

FREESCALE Microcontrollers



MCU / MPU / DSP

Freescale

KINETIS SERIES ARM CORTEX-M4 MICROCONTROLLERS

Kinetis K60 - Ethernet Crypto MCUs

- Serial Interface Type: UART, SPI, I2C, IS2, CAN, USB, Ethernet
- Touch Sensing Interface
- Memory Protection Unit (MPU)
- Watchdog OSC/Timer
- Real-Time Clock
- Analog Comparator
- Supply Voltage: 1.71 to 3.6V
- Core Operating Freq. Max: 100MHz
- D/A Converter: 12 bits

This product is RoHS compliant.

MOUSER STOCK NO.										MOUSER STOCK NO.									
Mfr.	Mfr. Part No.	Package	Internal Flash (KB)	Internal RAM (KB)	A/D Converter (bits/channels)	I/O Pins	Price Each			Mfr.	Mfr. Part No.	Package	Internal Flash (KB)	Internal RAM (KB)	A/D Converter (bits/channels)	I/O Pins	Price Each		
							1	25	100								1	25	100
841	—MK60DN512ZVLQ10	LQFP-144	512	128	16/44	100	10.46	9.39	8.43	841	—MK60DN256ZVLQ10	LQFP-144	256	64	16/2	100	12.81	10.92	10.56
841	—MK60DN512ZVM10	MAP-144	512	128	16/44	100	12.88	12.13	9.45	841	—MK60DN512VLD10	LQFP-144	512	128	16/2	100	16.38	13.96	13.50
841	—MK60DX256ZVLL10	LQFP-100	512	64	16/35	66	9.70	9.10	8.50	841	—MK60DN512VMD10	MAPBGA-144	512	128	16/2	100	16.47	14.04	13.58
841	—MK60DX256ZVLQ10	LQFP-144	512	64	16/44	100	9.88	8.74	7.93	841	—MK60DN512ZVLL10	LQFP-100	512	128	16/2	66	10.28	9.31	8.28
841	—MK60DN256ZVLL10	LQFP-100	256	64	16/2	66	9.39	8.00	7.74	841	—MK60DX256ZVLQ10	LQFP-144	256	64	16/2	100	13.18	12.47	11.81

Freescale's Flexis Series Microcontrollers provide the industry's first roadmap for 8- and 32-bit compatible architectures. From the S08 controllers to the full-featured ColdFire® devices, the Flexis Series is a range of compatible MCUs sharing tools and peripherals to ease your design process and accelerate your time to market. This means that you can move from one device to the next compatible device, from the low end to the high end.

