

# TEXAS INSTRUMENTS MSP430 Microcontrollers



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

For a complete listing of Texas Instruments Microcontrollers visit [mouser.com/ti](http://mouser.com/ti)

Having trouble finding the microcontroller you need? Try using the Texas Instruments microcontroller selection tool at: [mouser.com/timicrocontrollers-selector/](http://mouser.com/timicrocontrollers-selector/)

## META WATCH™ DEVELOPMENT SYSTEM

Meta Watch™ is a wearable development system that enables rapid development of 'connected-watch' applications. With Meta Watch™, developers can quickly and easily extend the interfaces of devices and applications to the wrist. The Meta Watch™ platforms utilize embedded Bluetooth® technology to connect to smartphones, mobile devices and other Bluetooth enabled devices.

### Watch Features:

- A great looking watch
- An easy-to-use Bluetooth enabled wearable development system
- Fully-tooled; production-ready modules with FCC, CE certification
- Stainless steel case
- Leather strap
- Water-resistant (3 ATM)
- Mineral crystal lens
- Vibrating motor
- Three-axis accelerometer
- Ambient light sensor

### Benefits:

- MetaWatch™ is a fully-tooled production unit which lowers the barrier to market entry
- As a development platform it allows users to create custom wearable applications
- Bluetooth technology allows connection to over 3 billion + Bluetooth devices in the market
- Freely available source example code allows for easy development
- Meta Watch™ community with forums, documentation and links to sample code



### Embedded SDK Features:

- Add your own thread to the watch for special functions
- Use the Meta Watch™ low-power application framework
- No need to open the watch for in-circuit debugging
- Uses TI SPI-BY-Wire
- Leverage the Bluetooth radio and remote protocol for communication
- Sample code which is an Open Source Android SDK project demonstrating watch connectivity to an Android phone. The project demonstrates watch idle screen use as well as notifications for: CallerID, SMS messages, alarms, calendar events, music control, email and IM

### Kit Includes:

- Programming/charging clip & USB cable
- Ability to easily program through external clip & cable; no need to open watch
- Supports open source projects that support both CCS (Code Composer Studio) and IAR tool chains
- One digital display watch
- Preprogrammed to connect to an Android device out of the box



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Display Type	Clock Display	Buttons	Price Each
595-MSPWDS430BT2000	MSP-WDS430BT2000D	96 x 96 Dot Matrix	Digital	6	224.50

## MSP430LXXX DEVELOPMENT TOOLS AND ACCESSORIES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Description	Price Each
595-MSP-FET430U092	MSP-FET430U092	Flash emulation tool that includes the hardware & software required to quickly begin application development on the MSP430 MCU	152.00
595-MSP-TS430L092	MSP-TS430L092	Target board used to program/debug the MSP430 in-system through the JTAG interface or the Spy Bi-Wire (2-wire JTAG) protocol	101.00

## MSP430BQXXXX WIRELESS RECEIVER-SIDE COMMUNICATION AND POWER MONITORING IC

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Texas Instruments Part No.	Package	Freq (MHz)	ADC	Features	Price Each			
						1	25	100	250
595-SP430BQ1010IRTVT	MSP430BQ1010IRTVT	QFN-32	0.2	10-bit	Communication and Voltage/Current Monitoring, WPC-Compliant Communication Protocol	4.13	3.06	2.22	2.22



## MSP430FXXXX MIXED SIGNAL MICROCONTROLLER

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
595-430FW423IPMR	MSP430FW423IPMR	LQFP-64	8	8	256	---	Slope	2 16-bit, 1 WDT	5.49	4.26	3.00	3.00
595-MSP430F5325IPNR	MSP430F5325IPNR	LQFP-80	25	64	6	---	12-bit SAR	4 16-bit, 1 WDT	5.05	3.74	2.64	2.64



## MSP430LXXX MIXED SIGNAL MICROCONTROLLER

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-MSP430L092SPWR	MSP430L092SPWR	TSSOP-14	4	128	-	11	8-bit SAR	2 16-bit (3CCR) 1 WDT	2.30	1.70	1.20	1.20



