD	Input Only(Numbers)				CMOS I/O (Numbers)	External Interrupt Pins	Boundary Scan/JTAG
Dashboard	H8S/2600	H8S/2646	HD6432645XXXFCJ	64K	2K	M	-	H8S/2600 core	69	50 (@20MHz)	16 x 16 - 32	-	DTC	16M	-	Yes(x 1, x 2, x 4)	Yes	10-bit x 12	-	-	6(TPU)	8(shared with TPU+ PPG)	2	-	-	-	1	-	-	-	24seg x 4com	16	92	7(NMI+ IRQ(6))	-	Yes (PC break)	-	16MHz/4.5 to 5.5V	-40 to 105	PRQP0144KA-A
			HD6432646XXXFCJ	128K	4K	F																															-	20MHz/4.5 to 5.5V	-40 to 85	
			HD64F2646RFC16L																																		Yes	16MHz/4.5 to 5.5V	-40 to 105	
			HD64F2646RFC20JV																																		-	20MHz/4.5 to 5.5V	-40 to 85	
			HD6432646XXXFCJ																																		-	16MHz/4.5 to 5.5V	-40 to 105	
			HD6432646XXXFC																																		-	20MHz/4.5 to 5.5V	-20 to 75	
		HD6432646XXXFCJ	H8S/2648	64K	2K	M												-	16MHz/4.5 to 5.5V	-40 to 85																				
		HD64F2648RFC20JV																128K	4K	F	Yes	20MHz/4.5 to 5.5V	-40 to 105																	
		HD64F2648RFC16LV																			-	16MHz/4.5 to 5.5V	-40 to 85																	
		HD6432648XXXFCJ		128K	4K	M												-	20MHz/4.5 to 5.5V	-40 to 105																				
		HD6432648XXXFC																-	16MHz/4.5 to 5.5V	-40 to 85																				
		HD6432648XXXFCJ																-	20MHz/4.5 to 5.5V	-40 to 105																				
HD64F2649FC20LV	H8S/2649	256K	8K	M	-	20MHz/4.5 to 5.5V	-40 to 85																																	
HD64F2649FC20JV					Yes	20MHz/4.5 to 5.5V	-40 to 105																																	
HD6432649XXXFCJ					-	16MHz/4.5 to 5.5V	-40 to 85																																	

★ : New product ★★ : Under development
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version



*A free evaluation version of the coding tool and flash programming software (Flash Development Toolkit) is provided.

H8S Family Development Tool Lineup

MCU	Real Time OS	Software Tool	Emulator		Programming Tool
			On-Chip Debugging Emulator	Full-Spec Emulator	Programmer*2
H8S/2600 Series	HI1000/4	C/C++ Compiler Package for H8SX, H8S, H8 Family (An integrated development environment*1, compiler and simulator are included. The emulator-debugger is bundled with the emulator.)	-	E6000	E8a*3, HS0008EASF5H*3 *4
H8S/2500 Series				E100	
H8S/2400 Series			E10A-USB	E6000	
H8S/2300 Series					
H8S/2200 Series					
H8S/2100 Series					

*1. The High-performance Embedded Workshop is provided as an integrated development environment.

*2. This programmer is for Renesas Flash on-board microcontrollers.

*3. The E8a and HS0008EASF5H are usable with the Flash Development Toolkit [R0C0000FDW04R] (Free evaluation version available).

*4. The HS0008EASF5H is used together with the F-ZTAT microcontroller on-board writing program Ver. 5.0 [HS6400FWIW5SR].

*For information about microcontrollers compatible with the emulator or emulator specifications, access the website: http://www.renesas.com/emulation_debugging
Compatible emulators may vary according to the microcontroller part number.

H8S Tool

Get up and running quickly: Starter kit

Want to start evaluating the H8S right away? The Renesas Starter Kit is just what you need. It brings together in a single package all the development tools needed for microcontroller evaluation and initial implementation. The control signals from the microcontroller are output to the expansion board interface of the CPU board, allowing connection to the target system under development for easy debugging.

Including:

- H8S On-board CPU Board
- On-Chip Debugging Emulator E10A-USB for Starter Kit
- Multi region power supply
- Free evaluation version of the C/C++ Compiler Package (with simulator)
- Free evaluation version of the Flash Development Toolkit
- The High-performance Embedded Workshop is provided as an integrated development environment.



Renesas Starter Kit for H8S Family

Target Device		Product Name	Part Number
Series	Group		
H8S/2200	H8S/2215	Renesas Starter Kit for H8S/2215R	R0K42215RS001BE
H8S/2400	H8S/2456, H8S/2456R, H8S/2454	Renesas Starter Kit for H8S/2456R	R0K524568S000BE
	H8S/2472, H8S/2463, H8S/2462	Renesas Starter Kit for H8S/2472	R0K52472VS000BE

Visit this website for information about development environment products.

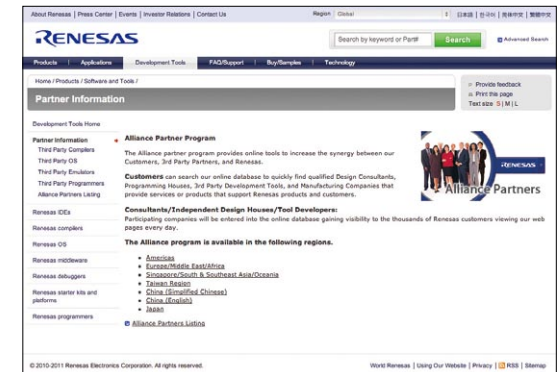
H8S Family Development Environment Site

http://www.renesas.com/h8s_tools

Partner Alliances

The Alliance Partner Program is a web system that provides Renesas microcontroller users with the latest information about a wide variety of solutions using partner company products and services in coordination with Renesas products.

Over 700 partner companies worldwide provide development tool products and a variety of services for Renesas microcontrollers needed by Renesas customers for product development. Renesas will continue strengthening and expanding its coordination with partner companies in the future and prepare the optimal solutions for our customers.



Strong alliances with over 700 partner companies worldwide

Click the following URL to access information about partner products and services.
<http://www.renesas.com/partners>

Renesas Microcomputer H8S Family Selection Guide

Renesas Electronics Corporation

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