FLEXIS AC FAMILY - S08AC 8-BIT LARGE APPLIANCE/INDUSTRIAL MCUS

MOUSER STOCK NO.										MOUSER STOCK NO.									
Mfr.	Mfr. Part No.	Package	Internal Flash (Bytes)	Internal RAM (Bytes)	Serial Interface Type	Bus Freq. (MHz)	Timer Channels	Supply Voltage (Max.)	I/O Pins	ADC	Price Each								
										1	25	100							
841	—MC9S08AC8CFGE	MC9S08AC8CFGE	LQFP 44	8K	700	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.15	1.88	1.65					
841	—MC9S08AC8CFJE	MC9S08AC8CFJE	LQFP 32	8K	700	I2C, SCI, SPI	20	2, 2	5.5	22	6-ch./10-bit	2.15	1.88	1.65					
841	—MC9S08AC16CFDE	MC9S08AC16CFDE	QFN 48 EP	16K	1000	I2C, SCI, SPI	20	4, 2	5.5	38	8-ch./10-bit	2.35	2.12	1.87					
841	—MC9S08AC16CFGE	MC9S08AC16CFGE	LQFP 44	16K	1000	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.35	2.12	1.87					
841	—MC9S08AC16CFJE	MC9S08AC16CFJE	LQFP 32	16K	1000	I2C, SCI, SPI	20	2	5.5	22	6-ch./10-bit	2.15	1.88	1.65					
841	—MC9S08AC16MFGE	MC9S08AC16MFGE	LQFP 44	16K	1000	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.60	2.50	2.00					
841	—MC9S08AC32CFDE	MC9S08AC32CFDE	QFN 48 EP	32000	2000	I2C, SCI, SPI	20	4, 2, 2	5.5	38	8-ch./10-bit	2.71	2.60	2.00					
841	—MC9S08AC32CFGE	MC9S08AC32CFGE	LQFP 44	32000	2000	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.71	2.60	2.00					
841	—MC9S08AC32CFJE	MC9S08AC32CFJE	LQFP 32	32000	2000	I2C, SCI, SPI	20	2, 2	5.5	22	6-ch./10-bit	2.71	2.60	2.00					
841	—MC9S08AC32CFUE	MC9S08AC32CFUE	QFP 64	32000	2000	I2C, SCI, SPI	20	6, 2	5.5	54	16-ch./10-bit	3.09	2.64	2.34					
841	—MC9S08AC32CPUE	MC9S08AC32CPUE	LQFP 64	32000	2000	I2C, SCI, SPI	20	6, 2, 2	5.5	54	16-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC48CFDE	MC9S08AC48CFDE	QFN 48 EP	48K	2K	I2C, SCI, SPI	20	4, 2, 2	5.5	38	8-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC48CFGE	MC9S08AC48CFGE	LQFP 44	48K	2K	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC48CFJE	MC9S08AC48CFJE	LQFP 32	48000	2000	I2C, SCI, SPI	20	2, 2	5.5	22	6-ch./10-bit	2.71	2.60	2.00					
841	—MC9S08AC48CFUE	MC9S08AC48CFUE	LQFP 64	48000	2000	I2C, SCI, SPI	20	6, 2, 2	5.5	54	16-ch./10-bit	3.09	2.64	2.34					
841	—MC9S08AC60CFDE	MC9S08AC60CFDE	QFN 48 EP	60000	2000	I2C, SCI, SPI	20	4, 2, 2	5.5	38	8-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC60CFGE	MC9S08AC60CFGE	LQFP 44	60000	2000	I2C, SCI, SPI	20	4, 2, 2	5.5	34	8-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC60CFJE	MC9S08AC60CFJE	LQFP 32	60000	2000	I2C, SCI, SPI	20	2, 2	5.5	22	6-ch./10-bit	2.94	2.50	2.25					
841	—MC9S08AC60CFUE	MC9S08AC60CFUE	QFP 64	60000	2000	I2C, SCI, SPI	20	6, 2, 2	5.5	54	16-ch./10-bit	3.19	2.88	2.51					
841	—MC9S08AC60CPUE	MC9S08AC60CPUE	LQFP 64	60000	2000	I2C, SCI, SPI	20	6, 2, 2	5.5	54	16-ch./10-bit	3.09	2.64	2.34					
841	—MC9S08AC60MPUE	MC9S08AC60MPUE	LQFP 64	60K	2K	I2C, SCI, SPI	20	6, 2, 2	5.5	54	16-ch./10-bit	3.19	2.88	2.51					
841	—MC9S08AC96CFGE	MC9S08AC96CFGE	LQFP 44	96K	6K	I2C, SCI, SPI	20	-	5	38	8-ch./10-bit	3.61	3.11	2.75					
841	—MC9S08AC96CFUE	MC9S08AC96CFUE	QFP 64	96K	6K	I2C, SCI, SPI	20	-	5	54	16-ch./10-bit	3.97	3.38	3.10					
841	—MC9S08AC96CLKE	MC9S08AC96CLKE	LQFP 80	96K	6K	I2C, SCI, SPI	20	-	5	70	16-ch./10-bit	3.97	3.38	3.10					
841	—MC9S08AC128CFGE	MC9S08AC128CFGE	LQFP 44	128000	8000	I2C, SCI, SPI	20	6, 6, 2	5	34	16-ch./10-bit	3.97	3.38	3.10					
841	—MC9S08AC128CFUE	MC9S08AC128CFUE	QFP 64	128000	8000	I2C, SCI, SPI	20	6, 6, 2	5	54	16-ch./10-bit	3.97	3.38	3.10					
841	—MC9S08AC128CLKE	MC9S08AC128CLKE	LQFP 80	128000	8000	I2C, SCI, SPI	20	6, 6, 2	5	69	16-ch./10-bit	3.97	3.38	3.10					

