



Microcontrollers – 8 and 16 Bit  
HC908 Family — 8-Bit (Cont.)



C

FLASH (Bytes)	RAM (Bytes)	I/O	A/D	Timer (s) 16-Bit	Serial	Typ. Operating Voltage (V)	Max. Bus Frequency (MHz)	Temperature (°C)	Package	Digi-Key Part No.	1	Price Each 10	25	Freescale Part No.	
16K	512	22	16-Ch., 10-Bit	2-Ch.	SCI, SPI, I2C, SLIC	2.7 - 5.5	20.0	-40 - 85	28-TSSOP	MC9S08SL16CTL-ND	3.62	3.42	3.22	MC9S08SL16CTL	
	512	14	—	2-Ch.	SCI, SPI	2.7 - 5.5	24	-40 - 85	24-QFN	MC9S08JS16CFK-ND	2.84	2.68	2.53	MC9S08JS16CFK	
	512	14	—	2-Ch.	SCI, SPI	2.7 - 5.5	24	-40 - 85	20-SOIC	MC9S08JS16CWJ-ND	2.77	2.62	2.47	MC9S08JS16CWJ	
	1K	38	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	48-QFN	MC9S08AW16CFDE-ND	4.48	4.23	3.98	MC9S08AW16CFDE	
	1K	34	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	44-LQFP	MC9S08AW16CFGE-ND	4.25	4.02	3.79	MC9S08AW16CFGE	
	1K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-QFP	MC9S08AW16CFUE-ND	4.80	4.54	4.27	MC9S08AW16CFUE	
	1K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-LQFP	MC9S08AW16CPUE-ND	4.80	4.54	4.27	MC9S08AW16CPUE	
	1K	38	12-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	48-QFN	MC9S08AW16MFDE-ND	4.93	4.66	4.39	MC9S08AW16MFDE	
	1K	34	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	44-LQFP	MC9S08AW16MFGE-ND	4.69	4.43	4.17	MC9S08AW16MFGE	
	1K	26	16-Ch., 12-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DN16ACLCL-ND	5.34	5.05	4.76	MC9S08DN16ACLCL	
	1K	26	10-Ch., 12-Bit	2-Ch.	SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DV16ACLCL-ND	5.57	5.26	4.95	MC9S08DV16ACLCL	
	1K	26	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DZ16ACLCL-ND	5.91	5.59	5.26	MC9S08DZ16ACLCL	
	1K	40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	48-LQFP	MC9S08DZ16ACFL-ND	6.10	5.77	5.43	MC9S08DZ16ACFL	
	1K	40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	48-LQFP	MC9S08DZ16AMFL-ND	6.74	6.37	6.00	MC9S08DZ16AMFL	
	1K	16	12-Ch., 10-Bit	4-Ch. + 2-Ch.	SLIC, SCI, SPI, I2C	2.7 - 5.5	20.0	-40 - 125	20-TSSOP	MC9S08EL16CTJ-ND	3.91	3.69	3.48	MC9S08EL16CTJ	
	1K	22	16-Ch., 10-Bit	4-Ch. + 2-Ch.	SLIC, SCI, SPI, I2C	2.7 - 5.5	20.0	-40 - 85	28-TSSOP	MC9S08EL16CTL-ND	3.75	3.55	3.34	MC9S08EL16CTL	
	1K	39	8-Ch., 10-Bit	3-Ch. + 2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 125	48-QFN	MC9S08GT16AMFDE-ND	4.19	3.96	3.73	MC9S08GT16AMFDE	
	1K	39	—	2-Ch.	SCI	1.8 - 3.6	8.0	0 - 70	32-LQFP	MC9S08RE16FJE-ND	7.00	6.62	6.23	MC9S08RE16FJE	
	1K	39	—	2-Ch.	SCI	1.8 - 3.6	8.0	0 - 70	44-LQFP	MC9S08RE16FGE-ND	7.00	6.62	6.23	MC9S08RE16FGE	
	2K	36	8-Ch., 10-Bit	Dual 2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 125	44-QFP	MC9S08GT16AMFBE-ND	4.08	3.86	3.63	MC9S08GT16AMFBE	
	2K	24	8-Ch., 10-Bit	2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 125	32-QFN	MC9S08GT16AMFCE-ND	4.08	3.86	3.63	MC9S08GT16AMFCE	
	2K	39	8-Ch., 10-Bit	3-Ch. + 2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 85	48-QFN	MC9S08GT16ACFDE-ND	3.82	3.61	3.40	MC9S08GT16ACFDE	
