

FREESCALE 16-Bit Microcontrollers



MCU/MPU

Freescale

HCS12 AND HCS12X FAMILY - 16-BIT MICROCONTROLLERS

For quantities 250 and up, call for quote.

MOUSER STOCK NO.	Freescale Part No.	Package	Internal RAM (Byte)	Internal FLASH (Byte)	EEPROM (Byte)	ADC	Serial Interface Type	Bus Freq. (MHz) (Max)	I/O Pins	Timer Channels	Supply Voltage (V)(Typ)	Price Each			
												1	25	100	
S12A Family - General Purpose with I2C															
841-MC9S12A32CFUE	MC9S12A32CFUE	QFP 80	4096	32000	1024	10-bit/8-ch	I2C, SCI, SPI	25	91	8	5	7.31	6.56	5.81	
841-MC9S12A64CFUE	MC9S12A64CFUE	QFP 80	4096	65536	1024	10-bit/8-ch	I2C, SCI, SPI	25	91	8	5	9.95	8.93	7.91	
841-MC9S12A256CFUE	MC9S12A256CFUE	QFP 80	12288	262144	4096	10-bit/8-ch	I2C, SCI, SPI	25	91	8	5	16.32	14.65	12.97	
841-MC9S12A64CPVE	MC9S12A64CPVE	LQFP 112	4096	65536	1024	10-bit/8-ch	I2C, SCI, SPI	25	59	8	5	10.09	9.06	8.02	
841-MC9S12A256MPVE	MC9S12A256MPVE	LQFP 112	12288	262144	4096	10-bit/8-ch	I2C, SCI, SPI	25	91	8	5	18.44	16.55	14.66	
841-MC9S12A512CPVE	MC9S12A512CPVE	LQFP 112	4096	512000	1024	10-bit/8-ch	I2C, SCI, SPI	25	59	8	5	19.86	17.82	15.79	
S12B Family - Automotive Industrial with Intermediate Cost CAN															
841-MC9S12B64MFUE	MC9S12B64MFUE	QFP 80	2048	65536	1024	10-bit/8-ch	CAN, I2C, SCI, SPI	25	59	8	5	10.09	9.06	8.02	
841-MC9S12B64MPVE	MC9S12B64MPVE	LQFP 112	2048	65536	1024	10-bit/8-ch	CAN, I2C, SCI, SPI	25	59	8	5	10.46	9.38	8.31	
841-MC9S12B128MFUE	MC9S12B128MFUE	QFP 80	4096	131072	1024	10-bit/8-ch	CAN, I2C, SCI, SPI	25	59	8	5.5	13.15	11.80	10.45	
841-MC9S12B128MPVE	MC9S12B128MPVE	LQFP 112	4096	131072	1024	10-bit/16-ch	CAN, I2C, SCI, SPI	25	91	8	5.5	13.59	12.19	10.80	
841-MC9S12B256MPVE	MC9S12B256MPVE	LQFP 112	4096	262144	2048	10-bit/8-ch	CAN, I2C, SCI, SPI	25	59	8	5	16.88	15.15	13.42	
S12C Family - Low Pin Count, Low Cost CAN															
841-MC9S12C32MFAE16	MC9S12C32MFAE16	LQFP 48	2048	32000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	7.65	6.86	6.08	
841-MC9S12C32MFAE25	MC9S12C32MFAE25	LQFP 48	2048	32000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	8.13	7.30	6.46	
841-MC9S12C32MFUE25	MC9S12C32MFUE25	QFP 80	2048	32000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	8.53	7.65	6.78	
841-MC9S12C32MPBE25	MC9S12C32MPBE25	LQFP 52	2048	32000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	8.04	7.22	6.39	
841-MC9S12C64MFAE	MC9S12C64MFAE	LQFP 48	4000	64000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	9.65	8.66	7.67	
841-MC9S12C64MFUE	MC9S12C64MFUE	QFP 80	4000	64000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	10.14	9.10	8.06	
841-MC9S12C96MFAE	MC9S12C96MFAE	LQFP 48	4000	96000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	11.83	10.62	9.46	
841-MC9S12C96MFUE	MC9S12C96MFUE	QFP 80	4000	96000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	11.74	10.54	9.33	
841-MC9S12C96MPBE	MC9S12C96MPBE	LQFP 52	4000	96000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	11.26	10.11	8.95	