FLEXIS AG FAMILY - MCF51AG 32-BIT V1 COLD FIRE® MCUS

MOUSER STOCK NO.										MOUSER STOCK NO.									
Mfr.	Mfr. Part No.	Package	Internal Flash (KB)	Internal RAM (KB)	Serial Interface Type	Bus Freq. (MHz)	Timer Channels	Supply Voltage (Max.)	I/O Pins	ADC	Price Each								
										1	25	100							
841	—MCF51AG128CLF	MCF51AG128CLF	LQFP-48	128k	16k	SCI, SPI	25	14	5.5	39	12-ch./12-bit	4.96	4.57	3.57					
841	—MCF51AG128CLH	MCF51AG128CLH	LQFP-64	128k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	5.32	4.81	3.83					
841	—MCF51AG128CLK	MCF51AG128CLK	LQFP-80	128k	16k	I2C, SCI, SPI	25	14	5.5	69	24-ch./12-bit	5.62	5.08	4.04					
841	—MCF51AG128CQH	MCF51AG128CQH	QFP-64	128k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	5.40	4.86	3.89					
841	—MCF51AG128VLF	MCF51AG128VLF	LQFP-48	128k	16k	-	25	-	5.5	39	-	7.24	6.15	5.47					
841	—MCF51AG128VLH	MCF51AG128VLH	LQFP-64	128k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.76	6.60	5.86					
841	—MCF51AG128VLK	MCF51AG128VLK	LQFP-80	128k	16k	I2C, SCI, SPI	25	14	5.5	69	24-ch./12-bit	8.18	6.95	6.17					
841	—MCF51AG128VQH	MCF51AG128VQH	QFP-64	128k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.84	6.67	5.92					
841	—MCF51AG96CLF	MCF51AG96CLF	QLFP-48	96k	16k	-	25	-	5.5	39	-	6.66	5.66	5.03					
841	—MCF51AG96CLH	MCF51AG96CLH	LQFP-64	96k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.01	5.96	5.29					
841	—MCF51AG96CLK	MCF51AG96CLK	LQFP-80	96k	16k	I2C, SCI, SPI	25	14	5.5	69	19-ch./12-bit	7.36	6.26	5.56					
841	—MCF51AG96CQH	MCF51AG96CQH	QFP-64	96k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.09	6.03	5.36					
841	—MCF51AG96VLF	MCF51AG96VLF	LQFP-48	96k	16k	-	25	-	5.5	39	-	7.01	5.96	5.29					
841	—MCF51AG96VLH	MCF51AG96VLH	LQFP-64	96k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.34	6.24	5.55					
841	—MCF51AG96VLK	MCF51AG96VLK	LQFP-80	96k	16k	I2C, SCI, SPI	25	14	5.5	69	24-ch./12-bit	7.74	6.58	5.84					
841	—MCF51AG96VQH	MCF51AG96VQH	QFP-64	96k	16k	I2C, SCI, SPI	25	14	5.5	53	19-ch./12-bit	7.47	6.35	5.64					

FLEXIS JE FAMILY

MCF51JE 32-Bit V1 Coldfire® USB MCUS

MOUSER STOCK NO.										MOUSER STOCK NO.									
Mfr.	Mfr. Part No.	Package	Internal Flash (KB)	Internal RAM (KB)	Serial Interface Type	Bus Freq. (MHz)	Timer Channels	Supply Voltage (Max.)	I/O Pins	ADC	Price Each								
										1	25	100							
841	—MCF51JE128CLK	MCF51JE128CLK	LQFP-80	128k	32k	SPI, SCI, I2C, USB	25	8	3.6	47	12-ch./12-bit	9.81	8.72	6.73					
841	—MCF51JE256CML	MCF51JE256CML	MAPBGA-104	256k	32k	SPI, SCI, I2C	25	8	3.6	69	12-ch./12-bit	8.04	6.46	6.09					

S08JE 8-Bit USB MCUS

841	—MC9S08JE128CLH	MC9S08JE128CLH	LQFP-64	128	12	SCI, SPI, I2C	20	6	3.8	33	12-ch./12-bit	5.83	4.55	4.29
841	—MC9S08JE128CLK	MC9S08JE128CLK	LQFP-80	128	12	SCI, SPI, I2C	20	8	3.8	46	12-ch./12-bit	5.93	4.31	4.07

FLEXIS JM FAMILY

The S08JM family extends Freescale's 8-bit embedded USB controller family with up to 60 Kbytes of Flash memory, a full speed USB 2.0 device controller and a 12-channel, 12-bit analog-to-digital converter. The S08JM family devices, are supported by the Freescale USB-LITE Stack by CMX, providing a direct migration path to high performing USB microcontrollers.

For quantities greater than listed, call for quote.

S08JM 8-Bit USB MCUS

841	—MC9S08JM8CGT	MC9S08JM8CGT	QFN 48 EP	8K	1K	SPI, I2C, SCI, USB	24	4, 2	5.5	37	8-ch/12-bit	2.71	2.60	2.00
841	—MC9S08JM8CLC	MC9S08JM8CLC	LQFP 32	8K	1K	SPI, I2C, SCI, USB	24	2	5.5	21	4-ch/12-bit	3.12	2.93	2.35
841	—MC9S08JM8CLD	MC9S08JM8CLD	LQFP 44	8K	1K	SPI, I2C, SCI, USB	24	4, 2	5.5	33	8-ch/12-bit	3.12	2.93	2.35
841	—MC9S08JM16CGT	MC9S08JM16CGT	QFN 48 EP	16K	1K	SCI, SPI, I2C, USB	24	4, 2	5.5	37	8-ch/12-bit	2.94	2.50	2.25
841	—MC9S08JM16CLC	MC9S08JM16CLC	LQFP 32	16K	1K	SPI, I2C, SCI, USB	24	2	5.5	21	4-ch/12-bit	3.12	2.93	2.35
841	—MC9S08JM16CLD	MC9S08JM16CLD	LQFP 44	16K	1K	SPI, I2C, SCI, USB	24	4, 2	5.5	33	8-ch/12-bit	2.94	2.50	2.25
84														