

TEXAS INSTRUMENTS MSP430 Microcontrollers

Products may be RoHS compliant. Check mouser.com for RoHS status.

MSP430X1XX FLASH/ROM NO LCD MICROCONTROLLERS

MSP430x1xx – These non-LCD flash/ROM based MCUs offer 1.8V to 3.6V operation, up to 60kB, 8MIPS with Basic Clock. Includes a wide range of peripherals from a simple low power comparator to high-performance data converters, interfaces and multiplier.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	Freq (MHz)	Flash (KB)	RAM (B)	GPIO	ADC	Timers	Price Each			
									1	25	100	250
595-430F1571PMR	MSP430F1571PMR	LQFP-64	8	32	1K	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	11.63	9.78	8.99	8.19
595-MSP430F1610IPM	MSP430F1610IPM	LQFP-64	8	32	5K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	17.07	14.35	13.19	12.02
595-430F1481PMR	MSP430F1481PMR	LQFP-64	8	48	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	11.86	9.72	8.77	8.06
595-430F1481PMR	MSP430F1481PMR	LQFP-64	8	48	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	12.57	10.43	9.48	8.54
595-MSP430F1481RTDT	MSP430F1481RTDT	QFN-64	8	48	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	12.70	10.54	9.58	8.15
595-MSP430F1481RTDT	MSP430F1481RTDT	QFN-64	8	48	2K	48	Slope	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	12.17	10.11	9.19	7.81
595-430F1681PMR	MSP430F1681PMR	LQFP-64	8	48	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	14.89	12.52	11.51	10.49
595-MSP430F1611IPM	MSP430F1611IPM	LQFP-64	8	48	10K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	17.94	15.26	13.86	12.67
595-MSP430F1611IPM	MSP430F1611IPM	LQFP-64	8	48	10K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	17.94	15.26	13.86	12.67
595-MSP430F1611RTDT	MSP430F1611RTDT	QFN-64	8	48	10K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	18.87	15.99	14.76	12.71
595-MSP430F1612IPM	MSP430F1612IPM	LQFP-64	8	55	5K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	18.59	15.63	14.36	13.10
595-MSP430F1612RTDT	MSP430F1612RTDT	QFN-64	8	55	5K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	19.55	16.57	15.30	13.17
595-430F1491PAG	MSP430F1491PAG	TQFP-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	11.41	9.60	8.82	8.04
595-430F1491PMR	MSP430F1491PMR	LQFP-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	11.41	9.60	8.82	8.04
595-430F1491PMR	MSP430F1491PMR	LQFP-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	11.41	9.60	8.82	8.04
595-430F1691PMR	MSP430F1691PMR	LQFP-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	15.98	13.44	12.35	11.26
595-430F1691PMR	MSP430F1691PMR	LQFP-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	16.71	14.16	13.07	11.98
595-MSP430F1691RTDT	MSP430F1691RTDT	QFN-64	8	60	2K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	16.82	14.26	13.16	11.33

