

FREESCALE 8-Bit Microcontrollers



RS08 - REDUCED INSTRUCTION SET S08 CORE MICROCONTROLLERS

The RS08 core is a reduced version of the S08 central processing unit (CPU) that has been specifically designed for small pin-count devices with under 16KB memory. Thirty percent smaller than the S08 CPU, it is more efficient and cost-effective for simple electro-mechanical devices that are migrating to fully solid-state electronic operation or portable devices that have evolved into smaller or even disposable versions.



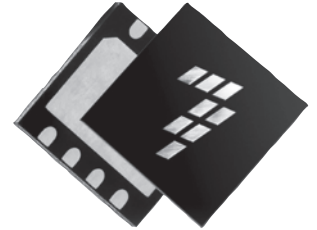
◆ Surface Mount Device

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Internal RAM (Byte)	Internal FLASH (Byte)	Timer Channels	Bus Frequency (MHz)	Supply Current (Max.)	I/O Pins	Operating Temperature	Price Each			
										1	25	100	250
◆ 841-MC9RS08KA1CDB	MC9RS08KA1CDB	QFN-D 6	63	1k	1	10	5600 mA	2	-40 - 85°C	.50	.46	.41	.36
◆ 841-MC9RS08KA1CPC	MC9RS08KA1CPC	PDIP 8	63	1k	1	10	5600 mA	4	-40 - 85°C	.51	.47	.41	.37
◆ 841-MC9RS08KA1CSC	MC9RS08KA1CSC	SOIC 8	63	1k	1	10	5600 mA	4	-40 - 85°C	.53	.49	.43	.39
◆ 841-MC9RS08KA2CDB	MC9RS08KA2CDB	QFN-D 6	63	2k	1	10	5600 mA	2	-40 - 85°C	.60	.56	.50	.44
◆ 841-MC9RS08KA2CPC	MC9RS08KA2CPC	PDIP 8	63	2k	1	10	5600 mA	4	-40 - 85°C	.79	.71	.65	.58
◆ 841-MC9RS08KA2CSC	MC9RS08KA2CSC	SOIC 8	63	2k	1	10	5600 mA	4	-40 - 85°C	.63	.58	.52	.46

HCS08 - CORE MICROCONTROLLERS

High-performance and low power, the HCS08 does not sacrifice performance to provide low power 1.8 V operation. HCS08 Features - Multiple power management modes, including a 20 nanoamp (nA) power-down mode



- A zero-component auto-wakeup from "stop" to help reduce costs and reduce power to 0.7 microamp (uA) - Up to 40 MHz CPU/20 MHz bus at 2.1 V and 16 MHz CPU/8 MHz bus at 1.8 V
- A programmable internal clock generator with temperature and voltage compensation (typical drift < 2%) designed for reliable communications, fast start up and reduced system cost
- In-application reprogramming and data storage via third-generation 0.25µ flash technology
- High integration including four serial communication ports, up to 8 timer/PWMs, and an 8-channel 10-bit analog-to-digital converter specified down to 1.8 V.