841-MC9S12C128MFAE	MC9S12C128MFAE	LQFP 48	4000	128000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.5	12.07	10.83	9.59	
841-MC9S12C128MFUE	MC9S12C128MFUE	QFP 80	4000	128000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.6	12.55	11.26	9.97	
841-MC9S12C128MPBE	MC9S12C128MPBE	LQFP 52	4000	128000	---	10-bit/8-ch	CAN, SCI, SPI	25	60	8	3.3, 5.7	12.07	10.83	9.59	
S12D Family - Automotive / Industrial with CAN															
841-MC9S12D32MFUE	MC9S12D32MFUE	QFP 80	4096	32000	1024	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	91	8	5	8.85	7.94	7.03	
841-MC9S12D64MFUE	MC9S12D64MFUE	QFP 80	4096	65536	1024	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	91	8	5	12.24	10.99	9.73	
841-MC9S12D64MPVE	MC9S12D64MPVE	LQFP 112	4096	65536	1024	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	59	8	5	12.72	11.42	10.11	
841-MC9S12DB128MPVE	MC9S12DB128MPVE	LQFP 112	8192	131072	2048	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	112	8	5	16.41	15.18	13.54	
841-MC9S12DG128MFUE	MC9S12DG128MFUE	QFP 80	8192	131072	2048	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	59	7	5	15.25	13.69	12.12	
841-MC9S12DG128MPVE	MC9S12DG128MPVE	LQFP 112	8192	131072	2048	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	25	91	7	5	15.74	14.12	12.51	
841-MC9S12DG256MFUE	MC9S12DG256MFUE	QFP 80	12288	262144	4096	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	25	91	8	5	18.94	17.00	15.05	
841-MC9S12DG256MPVE	MC9S12DG256MPVE	LQFP 112	12288	262144	4096	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	25	91	8	5	19.42	17.43	15.44	
841-MC9S12DJ64MFUE	MC9S12DJ64MFUE	QFP 80	4096	65536	1024	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	91	8	5	12.72	11.42	10.11	
841-MC9S12DJ64MPVE	MC9S12DJ64MPVE	LQFP 112	4096	65536	1024	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	59	8	5	13.21	11.85	10.50	
841-MC9S12DJ128MFUE	MC9S12DJ128MFUE	QFP 80	8192	131072	2048	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	59	7	5	15.55	13.95	12.36	
841-MC9S12DJ128MPVE	MC9S12DJ128MPVE	LQFP 112	8192	131072	2048	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	91	8	5	16.03	14.39	12.74	
841-MC9S12DJ256MFUE	MC9S12DJ256MFUE	QFP 80	12288	262144	4096	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	59	8	5	20.78	18.65	16.52	
841-MC9S12DJ256MPVE	MC9S12DJ256MPVE	LQFP 112	12288	262144	4096	10-bit/8-ch	SCI, SPI, I2C, J1850, CAN 2.0A/B	25	91	8	5	21.26	19.08	16.90	
841-MC9S12DP512MPVE	MC9S12DP512MPVE	LQFP 112	12288	512000	4096	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI, J1850	25	91	8	5	31.10	27.60	24.66	
841-MC9S12DT128MPVE	MC9S12DT128MPVE	LQFP 112	8192	131072	2048	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	25	91	8	5	15.53	13.94	12.35	
841-MC9S12DT256MPVE	MC9S12DT256MPVE	QFP 80	12288	262144	4096	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	25	91	8	5	20.23	18.15	16.08	
841-MC9S12DT256MPVE	MC9S12DT256MPVE	LQFP 112	12288	262144	4096	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	25	91	8	5	20.23	18.59	16.46	
S12E Family - General Purpose, 3 Volts with D/A															
