

# TEXAS INSTRUMENTS MSP430 Microcontrollers



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## MSP430X4XX FLASH/ROM LCD MICROCONTROLLERS

MSP430x4xx – This family of LCD flash/ROM based devices offers 1.8V-3.6V operation, up to 120kB/Flash/ROM 8MIPS with FLL + SVS along with an integrated LCD controller. Ideal for low power metering and medical applications.



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	Freq (MHz)	Flash (KB)	RAM (B)	GPIO	ADC	LCD Seg	Timers	Price Each		
										1	25	100
595-MSP430F4132IPM	MSP430F4132IPM	LQFP-64	8	8	512	56	10-Bit SAR	144	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	3.46	2.56	1.80
595-MSP430F4152IPM	MSP430F4152IPM	LQFP-64	8	16	512	56	10-Bit SAR	144	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	3.92	2.90	2.04
595-430F425IPM	MSP430F425IPM	LQFP-64	8	16	512	14	16-Bit S-D	128	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	5.29	3.88	2.76
595-MSP430FE425AIPM	MSP430FE425AIPM	LQFP-64	8	16	512	14	16-Bit S-D	128	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	7.13	5.28	4.88
595-430F435IPM	MSP430F435IPM	LQFP-80	8	16	512	48	12-Bit SAR	128, 160	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	7.80	5.73	4.08
595-MSP430FG479IZQW	MSP430FG479IZQW	BGA MICROSTAR JR	8	60	1K	48	16-Bit S-D	128	2 16-bit (3CCR), 1 WD/Int	14.47	10.72	7.56
595-430F436IPN	MSP430F436IPN	LQFP-80	8	24	1K	48	12-Bit SAR	128, 160	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	8.72	6.46	5.82
595-MSP430F4270IDL	MSP430F4270IDL	SSOP-48	8	32	256	32	16-Bit S-D	56	1 16-bit (3CCR), 1 WD/Int	8.37	6.20	4.38
595-430F417IPM	MSP430F417IPM	LQFP-64	8	32	1K	48	Slope	96	2 8-bit, 1 16-bit (3CCR), 1 16-bit (5CCR), 1 WD/Int	4.02	2.98	2.10
595-MSP430F427AIPM	MSP430F427AIPM	LQFP-64	8	32	1K	14	16-Bit S-D	128	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	5.75	4.59	3.86
595-430F427IPM	MSP430F427IPM	LQFP-64	8	32	1K	14	16-Bit S-D	128	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	5.37	3.94	2.81
595-MSP430FE427AIPM	MSP430FE427AIPM	LQFP-64	8	32	1K	14	16-Bit S-D	128	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	7.59	6.04	5.19
595-MSP430FE4272IPM	MSP430FE4272IPM	LQFP-64	8	32	1K	14	7 16-Bit S-D	128	2 8-bit, 1 16-bit (3CCR), 1 WD/Int	5.62	4.16	3.24
595-430FG437IPN	MSP430FG437IPN	LQFP-80	8	32	1K	48	12-Bit SAR	128	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	9.75	6.54	5.10
595-430F449IPZ	MSP430F449IPZ	LQFP-100	8	60	2K	48	12-Bit SAR	160	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int, 2 8-bit	11.83	7.90	6.18
595-430FG439IPN	MSP430FG439IPN	LQFP-80	8	60	2K	48	12-Bit SAR	128	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	12.90	9.95	9.12
595-MSP430F4491IPZ	MSP430F4491IPZ	LQFP-100	8	60	2K	48	----	160	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int, 2 8-bit	10.10	7.48	5.28
595-MSP430FG4616IPZ	MSP430FG4616IPZ	LQFP-100	8	92	4K	80	12-Bit SAR	160	2 8-bit, 1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	17.00	12.42	8.94
595-MSP430FG4618IPZ	MSP430FG4618IPZ	LQFP-100	8	116	8K	80	12-Bit SAR	160	2 8-bit, 1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	19.17	14.09	10.02
595-MSP430FG4619IPZ	MSP430FG4619IPZ	LQFP-100	8	120	4K	80	12-Bit SAR	160	2 8-bit, 1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	18.25	13.41	9.54
595-MSP430F4783IPZ	MSP430F4783IPZ	LQFP-100	16	48	2K	72	3 16-Bit S-D	160	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	9.18	6.80	5.28
595-MSP430F47127IPZ	MSP430F47127IPZ	LQFP-100	16	56	4K	72	7 16-Bit S-D	160	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	11.93	8.84	6.24
595-MSP430F4793IPZ	MSP430F4793IPZ	LQFP-100	16	60	2.5K	72	3 16-Bit S-D	160	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	10.91	8.01	5.70
595-MSP430F4794IPZ	MSP430F4794IPZ	LQFP-100	16	60	2.5K	72	4 16-Bit S-D	160	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	9.88	7.32	5.70
595-MSP430F47187IPZ	MSP430F47187IPZ	LQFP-100	16	116	8K	68	7 16-Bit S-D	160	2 8-bit, 2 16-bit (3CCR), 1 WD/Int	9.43	8.30	8.10