	2K	36	8-Ch., 10-Bit	Dual 2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 85	44-QFP	MC9S08GT16ACFBE-ND	3.70	3.51	3.30	MC9S08GT16ACFBE	
	2K	36	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	1.8 - 3.6	20.0	-40 - 85	44-QFP	MC9S08GT16ACFBERT-ND§	4.31	3.85	3.62	MC9S08GT16ACFBERT	
	2K	36	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	1.8 - 3.6	20.0	-40 - 85	44-QFP	MC9S08GT16ACFBERT-ND‡	1654.29/750			MC9S08GT16ACFBERT	
	2K	34	8-Ch., 10-Bit	Dual 2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 85	42-SDIP	MC9S08GT16ACBE-ND	3.70	3.51	3.30	MC9S08GT16ACBE	
	2K	24	8-Ch., 10-Bit	2-Ch.	2 SCI, SPI	1.8 - 3.6	20.0	-40 - 85	32-QFN	MC9S08GT16ACFCE-ND	3.70	3.51	3.30	MC9S08GT16ACFCE	
	32K	1500	40	16-Ch., 12-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	48-LQFP	MC9S08DN32AMFL-ND	6.59	6.22	5.86	MC9S08DN32AMFL
		1K	16	12-Ch., 10-Bit	2-Ch. + 4-Ch.	SLIC, SCI, SPI, I2C	2.7 - 5.5	20.0	-40 - 85	20-TSSOP	MC9S08EL32CTJ-ND	4.56	4.31	4.06	MC9S08EL32CTJ
		1K	22	16-Ch., 10-Bit	4-Ch. + 2-Ch.	SLIC, SCI, SPI, I2C	2.7 - 5.5	20.0	-40 - 85	28-TSSOP	MC9S08EL32CTL-ND	4.39	4.15	3.90	MC9S08EL32CTL
		2K	38	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	48-QFN	MC9S08AW32CFDE-ND	4.80	4.54	4.27	MC9S08AW32CFDE
		2K	34	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	44-LQFP	MC9S08AW32CFGE-ND	4.58	4.33	4.08	MC9S08AW32CFGE
		2K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-QFP	MC9S08AW32CFUE-ND	5.13	4.85	4.56	MC9S08AW32CFUE
		2K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-LQFP	MC9S08AW32CPUE-ND	5.13	4.85	4.56	MC9S08AW32CPUE
		2K	34	8-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2 SCI, I2C	2.7 - 5.5	20.0	-40 - 125	44-LQFP	MC9S08AW32MFGE-ND	5.04	4.76	4.48	MC9S08AW32MFGE
		2K	40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	48-LQFP	MC9S08DV32ACFL-ND	6.22	5.88	5.53	MC9S08DV32ACFL
2K		40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	48-LQFP	MC9S08DV32AMFL-ND	6.85	6.47	6.09	MC9S08DV32AMFL	
2K		54	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	64-LQFP	MC9S08DV32AMLH-ND	7.33	6.93	6.52	MC9S08DV32AMLH	
2K		26	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DZ32ACLCL-ND	6.35	6.00	5.65	MC9S08DZ32ACLCL	
2K		40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	48-LQFP	MC9S08DZ32ACFL-ND	6.54	6.19	5.82	MC9S08DZ32ACFL	
2K		54	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	64-LQFP	MC9S08DZ32AMLH-ND	7.68	7.26	6.83	MC9S08DZ32AMLH	
2K		56	8-Ch., 10-Bit	5-Ch.	I2C, SCI, SPI	1.8 - 3.6	20.0	-40 - 85	64-LQFP	MC9S08GB32ACFUE-ND	6.43	6.08	5.73	MC9S08GB32ACFUE	
2K		36	8-Ch., 10-Bit	2-Ch.	SCI, SPI	1.8 - 3.6	20.0	-40 - 85	42-SDIP	MC9S08GT32ACBE-ND	6.33	5.98	5.63	MC9S08GT32ACBE	
2K		36	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	1.8 - 3.6	20.0	-40 - 85	44-QFP	MC9S08GT32ACFBE-ND	5.78	5.46	5.14	MC9S08GT32ACFBE	
2K		39	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	1.8 - 3.6	20.0	-40 - 85	48-QFN	MC9S08GT32ACFDE-ND	6.00	5.67	5.34	MC9S08GT32ACFDE	
2K		36	8-Ch., 10-Bit	Dual 2-Ch.	SCI, SPI	1.8 - 3.6	20.0	-40 - 85	48-QFN	MC9S08GT32CFDE-ND	9.09	8.18	7.46	MC9S08GT32CFDE	
