





The A2500R24A-EZ4x is a high-performance demonstration platform, designed to showcase Anaren's family of FCC & IC certified and ETSI-compliant AIR Modules. It features an A2500R24A AIR 2.4 GHz module with integral antenna, and is designed to quickly connect to the Texas Instruments eZ430 Development Kit battery board or USB debugging interface

### **Product Overview**

The A2500R24A-EZ4x is a target board assembly with the Anaren A2500R24A radio module in the industry's smallest package (9 x 12 x 2.5mm) mounted on it.

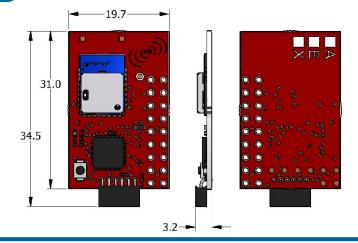
This module is fully compliant with Texas Instruments eZ430-RF2500 Development Kit, and plugs directly into either the battery board or USB debugging interface via the 6 pin header. It is designed to be a direct-replacement for the access point and end point target board modules included with the Texas Instrument eZ430-RF2500 Development Kit. Each Anaren A2500R24A Radio Module is FCC & IC certified, ETSI-compliant, and incorporates the Texas Instruments CC2500 transceiver chip.

As a stand-alone module for your final design implementation, Anaren's A2500R24A has an LGA pad footprint with an integral printed antenna.

This module is designed to effortlessly integrate into a wide range of applications, including: industrial control, building automation, low-power wireless sensor networks, lighting control, and automated meter reading.



### Layout











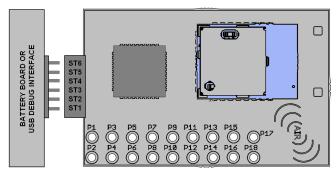




## Anaren Integrated Radio

### Pin Diagram

#### **EZ4x Connections**



### Battery / USB:

ST1 P3.4 / UCA0TXD / UCA0SIMO

ST2 **GND** 

RST / SBWTDIO ST3 ST4 TEST / SBWTCK VCC (3.6V) ST5

ST6 P3.5 / UCA0RXD / UCA0SOMI

#### Interface:

P1 **GND** P2 VCC

РЗ P2.0 / ACLK / A0 / OA0I0

P4 P2.1 / TAINCLK / SMCLK / A1 /A0O

P5 P2.2 / TA0 / A2 / OA0I1

P6 P2.3 / TA1 / A3 / VREF- / VeREF-/ OA1I1 / OA1O

P7 P2.4 / TA2 / A4 / VREF+ / VeREF+/ OA1I0

P8 P4.3 / TB0 / A12 / OA0O P4.4 / TB1 / A13 / OA1O P9 P4.5 / TB2 / A14 / OA0I3 P10 P11 P4.6 / TBOUTH / A15 / OA1I3

P12 GND

P13 P2.6 / XIN (GDO0)

P14 P2.7 / XOUT (GDO2)

P15 P3.2 / UCB0SOMI / UCB0SCL P16 P3.3 / UCB0CLK / UCA0STE P17 P3.0 / UCB0STE / UCA0CLK / A5

P18 P3.1 / UCB0SIMO / UCB0SDA



This product is not to be used in any implantable medical device or external medical device intended to regulate or monitor biological functions, including but not limited to devices such as pacemakers, defibrillators, cardiac resynchronization devices, pressure sensors, biochemical stimulators and neurostimulators. ANAREN MAKES NO WARRANTY OF FITNESS OR MERCHANTABILITY OF THIS PRODUCT FOR ANY USE OF THIS TYPE. Anaren shall not be responsible for any consequential damages arising from the sale or use of this product for any use of this type. The ultimate user of the product assumes all risk of personal injury or death arising from a prohibited use

#### **Nomenclature**

# A2500R24A-E

(Anaren)

1 Chip series

2 Function

3 Frequency band

4 Form factor

5 Module Type

6 Firmware (EZ4 only)

(CC1101, CC110L, CC2500)

(R = radio only)

(x100MHz)

(A = Internal Antenna, C = Connector) (EM1 = Eval Module, EZ4x = EZ-430)

Module)

(A = Access Point, E = End Point,

X = Custom (or no firmware)

To view the entire available family of AIR Modules & Development options, please visit our website at:

http://www.anaren\_com/air



PLEASE NOTE: Additional information on the Texas Instruments CC2500 Development Kit can be found in the company's latest datasheet release at http://www.ti.com



Caution! ESD sensitive device. Precautions should be used when handling the device in order to prevent permanent damage.







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