## MSP430X5XX DEVELOPMENT TOOLS AND ACCESSORIES



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Description	Price Each
595-MSP-FET430UIF	MSP-FET430UIF	MSP430 USB Debugging Interface	101.00
595-MSP-EXP430F5438	MSP-EXP430F5438	MSP430 F5438 Experimenter Board	152.00
595-MSP-TS430PZ5X100	MSP-TS430PZ5X100	MSP430F5xx 100 pin Socket Target Board	76.50
595-MSP-FET430U5X100	MSP-FET430U5X100	MSP430F5xx 100 pin Socket Target Board and USB Programmer	152.00
595-MSP-TS430PN80USB	MSP-TS430PN80USB	MSP430F55xx 80 pin Socket Target Board	84.61

## MSP430X5XX/6XX FLASH NO LCD MICROCONTROLLERS

MSP430x5xx/6xx – Introducing the new Flash-based family featuring the lowest power consumption up to 25MIPS with 1.8V to 3.6V operation starting at 12MIPS. New features include an innovative Power Management Module for optimizing power consumption, an internally controlled voltage regulator, and 2x more memory than previous devices.



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
595-MSP430F5418IPN	MSP430F5418IPN	LQFP-80	18	128	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	5.94	4.40	3.47
595-MSP430F5418IPNR	MSP430F5418IPNR	LQFP-80	18	128	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	5.94	4.40	3.11
595-MSP430F5419IPZ	MSP430F5419IPZ	LQFP-100	18	128	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	5.56	4.12	3.22
595-MSP430F5419IPZR	MSP430F5419IPZR	LQFP-100	18	128	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	5.56	4.12	2.91
595-MSP430F5435IPN	MSP430F5435IPN	LQFP-80	18	192	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	8.59	6.83	6.41
595-MSP430F5436IPZ	MSP430F5436IPZ	LQFP-100	18	192	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	9.90	9.35	8.50
595-MSP430F5437IPN	MSP430F5437IPN	LQFP-80	18	256	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	9.67	7.70	7.28
595-MSP430F5438IPZ	MSP430F5438IPZ	LQFP-100	18	256	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	9.86	6.58	5.15
595-MSP430F6636IPZ	MSP430F6636IPZ	TQFP-100	20	128	16K	74	12-bit SAR	4 16-bit (3, 5, 7CCR), 1 WDT, RTC	11.26	8.34	5.88
595-MSP430F5635IPZ	MSP430F5635IPZ	LQFP-100	20	256	16K	74	12-bit SAR	4 16-bit (3, 5, 7CCR), 1 WDT, RTC	10.91	8.01	5.70
595-MSP430F5637IPZ	MSP430F5637IPZ	LQFP-100	20	256	16K	74	12-bit SAR	4 16-bit (3, 5, 7CCR), 1 WDT, RTC	11.72	8.61	6.12
595-MSP430F6632IPZ	MSP430F6632IPZ	LQFP-100	20	256	16K	74	12-bit SAR	4 16-bit (3, 5, 7CCR), 1 WDT, RTC	11.72	8.61	6.12
595-MSP430F6635IPZ	MSP430F6635IPZ	LQFP-100	20	256	16K	74	12-bit SAR	4 16-bit (3, 5, 7CCR), 1 WDT, RTC	11.83	8.69	6.18
595-MSP430F5500IRGZR	MSP430F5500IRGZR	VQFN-48	25	8	4+2K	31	-	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	3.32	2.46	1.74