MSP430G2XX FLASH NO LCD MICROCONTROLLERS

The Texas Instruments MSP430 family of ultra-low-power microcontrollers consists of several devices featuring different sets of peripherals targeted for various applications. The architecture, combined with five low-power modes, is optimized to achieve extended battery life in portable measurement applications. The device features a powerful 16-bit RISC CPU, 16-bit registers, and constant generators that contribute to maximum code efficiency. The digitally controlled oscillator (DCO) allows wake-up from low-power modes to active mode in less than 1 μs.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	Freq (MHz)	Flash (KB)	RAM (B)	GPIO	ADC	Timers	Price Each			
									1	25	100	250
595-MSP430G2001IN14	MSP430G2001IN14	DIP-14	16	0.512	128	10	---	1x16-Bit (TA2)	1.73	1.48	1.23	1.01
595-MSP430G2001IPW14	MSP430G2001IPW14	TSSOP-14	16	0.512	128	10	---	1x16-Bit (TA2)	1.03	.85	.589	.55
595-SP430G2001IPW14R	MSP430G2001IPW14R	TSSOP-14	16	0.512	128	10	---	1x16-Bit (TA2)	1.39	1.07	.984	.793
595-MSP430G2101IPW14	MSP430G2101IPW14	TSSOP-14	16	1	128	10	---	1x16-Bit (TA2)	1.53	1.32	1.10	.656
595-SP430G2152IPW14R	MSP430G2152IPW14R	TSSOP-14	16	1	256	16	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	1.93	1.48	1.34	1.21
595-SP430G2152IPW20R	MSP430G2152IPW20R	TSSOP-20	16	1	256	16	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.10	1.62	1.47	1.32
595-P430G2152IRSA16T	MSP430G2152IRSA16T	QFN-16	16	1	256	16	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.27	1.75	1.59	1.43
595-P430G2153IRHB32T	MSP430G2153IRHB32T	QFN-32	16	1	256	24	8x10-Bit	2 16-bit (3CCR), 1 WD/Int	2.45	1.89	1.71	1.40
595-MSP430G2211IN14	MSP430G2211IN14	DIP-14	16	2	128	10	---	1 16-bit (2CCR), 1 WD/Int	1.63	1.30	1.04	1.00
595-MSP430G2211IPW14	MSP430G2211IPW14	TSSOP-14	16	2	128	10	---	1x16-Bit (TA2)	1.46	1.22	.837	.78
595-MSP430G2221IN14	MSP430G2221IN14	DIP-14	16	2	128	10	---	1x16-Bit (TA2)	1.95	1.63	1.30	1.04
595-MSP430G2221IPW14	MSP430G2221IPW14	TSSOP-14	16	2	128	10	---	1x16-Bit (TA2)	1.70	1.46	1.22	1.00
595-MSP430G2231IN14	MSP430G2231IN14	DIP-14	16	2	128	10	8x10-Bit	1x16-Bit (TA2)	1.75	1.40	1.12	1.08
595-MSP430G2231IPW14	MSP430G2231IPW14	TSSOP-14	16	2	128	10	8x10-Bit	1x16-Bit (TA2)	1.38	1.10	.885	.854
595-SP430G2231IPW14R	MSP430G2231IPW14R	TSSOP-14	16	2	128	10	10-bit SAR	1x16-Bit (TA2)	1.44	1.27	1.04	.924
595-P430G2231IRSA16T	MSP430G2231IRSA16T	QFN-16	16	2	128	10	10-bit SAR	1x16-Bit (TA2)	1.50	1.20	.84	.81
595-MSP430G2232IN20	MSP430G2232IN20	DIP-20	16	2	256	16	10-bit SAR	1x16-Bit (TA3)	1.65	1.38	1.10	.77
595-P430G2253IRHB32T	MSP430G2253IRHB32T	QFN-32	16	2	256	24	10-bit SAR	2 16-bit (3CCR), 1 WD/Int	2.62	2.02	1.83	1.50
595-P430G2303IRHB32T	MSP430G2303IRHB32T	QFN-32	16	4	256	24	8x10-Bit	2x16-Bit (TA3)	2.62	2.02	1.83	1.50
595-MSP430G2452IN20	MSP430G2452IN20	PDIP-20	16	8	256	16	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	2.17	1.75	1.57	1.40
595-SP430G2452IPW14R	MSP430G2452IPW14R	TSSOP-14	16	8	256	16	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	2.45	1.89	1.71	1.54
595-MSP430G2452IPW20R	MSP430G2452IPW20R	TSSOP-20	16	8	256	16	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	2.10	1.75	1.40	.98
595-SP430G2452IPW20R	MSP430G2452IPW20R	TSSOP-20	16	8	256	16	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	2.45	1.89	1.71	1.54
595-P430G2452IRSA16T	MSP430G2452IRSA16T	QFN-16	16	8	256	16	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	2.80	2.16	1.96	1.76
595-P430G2403IRHB32T	MSP430G2403IRHB32T	QFN-32	16	8	512	24	---	2x16-Bit (TA3)	2.97	2.29	2.08	1.70
595-P430G2553IRHB32T	MSP430G2553IRHB32T	QFN-32	16	16	512	24	10-Bit SAR	2x16-Bit (TA3)	3.00	2.45	2.20	1.85