◆ Surface Mount Device

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Internal RAM (Byte)	Internal FLASH (Byte)	Serial Interface Type	Timer Channels	Bus Freq. (MHz)	Supply Voltage (V) (Max.)	I/O Pins	Operating Temperature	ADC	Price Each		
												1	25	100
◆ 841-MC9S08AW16CFDE	MC9S08AW16CFDE	QFN 48	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	38	-40 - 85°C	10-bit / 12-ch	3.08	2.84	2.54
◆ 841-MC9S08AW16CFGE	MC9S08AW16CFGE	LQFP 44	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	34	-40 - 85°C	10-bit / 8-ch	2.93	2.71	2.41
◆ 841-MC9S08AW16CFUE	MC9S08AW16CFUE	QFP 64	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	3.30	3.05	2.72
◆ 841-MC9S08AW16CPUE	MC9S08AW16CPUE	LQFP 64	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	3.30	3.05	2.72
◆ 841-MC9S08AW16MFDE	MC9S08AW16MFDE	QFN 48	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	38	-40 - 125°C	10-bit / 12-ch	3.39	3.14	2.80
◆ 841-MC9S08AW16MFGE	MC9S08AW16MFGE	LQFP 44	1k	16k	I2C, SCI, SPI	4, 2	20	5.5	34	-40 - 125°C	10-bit / 8-ch	3.23	2.98	2.66
◆ 841-MC9S08AW32CFDE	MC9S08AW32CFDE	QFN 48	2k	32k	I2C, SCI, SPI	4, 2	20	5.5	38	-40 - 85°C	10-bit / 12-ch	3.30	3.05	2.72
◆ 841-MC9S08AW32CFGE	MC9S08AW32CFGE	LQFP 44	2k	32k	I2C, SCI, SPI	4, 2	20	5.5	34	-40 - 85°C	10-bit / 8-ch	3.15	2.91	2.60
◆ 841-MC9S08AW32CFGER	MC9S08AW32CFGER	LQFP 44	2k	32k	I2C, SCI, SPI	4, 2	20	5.5	34	-40 - 85°C	10-bit / 8-ch	3.33	3.08	2.75
◆ 841-MC9S08AW32CFUE	MC9S08AW32CFUE	QFP 64	2k	32k	I2C, SCI, SPI	4, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	3.53	3.26	2.91
◆ 841-MC9S08AW32CPUE	MC9S08AW32CPUE	LQFP 64	2k	32k	I2C, SCI, SPI	4, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	3.53	3.26	2.91
◆ 841-MC9S08AW48CFDE	MC9S08AW48CFDE	QFN 48	2k	48k	I2C, SCI, SPI	6, 2	20	5.5	38	-40 - 85°C	10-bit / 16-ch	3.95	3.65	3.25
◆ 841-MC9S08AW48CFGE	MC9S08AW48CFGE	LQFP 44	2k	48k	I2C, SCI, SPI	6, 2	20	5.5	34	-40 - 85°C	10-bit / 16-ch	3.80	3.51	3.13
◆ 841-MC9S08AW48CFUE	MC9S08AW48CFUE	QFP 64	2k	48k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	4.17	3.86	3.44
◆ 841-MC9S08AW48CFUER	MC9S08AW48CFUER	QFP 64	2k	48k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	4.47	4.13	3.69
◆ 841-MC9S08AW48CPUE	MC9S08AW48CPUE	LQFP 64	2k	49152	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 8-ch	4.17	3.86	3.44
◆ 841-MC9S08AW60CFDE	MC9S08AW60CFDE	QFN 48	2048	60k	I2C, SCI, SPI	6, 2	20	5.5	38	-40 - 85°C	10-bit / 12-ch	4.28	3.95	3.53
◆ 841-MC9S08AW60CFGE	MC9S08AW60CFGE	LQFP 44	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	34	-40 - 85°C	10-bit / 8-ch	4.13	3.82	3.40
◆ 841-MC9S08AW60CFUE	MC9S08AW60CFUE	QFP 64	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	4.50	4.16	3.71