## MSP430BTXXXX MIXED SIGNAL MICROCONTROLLER

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-MSP430BT5190IPZ	MSP430BT5190IPZ	TQFP-100	8	256	16	87	12-bit SAR	3 16-bit, 2 8-bit (3CCR) 1 WDT, RTC	11.37	8.42	5.94	5.94



## MSP430X1XX FLASH/ROM NO LCD MICROCONTROLLERS

MSP430x1xx – These non-LCD flash/ROM based MCUs offer 1.8V to 3.6V operation, up to 60kHz, 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
595-430F1101AIPW	MSP430F1101AIPW	TSSOP-20	8	1	128	14	Slope	1 16-bit (3CCR), 1 WD/Int	2.19	1.60	1.14	1.14
595-430F1111AIPW	MSP430F1111AIPW	TSSOP-20	8	2	128	14	Slope	1 16-bit (3CCR), 1 WD/Int	2.54	1.86	1.32	1.32
595-430F1121AIDW	MSP430F1121AIDW	SOIC-20	8	4	256	14	Slope	1 16-bit (3CCR), 1 WD/Int	3.21	2.38	1.68	1.68
595-430F1122IPW	MSP430F1122IPW	TSSOP-20	8	4	256	14	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	3.78	2.78	1.98	1.98
595-430F1222IDW	MSP430F1222IDW	SOIC-28	8	4	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.02	2.95	2.10	2.10
595-430F1222IPW	MSP430F1222IPW	TSSOP-28	8	4	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.02	2.98	2.10	2.10
595-430F1132IPW	MSP430F1132IPW	TSSOP-20	8	8	256	14	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.13	2.72	2.16	2.16
595-430F1232IDW	MSP430F1232IDW	SOIC-28	8	8	256	22	Slope	1 16-bit (3CCR), 1 WD/Int	4.02	2.95	2.10	2.10
595-430F1232IDW	MSP430F1232IDW	SOIC-28	8	8	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.24	3.11	2.22	2.22
595-430F1232IPW	MSP430F1232IPW	TSSOP-28	8	8	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.24	3.14	2.22	2.22
595-430F1232IPWR	MSP430F1232IPWR	TSSOP-28	8	8	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	4.24	3.14	1.98	1.98
595-430F1232IRHBR	MSP430F1232IRHBR	QFN-32	8	8	256	22	10-bit SAR	1 16-bit (3CCR), 1 WD/Int	3.78	2.80	1.98	1.98
595-430F1331PAG	MSP430F1331PAG	TQFP-64	8	8	256	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	6.78	4.98	3.54	3.54
595-430F1351PAG	MSP430F1351PAG	TQFP-64	8	16	512	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	7.45	5.48	3.90	3.90
595-430F1351PM	MSP430F1351PM	LQFP-64	8	16	512	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	7.45	5.48	3.90	3.90
595-430F1351PMR	MSP430F1351PMR	LQFP-64	8	16	512	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	7.45	5.26	3.54	3.54
595-430F1471PAG	MSP430F1471PAG	TQFP-64	8	32	1K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	9.18	6.74	4.80	4.80
595-430F1471PM	MSP430F1471PM	LQFP-64	8	32	1K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	9.18	6.74	4.80	4.80
595-430F1471PMR	MSP430F1471PMR	LQFP-64	8	32	1K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	9.18	6.46	4.32	4.32
595-430F1571PM	MSP430F1571PM	LQFP-64	8	32	1K	48	12-bit SAR	2 16-bit (3CCR), 1 WD/Int	12.29	9.03	6.42	6.42
595-430F1671PM	MSP430F1671PM	LQFP-64	8	32	1K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	14.23	10.46	7.44	7.44
595-430F1671PMR	MSP430F1671PMR	LQFP-64	8	32	1K	48	12-bit SAR	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	14.23	10.46	7.44	7.44
595-430F1471IPM	MSP430F1471IPM	LQFP-64	8	32	1K	48	Slope	1 16-bit (3CCR), 1 16-bit (7CCR), 1 WD/Int	9.42	6.92	4.92	4.92