



## Anaren Integrated Radio Evaluation Module Series



**A8520E24A91-EM2**

The A8520E24A91-EM2 is a high-performance, interface board with an FCC-certified A8520E24A91 Audio module mounted for quick connection to the Texas Instruments CC8520DK Development Kit.

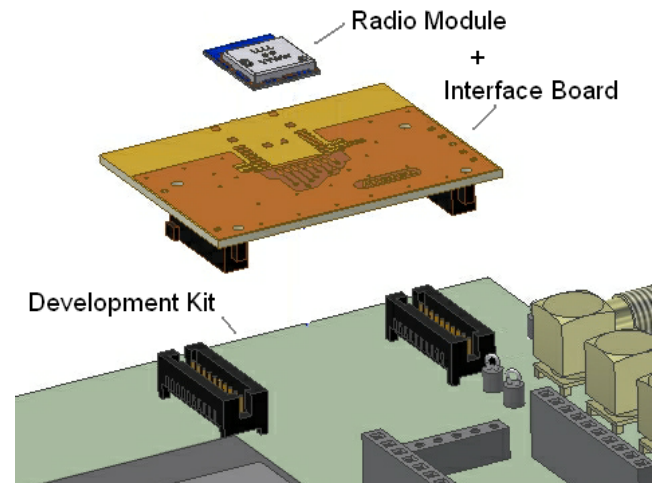
### Product Overview

The A8520E24A91-EM1 is an evaluation module with the Anaren A8520E24A91 Audio Module. In the industries smallest package. 11 x 19 x 2.5 mm. An FCC/IC-certified radio module that incorporates the Texas Instruments CC8520 transceiver chip and the CC2591 in the industry's smallest package (11 x 19 x 2.5mm).

The A8520E24A91 module is a surface mount module integrating a 8520 PurePath™ wireless audio transceiver with the CC2591 PA/LNA device ,for increased range, and an integral antenna. The module incorporates a crystal, the required RF matching and filtering for FCC/IC compliance as well as filtering on all digital lines for good noise reduction and sensitivity. The modules operate in the global non-licensed 2.4GHz ISM/SRD frequency band. These radio modules are ideal for achieving low power wireless connectivity without having to deal with extensive Protocol, RF, antenna design and regulatory compliance, allowing quick time to market. The modules are 100% tested to provide consistent performance.

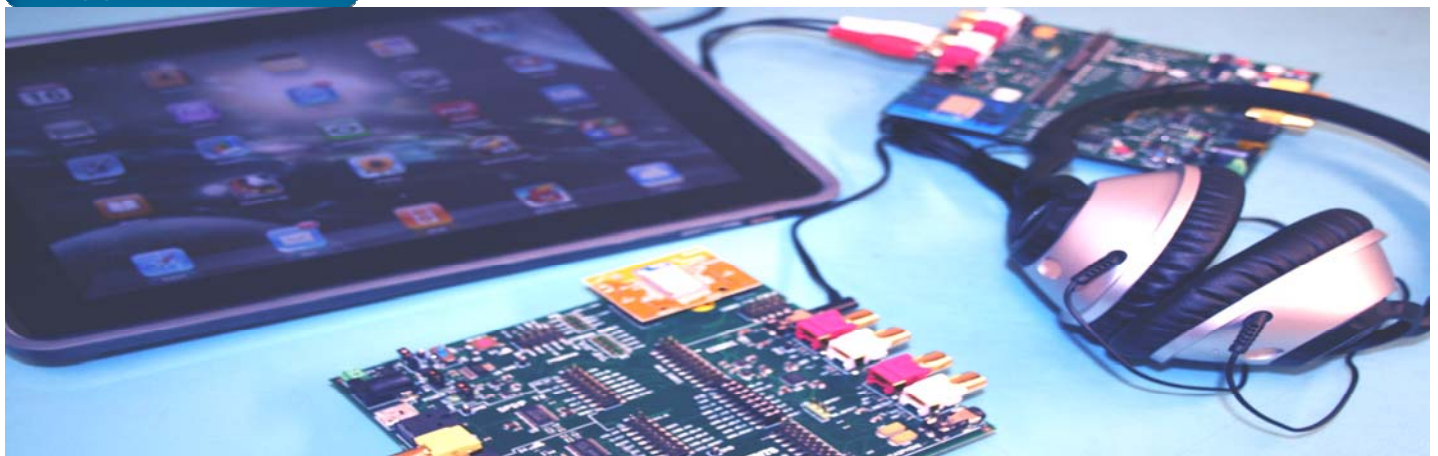
The A8520E24A91 has an RoHS-compliant ENIG finish and is packaged on tape and reel for high-volume automated manufacturing.