MSP430X2XX DEVELOPMENT TOOLS & ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Description	Price Each	MOUSER STOCK NO.	Description	Price Each
595-MSP-FET430U14	MSP430 14 pin Package Board and USB Programmer	169.68	595-MSP-FET430UIF	MSP430 USB Debugging Interface	112.75
595-EZ430-RF2500T	MSP430 2.4GHz Wireless Target Board	22.78	595-EZ430-F2013	MSP430 USB Stick Dev Tool	22.78
595-MSP-FET430U28	MSP430 20 & 28 pin Package Board and USB Programmer	169.68	595-EZ430-T2012	MSP430 USB Stick F2012 Board	11.39
595-MSP-FET430U38	MSP430 38 pin Package Board & USB Programmer	169.68	595-EZ430-RF2500	MSP430 Wireless Dev Tool	55.80
595-MSP-FET430U64	MSP430 64 pin Package Board & USB Programmer	169.68	595-MSP-FET430U23X0	MSP430F23x0 40 pin Package Board & USB Programmer	169.68
595-MSP-TS430PM64	MSP430 64 pin Socket Target Board	85.42	595-MSP-EXP430FG4618	MSP430FG4618/F2013 Experimenter Board	112.75
595-MSP-TS430PW14	Flash Emulation Tool for MSP430 Ultra Low Power MCU	85.42	595-MSP-EXP430G2	MSP430 flash programmer/debugger for Value Line devices	6.80
595-MSP-FET430U80	MSP430 80 pin Package Board & USB Programmer	169.68	595-MSP-GANG430	MSP430 In-System Gang Programmer	226.63
595-MSP-GANG430	MSP430 In-System Gang Programmer	226.63	595-MSP-FET430PIF	MSP430 Parallel Port Debugging Interface	55.80
595-MSP-FET430PIF	MSP430 Parallel Port Debugging Interface	55.80	595-430BOOST-SENSE1	Capacitive Touch BoosterPack for MSP-EXP430G2	5.07
595-EZ430-RF2500-SEH	MSP430 Solar Energy Harvesting Dev Tool	169.68			

MSP430X2XX FLASH, NO LCD MICROCONTROLLERS



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	Freq (MHz)	Flash (KB)	RAM (B)	GPIO	ADC	Timers	Price Each			
									1	25	100	250
595-MSP430F2001IN	MSP430F2001IN	DIP-14	16	1	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	1.53	1.23	1.11	.988
595-MSP430F2001IPW	MSP430F2001IPW	TSSOP-14	16	1	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	1.87	1.50	1.33	1.16
595-MSP430F2001IPWR	MSP430F2001IPWR	TSSOP-14	16	1	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	1.72	1.33	1.21	1.08
595-MSP430F2001IRSAT	MSP430F2001IRSAT	QFN-16	16	1	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	1.90	1.46	1.33	1.08
595-MSP430F2001TRSAT	MSP430F2001TRSAT	QFN-16	16	1	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	2.07	1.60	1.45	1.18
595-MSP430F2002IN	MSP430F2002IN	PDIP-14	16	1	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.14	1.72	1.55	1.38
595-MSP430F2002IPW	MSP430F2002IPW	TSSOP-14	16	1	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.14	1.72	1.55	1.38
595-MSP430F2003IRSAT	MSP430F2003IRSAT	QFN-16	16	1	128	10	16-bit S-D	1 16-bit (2CCR), 1 WD/Int	3.41	2.78	2.50	2.10
595-MSP430F2101IPWR	MSP430F2101IPWR	TSSOP-20	16	1	128	16	Slope	1 16-bit (2CCR), 1 WD/Int	2.07	1.60	1.45	1.30
595-MSP430F2011IPW	MSP430F2011IPW	TSSOP-14	16	2	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	1.83	1.48	1.33	1.18
595-MSP430F2011IPWR	MSP430F2011IPWR	TSSOP-14	16	2	128	10	Slope	1 16-bit (2CCR), 1 WD/Int	2.07	1.60	1.45	1.30
595-MSP430F2012IN	MSP430F2012IN	PDIP-14	16	2	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.75	2.22	2.00	1.77
595-MSP430F2012IPW	MSP430F2012IPW	TSSOP-14	16	2	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	2.75	2.22	2.00	1.77
595-MSP430F2012IPWR	MSP430F2012IPWR	TSSOP-14	16	2	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	3.11	2.40	2.17	1.95
595-MSP430F2012IRSAT	MSP430F2012IRSAT	QFN-16	16	2	128	10	10-bit SAR	1 16-bit (2CCR), 1 WD/Int	3.29	2.53	2.30	1.87
595-MSP430F2012TRSAT	MSP430F2012TRSAT	QFN-16	16	2	128	10	10-bit SAR	1 16-bit (2CCR),				