

Texas Instruments - eZ430-Chronos Wireless Watch Development Tool 433MHz

Product Overview:

The eZ430-Chronos is a highly integrated, wearable wireless development system based for the CC430 in a sports watch. It may be used as a reference platform for watch systems, a personal display for personal area networks, or as a wireless sensor node for remote data collection.

Based on the CC430F6137 <1 GHz RF SoC, the eZ430-Chronos is a complete CC430-based development system contained in a watch. This tool features a 96 segment LCD display and provides an integrated pressure 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 offers temperature and battery voltage measurement and is complete with a USB-based CC1111 wireless interface to a PC.



Kit Contents:

The evaluation kit contains everything needed to develop and run applications for eZ430 system including:

- CC1111 USB RF access point
- Mini Phillips screwdriver
- eZ430 USB programming and debugging interface
- eZ430-Chronos wireless watch
- CD containing documentation and development software
- 2 spare screws

Key Features:

The development system includes the following features:

- Fully functional sports watch based on the CC430F6137, MSP430 with integrated <1GHz wireless transceiver
- Watch reprogrammable for custom wireless applications
- Highly integrated watch includes on-board 3-axis accelerometer, pressure sensor, temperature sensor, battery voltage sensor
- 96-Segment LCD display driven directly by CC430
- Can be paired wirelessly with heart rate monitors, pedometers or other devices based RF transceivers like the CC1101 or SoCs such as the CC430 or CC111x
- Includes an eZ430 USB emulator that connects the Chronos to a PC for real-time, in-system programming and debugging
- Includes IAR Kick start and Code Composer Studio integrated development environments which includes an assembler, linker, simulator, source-level debugger, and code limited C-compiler

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
EZ430-CHRONOS	TI	1779156	55R3045

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
CC430F6137IRGC	TI	CC430F6137 Microcontroller	NA	68R5921
CC1111F32RSP	TI	RF Transceiver	1573890	61M5137
TPS76933DBV	TI	Voltage Regulator	1535764	77C1164

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
EZ430-RF2500	TI	MSP430 Wireless Development Tool	MSP430F20	1382267	55M5474
EM430F6137RF900	TI	CC430 Wireless Development Tool	CC430	NA	63R9909

EZ430-F2013	TI	MSP430, EZ430 Development Tools	MSP430	1172234	87K7632
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Document List:

Datasheets:

Part Number	Description	Size
CC430F6137IRGC	CC430F6137 Microcontroller	222KB
CC1111F32RSP	RF Transceiver	3.67MB
TPS76933DBV	Voltage Regulator	446KB

Application Notes:

File Name	Size
Frequency Scanning using CC430Fx, CC110x, and CC111xFx	65KB
SimpliciTI on the CC430 – Practical Modifications	89KB
Compact Antenna Solution for 868/915 MHz	832KB

Hardware & Software:

File Name	Size
eZ430-Chronos Software Package	23.23MB
Code Composer Essentials v3.1 SR1 Core Edition	151.8MB