Anaren Integrated Radio
EZ4x Module Series

A2500R24A-EZ4x

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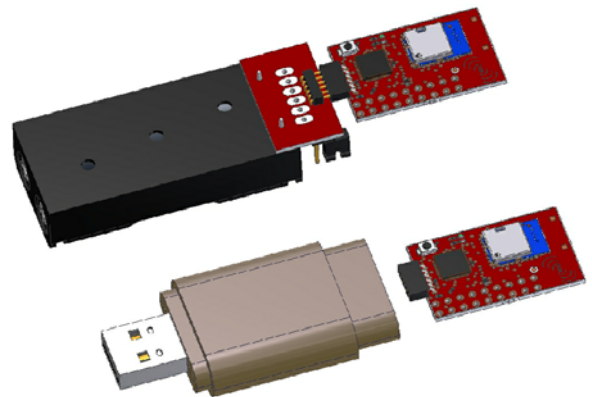
Product Overview

The A2500R24A-EZ4x is a target board assembly showcasing the Anaren A2500R24A radio module in the industry's smallest package (9 x 12 x 2.5mm) mounted on it.
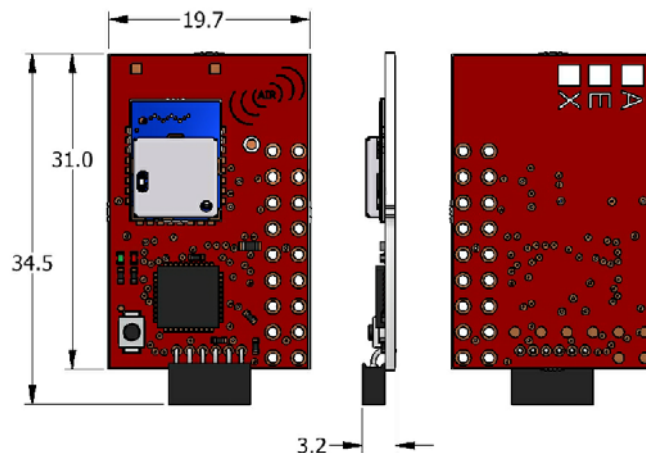
This module is fully compliant with Texas Instruments eZ430-RF2500 Development Kit, and plugs directly into either the battery board or USB debugging interface via the 6 pin header. It is designed to be a direct-replacement for the access point and end point target board modules included with the Texas 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.
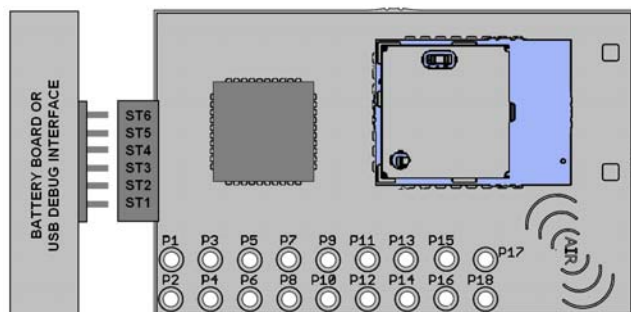

Layout

Pin Diagram

EZ4x Connections

Battery / USB:

ST1	P3.4 / UCA0TXD / UCA0SIMO
ST2	GND
ST3	RST / SBWTDIO
ST4	TEST / SBWTCK
ST5	VCC (3.6V)
ST6	P3.5 / UCA0RXD / UCA0SOMI

Interface:

P1	GND
P2	VCC
P3	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
P9	P4.4 / TB1 / A13 / OA1O
P10	P4.5 / TB2 / A14 / OA0I3
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 shall not be used in any of the following products or systems without prior express written permission from Anaren Microwave, Inc:
(i) implantable cardiac rhythm management systems, including without limitation pacemakers, defibrillators and cardiac resynchronization devices;
(ii) external cardiac rhythm management systems that communicate directly with one or more implantable medical devices; or
(iii) other devices used to monitor or treat cardiac function, including without limitation pressure sensors, biochemical sensors and neurostimulators.

Nomenclature

A		(Anaren)
1	Chip series	(1101, 2500)
2	Function	(R = radio only)
3	Frequency band	(x100MHz)
4	Form factor	(A = Internal Antenna, C = Connector)
5	Module Type	(EM1 = Eval Module, EZ4 = EZ-430 Module)
6	Firmware (EZ4 only)	(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/content/File/AIR/AIRoverview.cfm

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.

TI Developer Network — Low Power RF

TEXAS INSTRUMENTS — MCU Developer Network

Anaren® What'll we think of next?®

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