

eZ430-Chronos development kit



Based on the CC430F6137 <1 GHz RF SoC, the eZ430-Chronos is a complete CC430-based wireless development system contained in a watch. The eZ430™ development tool features a 96 segment LCD display and provides an integrated pressure/altitude sensor and 3-axis accelerometer for motion sensitive control. The integrated wireless feature allows the Chronos to act as a central hub for nearby wireless sensors such as pedometers and heart rate monitors. The eZ430-Chronos also includes temperature and battery voltage measurement and is complete with a USB-based CC1111 wireless interface to a PC and a programming interface to create custom applications.

Overview

- Small form factor and ultra-low-power consumption
- Expandable for Personal Area Network applications
- Based on CC430: MSP430™ MCUs with integrated <1 GHz RF
- Low cost development system, only \$49

Features

- Reprogrammable over Spy Bi-Wire
- Runs SimpliciTI and BM Innovations' BlueRobin™ RF protocols
- Available in 433, 868 and 915 MHz bands for worldwide usage
- Includes several open-source projects
- LCD driven directly by CC430
- Integrated Sensors:
 - 3-axis accelerometer
 - Altimeter
 - Temperature
 - Battery voltage
- The kit includes:
 - Chronos watch
 - eZ430 emulator for programming and debugging
 - USB-RF access point for PC communication



Software

- Code Composer Studio™ v4: www.ti.com/ccs
- IAR KickStart: www.ti.com/iarkickstart
- SimpliciTI™: www.ti.com/simpliciti

For more information, please visit:

- Chronos tool folder: www.ti.com/chronos
- Chronos wiki: www.ti.com/chronoswiki

| CC430F6137 RF MCU | | | |
|-----------------------|-------------------|------------------------|----------------------|
| 32 KB flash | 4KB RAM | 16-bit CPU | HW Multiplier |
| CC1101 RF Transceiver | Analog Comparator | 16-Ch. 12-bit ADC | Temperature Sensor |
| 4 16-bit Timers | CRC-16 Module | 3-Ch. DMA | I ² C/SPI |
| 96-Segment LCD Driver | AEC128 Encryption | Real Time Clock Module | UART/SPI/IrDA |

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|--------------------|----------------------|-----------------|----------------------------|
| LCD with backlight | 3-Axis Accelerometer | Pressure Sensor | Spy Bi-Wire JTAG Interface |
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| RF Antenna (433, 868, 915 MHz options) | Buzzer |
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