

September 27, 2012

## Product Specifications of the RH850/F1x Series of MCUs

Item	Specifications (Tentative)		
	RH850/F1L Group	RH850/F1M Group	RH850/F1H Group
Pin count (Pins)	48, 64, 80, 100, 144, 176	100, 144, 176, 208(*)	176, 208(*), 272(*)
Code flash (Byte)	256K to 2M	1.5M to 4M	3M to 8M
Data flash (Byte)	32K	64K	64K or 128K
CPU core	G3		G3 x 2 ch
Maximum CPU operation speed (Hz)	80M	120M	120M (Each core)
External memory I/F	1 unit		
Internal oscillator	yes		
Timer	Timer Array Unit (16-bit)	up to 3 units (16 ch/unit)	
	Timer Array Unit (32-bit)	up to 2 units (4 ch/unit)	
	Real time clock	1 ch	
	Watchdog timer	up to 2 ch	up to 3 ch
	Encoder timer	1 ch	
Serial I/F	CAN	up to 6 ch	up to 7 ch
	CSI	up to 6 ch	up to 8 ch
	UART/LIN	up to 16 ch	up to 18 ch
	I2C	1 ch	
	FlexRay	-	1 ch
	Ethernet	-	-

Item		Specifications (Tentative)		
		RH850/F1L Group	RH850/F1M Group	RH850/F1H Group
Other functions	A/D converter	up to 60 ch	up to 72 ch	
	DMA	up to 16 ch		up to 32 ch
	Motor control	1 unit		
	PWM diagnosis	up to 72	up to 80	up to 96
	Security functions	yes		

\*: BGA package. Other packages are QFP.