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### Applications:

**Consumer Audio, Professional Audio, Portable Audio, Digital**



TI Developer  
Network  
Low Power RF

**Anaren®**

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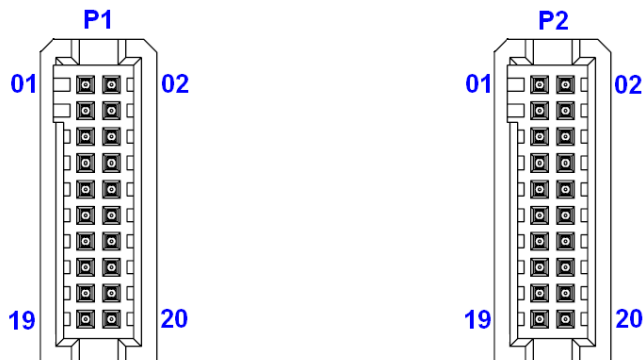
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## Anaren Integrated Radio

### Pin Diagram

#### Development Kit Connectors



Connector P1		
Pin #	TI SDK	Anaren Module
1	GND	GND
2	NC	NC
3	NC	NC
4	NC	NC
5	NC	NC
6	NC	NC
7	NC	NC
8	NC	NC
9	NC	NC
10	GIO1	GIO1
11	SDA	SDA
12	GIO2	GIO2
13	SCL	SCL
14	CSN	CS_N
15	GIO12	GIO12
16	SCLK	SCLK
17	GIO13	GIO13
18	MOSI	MOSI
19	GND	GND
20	MISO	MISO

Connector P2		
Pin #	TI SDK	Anaren Module
1	NC	NC
2	GND	GND
3	1V8	IOVdd
4	NC	NC
5	VBAT	VBAT
6	AD2	GIO9/AD2
7	3V3	Vdd
8	AD1	AD1
9	3V3	Vdd
10	AD0	AD0
11	WCLK	WCLK
12	USBM	USBM
13	MCLK	MCLK
14	USBP	USBP
15	RSTN	RSTN
16	NC	NC
17	BCLK	BCLK
18	GIO3	GIO3
19	NC	NC
20	NC	NC

### Nomenclature

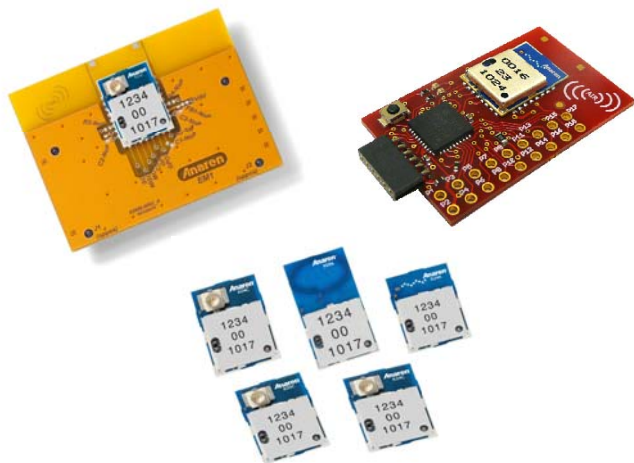
**A8520E24A91GR**

1 2 3 4 5 6 7

- A (Anaren)
- 1 Chip series (1101, 2500, 8520)
- 2 Function (R = radio only, E = Range Extender)
- 3 Frequency band (x 100MHz)
- 4 Form factor (A = Internal Antenna, C = Connector)
- 5 Design ID (90 for Europe, 91 for North America)
- 6 Application (G = General, EM-1 = Eval Module)
- 7 Packaging (R = Reel, M = Matrix Tray)

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.



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