## SONAVOX Inc. Wireless Audio Transceiver Module – WTX1011/WRX1011 Operations

#### Overview

The WTX1010/WRX1011 Wireless Audio Module is the ideal solution for customers ready to make their audio products wireless. Whether you're in the development stage or ready to mass manufacture, the WTX1010/WRX1011 will provide the reliable, standards-compliant, guaranteed performance you need.

#### **Product Highlights**

RF Performance Optimized and Guaranteed

WTX1010/WRX1011 modules are thoroughly optimized and tested to ensure consistent and superior RF performance.

#### **Small Form Factor**

The WTX1010/WRX1011 minimal size makes it easy to integrate into existing enclosures.

Electrical Characteristics Outdoor range (LOS) 15m. Transmitting Power - 0 dBm. Frequency ISM 2.400 - 2.480 GHz.

Power requirements Supply Voltage Range 2.0 - 3.3 VDC Nominal Supply voltage – 2.1VDC Current Consumption – 15mA

Physical Specifications Operating Temperature 0 to 70  $^{\circ}$ C / 32 to 158  $^{\circ}$ F

#### FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### IC Compliance

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

#### When integrating the WTX1010/WRX1011 module into your own product, you must:

Use only the provided chip antenna.

Operate the module according to the specifications listed in this data sheet.

Include a label clearly visible on the exterior of the product which states: "Contains FCC ID: WUO-WTX1010/WRX1011 / IC: 7985A-WTX1010/WRX1011".

It is mandatory that you consult all FCC and IC documentation for use of a modular approved product, and comply with all listed guidelines and additional testing that may be required.

# **Module Connection specifications** Pin description:

Pin Number	Pin Name	Pin Description
CONNECTOR J1		
1	GND	DIGITAL GROUND
2	GND	DIGITAL GROUND
3	GND	DIGITAL GROUND
4	GND	DIGITAL GROUND
5	GND	DIGITAL GROUND
6	GND	DIGITAL GROUND
7	GND	DIGITAL GROUND
8	TEST	CONNECT TO GROUND
9	SS0	SPI INTERFACE SLAVE SELECT 0
10	GND	DIGITAL GROUND
11	AUDIO_DETECT	AUDIO SIGNAL DETECT FOR ADC
12	IO_15	GPIO
13	GND	DIGITAL GROUND
14	IO-16	IO_16
15	IO_17	IO_17
16	GND	DIGITAL GROUND
17	TWI_CLK	I2C CLOCK
18	TWI_DAT	I2C DATA
19	GND	DIGITAL GROUND
20	5V	POWER SUPPLY 5V
CONNECTOR J2		
1	GND	DIGITAL GROUND
2	RESET_N	ACTIVE LOW RESET
3	RES2	UARTO RX
4	RES1	UARTO TX
5	MCLK	MASTER AUDIO CLOCK
6	DAI_BCLK	DIGITAL AUDIO INTERFACE BIT CLOCK
7	DAI_FS	DIGITAL AUDIO INTERFACE FRAME SYNC
8	DAI_DATA	DIGITAL AUDIO INTERFACE DATA
9	UART1_OUT	UART1 OUTPUT
10	UART1_IN	UART1 INPUT
11	GND	DIGITAL GROUND
12	SS2	GPIO 9
13	ASSOC	GPIO 10
14	MOSI	SPI MASTER OUT/SLAVE IN
15	DIV_CTL_MISO	ANTENNA DIV CONTROL/SPI MASTER IN / SLAVE OUT
16	IO_8	GPIO 8
17	SCLK	SPI CLOCK
18	GND	DIGITAL GROUND
19	GND	DIGITAL GROUND
20	GND	DIGITAL GROUND

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### Module Dimensions:

