

2400 Wireless

2.4 GHz Transceiver

Part Number: CC15380-1

Features

The Zebra 2400 Wireless is a 2.4 GHz radio designed for OEM applications that operate in the unlicensed FCC band between 2.4-2.5 GHz. The 2400 Wireless can be used for communications where physical connection is not desired. The following objectives can be achieved with the 2400 Wireless, (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 Zebra Wireless printers. When combined with Zebra's Intelligent Wireless Controller (part number CQ13867-1), the 2400 Wireless can be attached to any RS232C port. To minimize integration headaches, the 2400

Wireless has modular FCC approval, which means that no additional FCC approval is required by the OEM providing an approved antenna is used.

Note: The modular approval for this radio only applies for battery powered equipment. Installation of this radio into A.C. connected equipment requires additional regulatory approval. Please contact Zebra Technologies Corporation for details.



Actual Size

Electrical

Input Voltage:	Vcc = 5 Volts +,-10%
Power Dissipation:	250 mW (receive mode) 350mW (transmit mode) <5 mW (sleep mode)
Current Consumption:	50 mA (receive mode) 70 mA (transmit mode) <1 mA (sleep mode)

Operating Frequency:	2.482 GHz
Transmit Power Output:	-10 dBm (typical)
Receiver Sensitivity:	-85 dBm (typical)
Out of band interfering signal rejection:	60 dB (typical)
Baud rate:	user selectable

J1 Pin Assignments:	Pin #	Signal Name ¹	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	

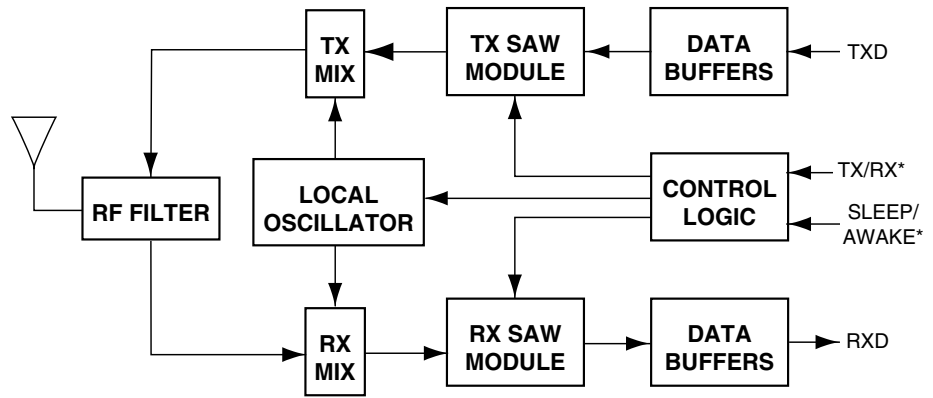
J2 Pin Assignments: (Optional)	<table><tr><th>Pin #</th><th>Signal Name¹</th><th>Description</th></tr><tr><td>Pin 1</td><td>GND</td><td></td></tr><tr><td>Pin 2</td><td>GND</td><td></td></tr></table>	Pin #	Signal Name ¹	Description	Pin 1	GND		Pin 2	GND	
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Pin 1	GND									
Pin 2	GND									

J3 Pin Assignments: (Optional)	<table><tr><th>Pin #</th><th>Signal Name¹</th><th>Description</th></tr><tr><td>Pin 1</td><td>GND</td><td></td></tr><tr><td>Pin 2</td><td>GND</td><td></td></tr></table>	Pin #	Signal Name ¹	Description	Pin 1	GND		Pin 2	GND	
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Pin 1	GND									
Pin 2	GND									



1. All signals are at CMOS levels

2400 Wireless Block Diagram



Software

When the Intelligent Wireless Controller (P/N CQ13967-1) is not used, Zebra 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

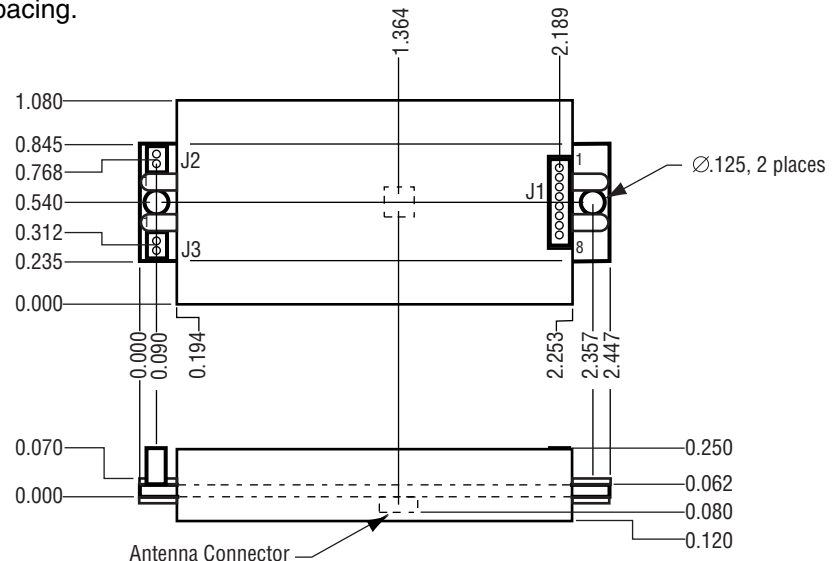
Approvals: FCC Modular, ID Number: I28MD-TRCV-24GHZ
 Canada: Canada RSS210 Certification # 3798103228A
 Product Labelling Requirements Any final product that contains this radio must have a permanently affixed label visible from the outside of the product that says the following: "Contains FCC ID: I28MD-TRCV-24GHz."

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
 Optional ground connectors (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:



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Specifications for information purposes and are subject to change.

WARNING: Changes or modifications to this radio not expressly approved by Zebra Technologies Corporation may void the user's authority to operate the equipment under the modular approval with FCC ID# I28MD-TRCV-24GHZ.

Likewise, the antenna used with this radio must be approved by Zebra for the modular approval to be valid.

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