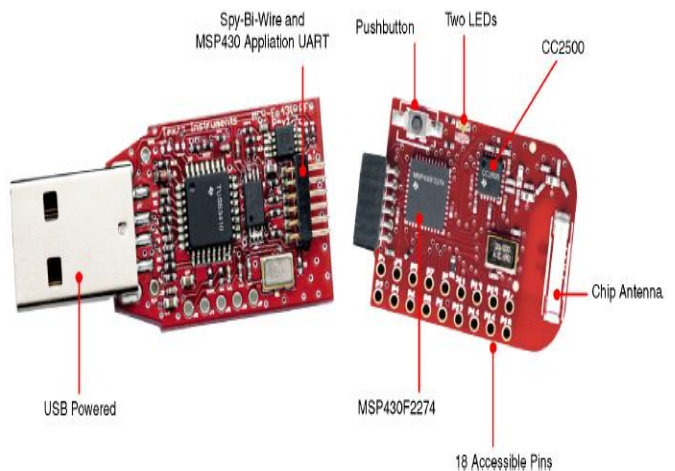


## Texas Instruments - EZ430-RF2500 - Wireless - Development Kit

### Product Overview:

The eZ430-RF2500 is a complete wireless development tool for the MSP430 and CC2500 that includes all the hardware and software required to develop an entire wireless project with the MSP430 in a convenient USB stick. The tool includes a USB-powered emulator to program and debug your application in-system and two 2.4-GHz wireless target boards featuring the highly integrated MSP430F2274 ultra-low-power MCU. Projects may be developed and instantly deployed using the included battery expansion board and AAA batteries. All the required software is included such as a complete Integrated Development Environment and SimpliciTI, a propriety low-power star network stack, enabling robust wireless networks out of the box. The eZ430-RF2500 uses the MSP430F22x4 which combines 16-MIPS performance with a 200-ksps 10-bit ADC and 2 op-amps and is paired with the CC2500 multi-channel RF transceiver designed for low-power wireless applications.



The eZ430-RF emulator interface may be used with any Spy Bi-Wire enabled MSP430, such as the F22xx and F20xx series, and is fully compatible with the eZ430-F2013 and eZ430-T2012 target boards. The emulator interface can be used to download and debug your target applications, and can transmit serial data to your PC while in or out of a debug session.

### Kit Contents:

The items in the Development Kit and their use are as follows:

- The hardware includes:
  - Two eZ430-RF2500T target boards
  - One eZ430-RF USB debugging interface
  - One AAA battery pack with expansion board (batteries included)

- One MSP430 Development Tool CD-ROM containing documentation and new development software
- For eZ430-RF2500:
  - MSP430x2xx Family User's Guide
  - eZ430-RF2500 User's Guide
  - Code Composer Essentials (CCE)
  - IAR Embedded Workbench (Kick Start Version)
  - eZ430-RF2500 Sensor Monitor (Code and Visualize)

## Key Features:

- USB debugging and programming interface featuring a driverless installation and application backchannel
- 21 available development pins
- Highly integrated, ultra-low-power MSP430 MCU with 16-MHz performance
- Two general-purpose digital I/O pins connected to green and red LEDs for visual feedback
- Interruptible push button for user feedback

## Ordering Information:

### Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
EZ430-RF2500	TI	1382267	55M5474

### Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
EZ430-RF2500T	TI	MSP430 2.4-GHz Wireless Target Board	1619096	08N6141
EZ430-F2013	TI	MSP430 USB Stick Development Tool	1172234	87K7632
MSP430F2274IRHAT	TI	16-bit Ultra-Low-Power Microcontroller	1537191	15P0274
CC2500RTK	TI	Low Cost Low-Power 2.4 GHz RF Transceiver	1564922	81K0303

## Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
EZ430-RF2500-SEH	TI	MSP430 Solar Energy Harvesting Development Tool	MSP430	NA	50P9927

## Document List:

## Datasheets:

Part Number	Description	Size
431171200245	<a href="#">Ceramic Chip Antenna</a>	733KB
CX5032SB26000	<a href="#">Crystal Units</a>	1.63MB
CC2500	<a href="#">Low-Cost Low-Power 2.4GHz RF Transceiver</a>	1.98MB
MSP430 Family	<a href="#">Mixed Signal Microcontroller</a>	1.75MB
SML-310 Series	<a href="#">LED</a>	244KB
22-05-3061	<a href="#">Connector</a>	30KB
B3U-1000P	<a href="#">Ultra-Small Tactile Switch</a>	225KB

## Application Notes:

File Name	Size
<a href="#">CC2500 and CC2510 Sensitivity versus Frequency Offset and Crystal Accuracy</a>	111KB
<a href="#">Cleanup of Installed PC Tools</a>	564KB
<a href="#">Clear Channel Assessment Using TI SUP430 and CC2500 Radio</a>	951KB
<a href="#">Code Export From SmartRF Studio</a>	97KB
<a href="#">Frequency Hopping Systems</a>	211KB
<a href="#">Interfacing CC1100-CC2500 to The MSP430</a>	293KB
<a href="#">Practical Sensitivity Testing</a>	365KB
<a href="#">Programming Output Power on CC2500 and CC2550</a>	177KB
<a href="#">RF Module Testing using SmartRF Studio</a>	326KB
<a href="#">RSSI Interpretation and Timing</a>	150KB
<a href="#">Software for CC1100 ,CC2500 and MSP430 – Examples and Function Library</a>	486KB
<a href="#">Wireless Sensor Monitor Using the eZ430-RF2500</a>	457KB
<a href="#">Register View in SmartRF Studio</a>	145KB

## Hardware & Software:

File Name	Size
<a href="#">eZ430-RF2500 Sensor Monitor Demo</a>	2.82MB
<a href="#">eZ430-RF2500-SEH Solar Energy Harvesting Development Kit</a>	241KB
<a href="#">eZ430-RF2500T Hardware Design Files</a>	182KB
<a href="#">SmartRF Flash Programmer</a>	8.13MB
<a href="#">SmartRF Flash Programmer User Manual</a>	1.23MB
<a href="#">eZ430-RF2500T Eagle CAD Source</a>	44KB

## Others Resources:

File Name	Size
<a href="#">Video: Getting Started with the MSP430 EZ430-RF2500, Wireless Development Tool</a>	7min