



Anaren Integrated Radio (AIR)

Low-power RF modules, firmware & development tools that make it easy to 'go wireless'

1101 Series

The A1101R08A is a high-performance, ETSI-compliant radio module that incorporates the Texas Instruments CC1101 transceiver chip, all in the industry's smallest package: 9 x 16 x 2.5mm.



A1101R08A

Features

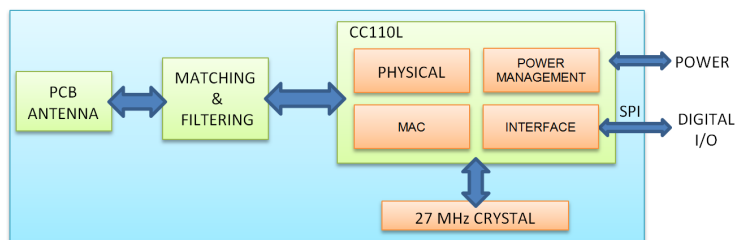
- Frequency range: 868-870 MHz
- ETSI-compliant, shielded package
- Digital RSSI output
- Programmable output power up to +10dBm
- High sensitivity (1.2 kBaud, 1% packet error rate)
-112 dBm at 869 MHz (compliant to ETSI)
- Ultra-small package size: 9 x 16 x 2.5mm
- LGA footprint
- RoHS compliant
- Operating temperature -40 to +85°C
- Impedance-controlled, multi-layer PCB
- 1.8 to 3.6 VDC
- Low current consumption (15 mA in RX, 1.2 kBaud, 868 MHz)
- 200 nA sleep mode current consumption
- Efficient SPI interface; all registers can be programmed with one "burst" transfer
- Available in tape & reel and matrix tray
- Module weight approximately 0.4 grams

Benefits

- Minimal RF engineering experience necessary
- No additional "Intentional Radiator" certification required (ETSI EN 300 220)
- Minimal real estate required
- Easily implemented on a two layer PCB
- No additional harmonic filtering required
- 100% RF-tested in production
- Common footprint for similar products in family
- No additional DC decoupling required
- Integrated analog temperature sensor
- Excellent receiver selectivity and blocking performance
- Suitable for frequency hopping systems, thanks to a fast-settling frequency synthesizer with 90 μ s settling time
- Impedance-matched balun for optimized efficiency
- Support for asynchronous and synchronous serial receive/transmit mode for backwards compatibility with existing radio communication protocols

PLEASE NOTE: Additional information on the Texas Instruments CC1101 device can be found in the company's latest datasheet release at <http://www.ti.com>

Block diagram



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.



The item described in this product brief is part of our total AIR Support solution. To learn more, visit our website or just ask us!



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