595-MSP430F5308IPT	MSP430F5308IPT	LQFP-48	25	16	6K	47	10-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	3.78	2.80	1.98
595-MSP430F5510IPT	MSP430F5510IPT	LQFP-48	25	32	4K	47	10-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	4.37	3.24	2.28
595-MSP430F5510IRGZT	MSP430F5510IRGZT	VQFN-48	25	32	4+2K	47	10-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	4.37	3.24	2.28
595-MSP430F5514IRGCR	MSP430F5514IRGCR	VQFN-64	25	64	4+2K	47	12-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	8.15	6.04	4.26
595-MSP430F5514IRGCT	MSP430F5514IRGCT	QFN-64	25	64	4+2K	47	-	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	8.15	6.04	4.26
595-MSP430F5418AIPN	MSP430F5418AIPN	LQFP-80	25	128	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	7.45	5.52	4.64
595-MSP430F5419AIPZ	MSP430F5419AIPZ	LQFP-100	25	128	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	6.32	4.92	4.79
595-MSP430F5528IZQE	MSP430F5528IZQE	BGA-80	25	128	8+2K	63	12-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	9.29	6.88	4.86
595-MSP430F5529IPN	MSP430F5529IPN	LQFP-80	25	128	8+2K	63	12-bit SAR	2 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 Watchdog, RTC	9.18	6.80	4.80
595-MSP430F5437AIPN	MSP430F5437AIPN	LQFP-80	25	192	16K	67	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	9.88	8.35	7.47
595-MSP430F5438AIPZ	MSP430F5438AIPZ	LQFP-100	25	256	16K	87	12-bit SAR	1 16-bit (3CCR), 1 16-bit (5CCR), 1 16-bit (7CCR), 1 WD, RTC	11.58	8.51	6.06
595-MSP430F5171IDAR	MSP430F5171IDAR	TSSOP-38	400	32	2K	29	10-bit SAR	3 16-bit (3CCR), 1 WDT	3.67	2.72	1.92
595-MSP430F5171IRSBT	MSP430F5171IRSBT	TSSOP-38	400	32	2K	29	10-bit SAR	3 16-bit (3CCR), 1 WDT	3.67	2.72	1.92
595-MSP430F5172IDAR	MSP430F5172IDAR	TSSOP-38	400	32	2K	29	10-bit SAR	3 16-bit (3CCR), 1 WDT	3.92	2.90	2.04
595-MSP430F5172IRSBT	MSP430F5172IRSBT	TSSOP-38	400	32	2K	29	10-bit SAR	3 16-bit (3CCR), 1 WDT	3.92	2.90	2.04

## MSP430X6XX WITH LCD FLASH/ROM



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-MSP430F6725IPN	MSP430F6725IPN	LQFP-80	25	128	4	16	10-Bit SAR	3x16-Bit	6.50	4.68	3.90	3.38
595-MSP430F6726IPZ	MSP430F6726IPZ	LQFP-100	25	128	8	16	10-Bit SAR	3x16-Bit	7.50	5.40	4.50	3.90
595-MSP430F6731IPN	MSP430F6731IPN	LQFP-80	25	32	2	2	10-Bit SAR	3x16-Bit	6.38	4.59	3.83	3.32
595-MSP430F6731IPZ	MSP430F6731IPZ	LQFP-100	25	32	2	16	10-Bit SAR	3x16-Bit	7.13	5.13	4.28	3.71
595-MSP430F6735IPN	MSP430F6735IPN	LQFP-80	25	128	4	16	10-Bit SAR	3x16-Bit	7.88	5.67	4.73	4.10
595-MSP430F6735IPZ	MSP430F6735IPZ	LQFP-100	25	128	4	16	10-Bit SAR	3x16-Bit	8.75	6.30	5.25	4.55