841-MC9S12E32CFUE	MC9S12E32CFUE	QFP 80	2000	32000	---	10-bit/16-ch	I2C, SCI, SPI	25	58	16, 15, 8	5.5	7.02	6.30	5.58	
841-MC9S12E64MFUE	MC9S12E64MFUE	QFP 80	4000	64000	---	10-bit/16-ch	I2C, SCI, SPI	25	58	16, 15, 8	5	9.52	8.54	7.57	
841-MC9S12E128MFUE	MC9S12E128MFUE	QFP 80	8000	128000	---	10-bit/16-ch	I2C, SCI, SPI	25	58	16, 15, 8	5	10.68	9.58	8.49	
841-MC9S12E256MFUE	MC9S12E256MFUE	QFP 80	16000	256000	---	10-bit/16-ch	I2C, SCI, SPI	25	58	16, 15, 8	5	12.69	11.39	10.09	
841-MC9S12E256MPVE	MC9S12E256MPVE	LQFP 112	16000	256000	---	10-bit/16-ch	I2C, SCI, SPI	25	90	16, 15, 8	5	13.18	11.83	10.47	
S12GC Family - Low Cost, Low Pin Count															
841-MC9S12GC16MFAE	MC9S12GC16MFAE	LQFP 48	2000	16000	---	10-bit/8-ch	SCI, SPI	25	29	8, 6	3.3, 5.5	5.81	5.21	4.62	
841-MC9S12GC32MFAE	MC9S12GC32MFAE	LQFP 48	2000	32000	---	10-bit/8-ch	SCI, SPI	25	29	8, 6	3.3, 5.5	7.05	6.33	5.60	
841-MC9S12GC64MFAE	MC9S12GC64MFAE	LQFP 48	4000	64000	---	10-bit/8-ch	SCI, SPI	25	29	8, 6	3.3, 5.5	8.37	7.51	6.65	
841-MC9S12GC64MFUE	MC9S12GC64MFUE	QFP 80	4000	64000	---	10-bit/8-ch	SCI, SPI	25	58	8, 6	3.3, 5.5	8.61	7.73	6.85	
841-MC9S12GC64MPBE	MC9S12GC64MPBE	LQFP 52	4000	64000	---	10-bit/8-ch	SCI, SPI	25	33	8, 6	3.3, 5.5	8.37	7.51	6.65	
841-MC9S12GC96MFAE	MC9S12GC96MFAE	LQFP 48	4000	96000	---	10-bit/8-ch	SCI, SPI	25	29	8, 6	3.3, 5.5	8.41	7.55	6.68	
841-MC9S12GC96MFUE	MC9S12GC96MFUE	QFP 80	4000	96000	---	10-bit/8-ch	SCI, SPI	25	58	8, 6	3.3, 5.5	9.14	8.20	7.27	
841-MC9S12GC96MPBE	MC9S12GC96MPBE	LQFP 52	4000	96000	---	10-bit/8-ch	SCI, SPI	25	33	8, 6	3.3, 5.5	8.82	7.91	7.01	
841-MC9S12GC128MFUE	MC9S12GC128MFUE	QFP 80	4000	128000	---	10-bit/8-ch	SCI, SPI	25	58	8, 6	3.3, 5.5	11.12	9.98	8.84	
841-MC9S12GC128MPBE	MC9S12GC128MPBE	LQFP 52	4000	128000	---	10-bit/8-ch	SCI, SPI	25	33	8, 6	3.3, 5.5	10.22	9.17	8.13	
S12H Family - LCD / H-Bridge Drivers with CAN															
841-MC9S12H128VPVE	MC9S12H128VPVE	LQFP 112	6000	131072	4096	10-bit/8-ch	CAN 2.0A/B, IIC, SCI, SPI	16	99	8	5	16.82	15.09	13.37	
841-MC9S12H128VFE	MC9S12H128VFE	LQFP 144	6000	131072	4096	10-bit/8-ch	CAN 2.0A/B, I2C, SCI, SPI	16	99	8	5	18.99	17.57	15.67	
841-MC9S12H256VFE	MC9S12H256VFE	LQFP 144	12000	256000	4000	10-bit/16-ch	CAN 2.0A/B, IIC, SCI, SPI	16	115	8	5	21.44	19.24	17.04	
841-MC9S12H256VPVE	MC9S12H256VPVE	LQFP 112	12000	256000	4000	10-bit/16-ch	CAN 2.0A/B, IIC, SCI, SPI	16	83	8	5	19.35	17.36	15.38	
841-MC9S12H256VAL	MC9S12H256VAL	LQFP 112	12000	256000	2000	10-bit/16-ch	CAN 2.0A/B, IIC, SCI, SPI	25	85	8	5	18.49	16.59	14.69	
S12NE Family - Single Chip with 10 / 100 Base -T with Integrated MAC & PHY															
841-MC9S12NE64CPVE	MC9S12NE64CPVE	LQFP 112	8000	64000	---	10-bit/8-ch	Ethernet, I2C, SCI, SPI	25	-	-	3.3, 5	12.02	10.79	9.56	
841-MC9S12NE64VTUE	MC9S12NE64VTUE	LQFP 80	8000	64000	---	10-bit/8-ch	Ethernet, IIC, SCI, SPI	25	-	-	3.3, 5	11.58	10.40	9.21	
S12UF Family - USB 2.0															
841-MC9S12UF32PBE	MC9S12UF32PBE	LQFP 64	5120	32768	---	---	SCI, USB 2.0	30							