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ZeroWire™ Mini PCI Board (TzM7201) Manufacturing guide

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Date: 06/24/2008

Introduction

Tzero's ZeroWire Mini PCI board (TZM7201) is the next generation platform, which is based on the TZC7200 chipset. It contains the Tzero ZeroWire TZC7200 (TZR7200Q RF chip and TZB7200 baseband chip), along with other supporting components such as single data rate SDRAM memory, filter, RF switch, and antenna. The ZeroWire Mini PCI board forms a complete UWB wireless system and is capable of operating at all WiMedia defined PHY rates, ranging from 53.3Mbps to 480Mbps

TZM7201 Mini PCI board

- Board size: Type IIIA, 59.7x 50.9mm
- R1 – 1mm thickness, 6-layers PCB

Hardware options

Current hardware revision: rev 5.0

Below is the hardware option matrix:

	MMCX connector	UFL connector
Single RX board	x	x
Dual RX board	x	x

Antenna options

Antenna Type	Gain (dBi)
Omron WXA-S1FL, monopole	0
Omron WXA-N1FL, SMD ceramic monopole	0
Taiyo Yuden AH 086M555001AE, SMD ceramic monopole	0

Antenna cabling options

Cable Type	Insertion loss (dB)
UFL – reverse polarity female SMA 4-inch long, 1.3mm cable	-0.6 dB
UFL – reverse polarity female SMA 6-inch long, 1.3mm cable	-0.8 dB
MMCX – reverse polarity female SMA 4-inch long, 0.100" cable	-0.3 dB
MMCX – reverse polarity female SMA 6-inch long, 0.100" cable	-0.5 dB

Firmware options

Below is the firmware option matrix with current versions:

		FCC compliant Calibrate for all TFC		ETSI, Telec compliant Calibrate for TFC 7 only	
Hardware		Dual RX	Single RX	Dual RX	Single RX
Manufacturing test firmware		1414	1421	1414	1421
Application firmware	RX / Client	4101		3106	
	TX / Server		4001		3016

Typical manufacturing label

This typical manufacturing label is applied on the RF shield cover of the miniPCI board



MAC address 0014EFxxxxxx

H/W rev

ODM ID

F/W test app

ODM information

Notify body ID

Installation instructions

Note:

To install the miniPCI board:

1. Verify the hardware option to match with the video codec board
 - a. Single RX miniPCI board for Tx / Server codec board
 - b. Dual RX miniPCI board for Rx / Client codec board
2. Insert the miniPCI board into the miniPCI socket on the codec board
3. Connect the one or two RF connections depending on the hardware used. See the antenna options and antenna cabling options for more details
4. Apply the certification label visible on the backside of the final product. For FCC, the external label must have this "Contains FCC ID: UEZTQM7201" wording plus the typical FCC warning. Example:

"Contains FCC ID: UEZTQM7201. 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."

In the product manual, the following statement must be included:

"This equipment may only be operated indoors. Operation outdoors is in violation of 47 U.S.C.301 and could subject the operator to serious legal penalties"