◆ 841-MC9S08AW60CFUER	MC9S08AW60CFUER	QFP 64	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	4.73	4.37	3.90
◆ 841-MC9S08AW60CPUE	MC9S08AW60CPUE	LQFP 64	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 85°C	10-bit / 16-ch	4.50	4.16	3.71
◆ 841-MC9S08AW60MFDE	MC9S08AW60MFDE	QFN 48	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	38	-40 - 125°C	10-bit / 12-ch	4.71	4.36	3.89
◆ 841-MC9S08AW60MFGE	MC9S08AW60MFGE	LQFP 44	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	34	-40 - 125°C	10-bit / 8-ch	4.55	4.20	3.75
◆ 841-MC9S08AW60MFUE	MC9S08AW60MFUE	QFP 64	2k	60k	I2C, SCI, SPI	6, 2	20	5.5	54	-40 - 125°C	10-bit / 16-ch	4.95	4.58	4.08
◆ 841-MC9S08GB32ACFUE	MC9S08GB32ACFUE	LQFP 64	2k	32k	I2C, SCI, SPI	3, 5	20	3.6	56	-40 - 85°C	10-bit / 8-ch	4.43	4.09	3.65
◆ 841-MC9S08GB60ACFUE	MC9S08GB60ACFUE	LQFP 64	4096	61440	I2C, SCI, SPI	3, 5	20	3.6	56	-40 - 85°C	10-bit / 8-ch	5.93	5.48	4.89
◆ 841-MC9S08GT32ACFBE	MC9S08GT32ACFBE	QFP 44	2k	32k	I2C, SCI, SPI	2, 2	20	3.6	36	-40 - 85°C	10-bit / 8-ch	3.98	3.68	3.28
◆ 841-MC9S08GT32ACFDE	MC9S08GT32ACFDE	QFN 48	2k	32k	I2C, SCI, SPI	2, 2	20	3.6	39	-40 - 85°C	10-bit / 8-ch	4.13	3.82	3.40
◆ 841-MC9S08GT60ACFBE	MC9S08GT60ACFBE	QFP 44	4k	60k	I2C, SCI, SPI	2, 2	20	3.6	36	-40 - 85°C	10-bit / 8-ch	5.48	5.06	4.52
◆ 841-MC9S08GT60ACFDE	MC9S08GT60ACFDE	QFN 48	4k	60k	I2C, SCI, SPI	2, 2	20	3.6	39	-40 - 85°C	10-bit / 8-ch	5.63	5.20	4.64
◆ 841-MC9S08QG4CDNE	MC9S08QG4CDNE	SOIC 8	256	4k	IIC	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.40	1.29	1.15
◆ 841-MC9S08QG4CDTE	MC9S08QG4CDTE	TSSOP 16	256	4k	IIC, SCI, SPI	2, 0	10	3.6	14	-40 - 85°C	10-bit / 8-ch	1.58	1.46	1.30
◆ 841-MC9S08QG4CFE	MC9S08QG4CFE	QFN 16	256	4k	I2C, SCI, SPI	2, 0	10	3.6	14	-40 - 85°C	10-bit / 8-ch	1.61	1.48	1.32
◆ 841-MC9S08QG4CFQE	MC9S08QG4CFQE	QFN-D 8	256	4k	IIC	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.44	1.33	1.19
◆ 841-MC9S08QG4CPAE	MC9S08QG4CPAE	PDIP 8	256	4k	IIC	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.34	1.23	1.10
◆ 841-MC9S08QG8CDNE	MC9S08QG8CDNE	SOIC 8	512	8k	I2C, SCI, SPI	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.49	1.37	1.23
◆ 841-MC9S08QG8CDTE	MC9S08QG8CDTE	TSSOP 16	512	8k	I2C, SCI, SPI	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.70	1.57	1.40
◆ 841-MC9S08QG8CFE	MC9S08QG8CFE	QFN 16	512	8k	I2C, SCI, SPI	2, 0	10	3.6	14	-40 - 85°C	10-bit / 8-ch	1.73	1.60	1.42
◆ 841-MC9S08QG8CFQE	MC9S08QG8CFQE	QFN-D 8	512	8k	I2C, SCI, SPI	2, 0	10	3.6	6	-40 - 85°C	10-bit / 4-ch	1.53	1.42	1.26
◆ 841-MC9S08QG8CPBE	MC9S08QG8CPBE	PDIP 16	513	8k	I2C, SCI, SPI	2, 0	10	3.6	14	-40 - 85°C	10-bit / 8-ch	1.62	1.50	1.34

