

Product Announcement

Introducing MSP430F2132 as Bare Die Product from Texas Instruments

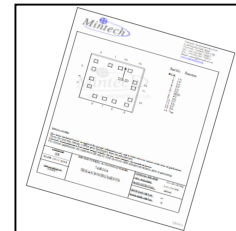
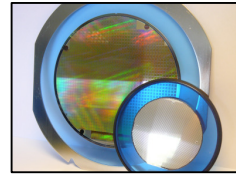
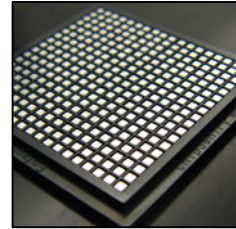
16-bit Ultra-Low-Power Microcontroller, 8kB Flash, 512B RAM, 10 bit ADC, 1 USCI

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 μ s.

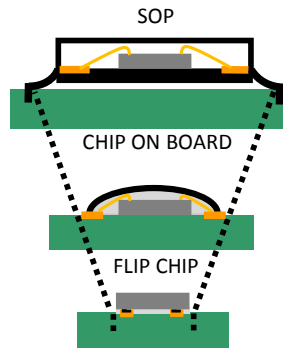
The MSP430F2132 is an ultra-low-power microcontroller with two built-in 16-bit timers, a fast 10-bit A/D converter with integrated reference and a data transfer controller (DTC), a comparator, built-in communication capability using the universal serial communication interface, and up to 24 I/O pins.

Designing applications with the MSP430F2132 in bare die form offers >50% X-Y-Z size reduction when compared with smallest available package. \therefore Bare die form factor greatly assists size sensitive applications.



Quick Reference Data

| | |
|-------------------------|---|
| Frequency (MHz) | 16 |
| Flash | 8 KB |
| RAM | 512 B |
| GPIO | 24 |
| ADC | 10-Bit SAR |
| Interface | 1 USCI_A (UART/LIN/IrDA/SPI) 1 USCI_B (I2C/SPI) |
| End equipment Optimised | Smoke Detectors, Battery Chargers, Wireless Sensors |
| Timers | 1 16-bit (3CCR), 1 16-bit (2CCR0, 1 watchdog/Interval |



Please [contact us](#) for the MSP430 die geometry.

Features

- Low Supply-Voltage Range, 1.8 V to 3.6 V
- Ultra-Low Power Consumption:
 - Active Mode: 250 μ A at 1 MHz, 2.2 V
 - Standby Mode: 0.7 μ A
 - Off Mode (RAM Retention): 0.1 μ A
- Ultra-Fast Wake-Up From Standby Mode in Less Than 1 μ s
- Smallest form factor
- 16-Bit RISC Architecture, 62.5-ns Instruction Cycle Time
- 16-Bit Timer0_A3 With Three Capture/Compare Registers
- 16-Bit Timer1_A2 With Two Capture/Compare Registers
- On-Chip Comparator for Analog Signal Compare Function or Slope Analog-to-Digital (A/D) Conversion
- 10-Bit 200-kps A/D Converter With Internal Reference, Sample-and-Hold, Autoscan, and Data Transfer Controller
- Universal Serial Communication Interface

A full electrical datasheet is available from <http://focus.ti.com/docs/prod/folders/print/msp430f2132.html>

For further die technical information and choice of available supply formats please [contact us](#)

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