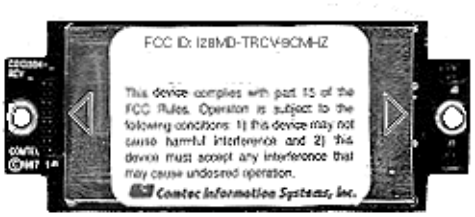
916 Wireless

916 MHz Transceiver

Part Number: CC15431-1

Features



The Comtec Wireless 916 is a 916 Mhz radio designed for OEM applications that operate in the unlicensed FCC band between 902-928 Mhz. The Wireless 916 can be used for communications where physical connection is not desired. The following objectives can be achieved with the Wireless 916, (i) provides a limited range radio (20-30 feet line of sight), (ii) minimizes parts count and associated cost, (iii) acts as a cable replacement when used together with Comtec Wireless printers. When combined with Comtec's Intelligent Wireless Controller (part number CQ13967), the Wireless 916 can be attached to any RS232C port. To minimize integration headaches, the Wireless 916 has modular FCC approval, which means that no additional FCC approval is required by the OEM[1].

Actual Size

Electrical

Input Voltage:	Vcc = 5 Volts +,-10%
Power Dissipation:	50mW (receive mode) 50mW (transmit mode) 5 mW (sleep mode)
Current Consumption:	10 mA (receive mode) 10 mA (transmit mode) 1 mA (sleep mode)
Operating Frequency:	916.5 Mhz
Transmit Power Output:	-5dBm (typical)
Receiver Sensitivity:	-85 dBm (typical)
Out of band interfering signal rejection:	60 dB (typical)
Baud rate:	user selectable, up to 19,200 bps

J1 Pin Assignments:

Pin #	Signal Name[2]	Description
Pin 1	sleep/awake*	1 = sleep
Pin 2	Vcc	
Pin 3	RXD	Receive Data
Pin 4	TX/RX*	1 = transmit
Pin 5	No connect	
Pin 6	TXD	Transmit Data
Pin 7	GND	
Pin 8	GND	

J2 Pin Assignments: (Optional)

Pin #	Signal Name
Pin 1	GND
Pin 2	GND

J3 Pin Assignments: (Optional)

Pin #	Signal Name
Pin 1	GND
Pin 2	GND

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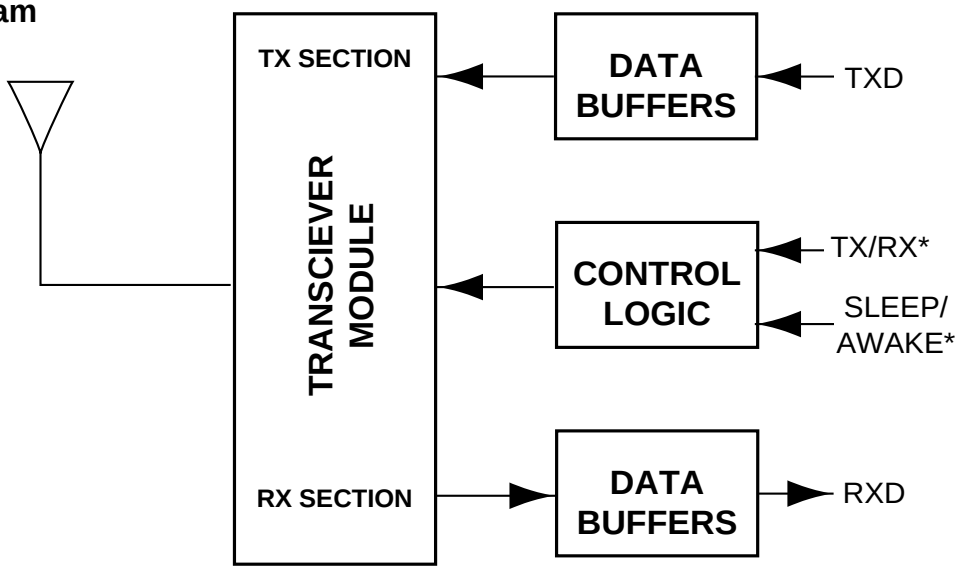
916 Wireless Block Diagram

(Part Number CC13626)



Software

When the Intelligent Wireless Controller (P/N CQ13967) is not used, Comtec can provide C source code for a CS/CDMA collision avoidance communications protocol. This software supports multiple radio pairs operating in proximity to each other, and implements error detection, retries and radio address association. The radio address association algorithm is based on radio or product serial number.

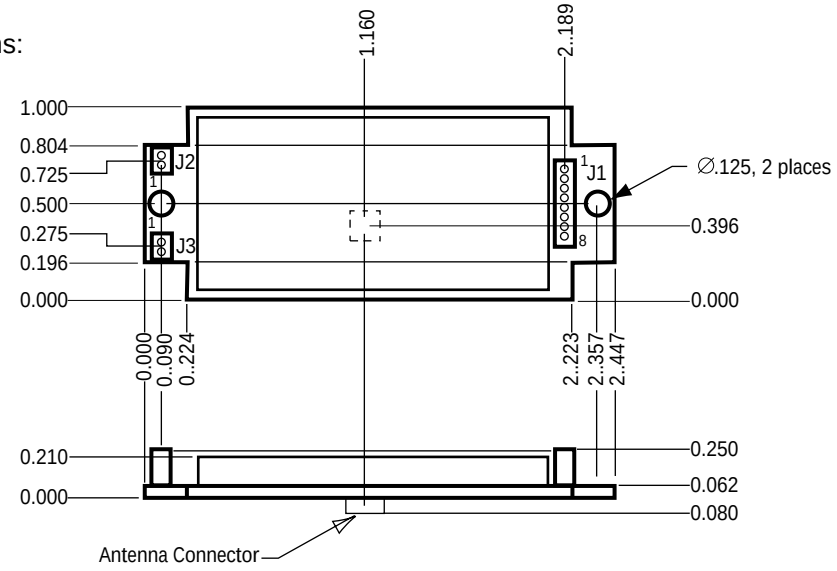
Regulatory

Approvals: FCC Modular, ID Number: I28MD-TRCV-9CMHZ
Canada T.B.D.

Physical

Connectors: Antenna - SSMT, M/A-COM part number 2367-5002-54
Data - (J1) 8 pin female, Samtec part number SLM-108-01-S-S
Ground (J2 & J3)- 2 pin female, Samtec part number SLM-102-01-S-S
Connectors mate with Samtec MTMS family. Part number is dependent on desired board spacing.

Dimensions:



[1]Comtec antenna or equivalent is used.
[2]All signals operate at CMOS levels.

4/00 Rev. 1.0.

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