2K		27	—	2-Ch.	SCI, SPI	1.8 - 3.6	8.0	-40 - 85	32-LQFP	MC9S08RG32CFJE-ND	8.85	8.37	7.88	MC9S08RG32CFJE	
36K		2K	18	2-Ch., 12-Bit	2-Ch.	SCI, SPI	1.8 - 3.6	40.0	-40 - 85	64-LQFP	MC9S08LC36LH-ND	7.24	6.85	6.44	MC9S08LC36LH
		2K	23	8-Ch., 12-Bit	2-Ch.	SCI, SPI	1.8 - 3.6	40.0	-40 - 85	80-LQFP	MC9S08LC36LK-ND	7.51	7.09	6.68	MC9S08LC36LK
		2K	38	16-Ch., 10-Bit	2-Ch. + 6-Ch.	2 SCI, 1 SPI, I2C	2.7 - 5.5	20.0	-40 - 85	48-QFN	MC9S08AW48CFDE-ND	5.73	5.42	5.10	MC9S08AW48CFDE
		2K	34	16-Ch., 10-Bit	2-Ch. + 6-Ch.	2 SCI, 1 SPI, I2C	2.7 - 5.5	20.0	-40 - 85	44-LQFP	MC9S08AW48CFGE-ND	5.52	5.22	4.91	MC9S08AW48CFGE
48K	2K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	2 SCI, 1 SPI, I2C	2.7 - 5.5	20.0	-40 - 85	64-QFP	MC9S08AW48CFUE-ND	6.06	5.73	5.40	MC9S08AW48CFUE	
	2K	26	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DV48ACLCL-ND	6.43	6.08	5.73	MC9S08DV48ACLCL	
	2K	40	16-Ch., 12-Bit	2-Ch. + 6-Ch.	CAN, SCI, SPI, I2C	2.7 - 5.5	20.0	-40 - 125	48-LQFP	MC9S08DZ48MLF-ND	9.88	8.89	8.10	MC9S08DZ48MLF	
	2K	38	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2-ESCI, I2C	2.7 - 5.5	20.0	-40 - 85	48-QFN	MC9S08AW60CFDE-ND	6.22	5.88	5.53	MC9S08AW60CFDE	
60K	2K	34	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2-ESCI, I2C	2.7 - 5.5	20.0	-40 - 85	44-LQFP	MC9S08AW60CFGE-ND	6.00	5.67	5.34	MC9S08AW60CFGE	
	2K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2-ESCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-QFP	MC9S08AW60CFUE-ND	6.54	6.19	5.82	MC9S08AW60CFUE	
	2K	54	16-Ch., 10-Bit	2-Ch. + 6-Ch.	SPI, 2-ESCI, I2C	2.7 - 5.5	20.0	-40 - 85	64-LQFP	MC9S08AW60CPUE-ND	6.54	6.19	5.82	MC9S08AW60CPUE	
	2K	34	8-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	44-LQFP	MC9S08AW60MFGE-ND	6.61	6.25	5.88	MC9S08AW60MFGE	
	2K	54	16-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	64-QFP	MC9S08AW60MFUE-ND	7.20	6.80	6.40	MC9S08AW60MFUE	
	2K	54	16-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	64-QFP	MC9S08AW60MFUERCT-ND§ <b>NEW!</b>	8.17	7.30	6.86	MC9S08AW60MFUER	
	2K	54	16-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 125	64-QFP	MC9S08AW60MFUERTR-ND‡ <b>NEW!</b>	3147.66/750			MC9S08AW60MFUER	
	2K	34	16-Ch., 10-Bit	2-Ch.	I2C, SCI, SPI	2.7 - 5.5	20.0	-40 - 105	44-LQFP	MC9S08AW60VFGDE-ND <b>NEW!</b>	6.32	5.98	5.62	MC9S08AW60VFGDE	
	3K	26	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DV60ACLCL-ND	6.87	6.49	6.11	MC9S08DV60ACLCL	
	4K	26	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	32-LQFP	MC9S08DZ60ACLCL-ND	7.22	6.82	6.42	MC9S08DZ60ACLCL	
	4K	40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	48-LQFP	MC9S08DZ60ACFL-ND	7.42	7.01	6.60	MC9S08DZ60ACFL	
	4K	54	10-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 85	64-LQFP	MC9S08DZ60ACLH-ND	7.86	7.42	6.99	MC9S08DZ60ACLH	
	4K	40	16-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	48-LQFP	MC9S08DZ60AMFL-ND	8.16	7.71	7.26	MC9S08DZ60AMFL	
	4K	54	24-Ch., 12-Bit	2-Ch.	2 SCI, SPI, I2C, CAN	2.7 - 5.5	20.0	-40 - 125	64-LQFP	MC9S08DZ60AMLH-ND	8.64	8.16	7.68	MC9S08D	