

# **Product Change Notifications**

Authors:\$metadata.from("Contributors")Revision:\$metadata.from("DocRevision")Date:26-Sep-2014 10:37



# **Table of Contents**

PCN-20140730 TE0720-01 to TE0720-02	4
Products Affected	4
Changes	4
#1 JTAG only boot mode is now supported	4
#2 Winbond W25Q256FV SPI Flash memory replaced with Spansion S25FL256	4
#3 Texas Instruments TPS51200 Sink/Source DDR Termination Regulator replaced with TPS5120	6 _
4	
#4 Changed MDIO pullup from 10k to 4k7	5
#5 Changed eMMC core supply from switched 3.3Vout to 3.3Vin	5
#6 MAC EEPROM power changed from 3.3V to 1.8V	5
#7 I2C Multiplexing no longer needed (to select between RTC and MEMS), all I2C devices are on t	he
same bus	5
#8 ST LSM303DLM (e-compass: 3D accelerometer and 3D magnetometer) MEMS is no longer	
assembled in standard assembly variants	5
#9 Removed test pads on top layer	5
#10 Increased component clearance from mounting holes on bottom layer	6
#11 System Controller in-system programming via B2B JTAG pins	6
#12 JM1 pin 89 has new function that enables System Controller JTAG Chain no impact for old	
designs that connect this pin to GND	6
Method of Identification	6
Production Shipment Schedule	6
Contact Information	6
Disclaimer	7



• PCN-20140730 TE0720-01 to TE0720-02



# PCN-20140730 TE0720-01 to TE0720-02

	Company	Trenz Electronic Gmbh
	PCN Number	PCN-20140730
	Title	TE0720-01 to TE0720-02
	Subject	Trenz Electronic TE0720 SoM (system on module): revision 1 to revision 2 upgrade
	Issue Date	20140730

# **Products Affected**

This change affects all Trenz Electronic TE0720 SoMs of the first revision: TE0720-01-\*.

affected product	suggested upgrade
TE0720-01-*	TE0720-02-*

## Changes

#### **#1 JTAG only boot mode is now supported**

Type: Enhancement

Reason: Enhancement of functionality

Impact: None

# #2 Winbond W25Q256FV SPI Flash memory replaced with Spansion S25FL256

Type: Enhancement

**Reason:** Spansion S25FL256 is supported by current Xilinx design tools (ISE14.7, Vivado) W25Q256 is only supported by u-boot, Linux and Vivado SDK Programmer

Impact: May have to re-evaluate applications that write to the SPI Flash

# #3 Texas Instruments TPS51200 Sink/Source DDR Termination Regulator replaced with TPS51206

Type: BOM change

Reason: TPS51206 was changed due to BOM optimization

Impact: None



#### #4 Changed MDIO pullup from 10k to 4k7

Type: BOM change

Reason: Avoiding potential problems when PHY management bus is configured at high speeds

Impact: None

#### #5 Changed eMMC core supply from switched 3.3Vout to 3.3Vin

Type: Schematic change

Reason: eMMC startup timing improvement

Impact: None

#### #6 MAC EEPROM power changed from 3.3V to 1.8V

Type: Schematic change

Reason: PCB and System Controller optimization

Impact: None

### **#7 I2C Multiplexing no longer needed (to select between RTC and MEMS),** all I2C devices are on the same bus.

Type: Schematic change

Reason: Change to new type of MEMS with only one I2C

Impact: None (if the old GPIO based I2C mux is used it just has no effect now)

### #8 ST LSM303DLM (e-compass: 3D accelerometer and 3D magnetometer) MEMS is no longer assembled in standard assembly variants

Type: BOM change

Reason: ST LSM303DLM MEMS has been discontinued

**Impact:** None for designs that did not use the MEMS sensor, please contact us for customized BOM if necessary

#### #9 Removed test pads on top layer

Type: Layout change

**Reason:** No longer needed as the System Controller factory programming is done during tests using main B2B Connectors

Impact: None (test pads only used at factory)



#### #10 Increased component clearance from mounting holes on bottom layer

Type: Enhancement

Reason: Decreasing the possibility to damage the module with improper extraction methods

Impact: None

#### **#11 System Controller in-system programming via B2B JTAG pins**

Type: Enhancement

Reason: Enhancement for Factory tests and programming

Impact: None

#### #12 JM1 pin 89 has new function that enables System Controller JTAG Chain no impact for old designs that connect this pin to GND

Type: Enhancement

Reason: Enhancement for Factory tests and programming

Impact: None

## Method of Identification

The model code and revision number (e.g. TE0720-01 or TE0720-02) are printed on the top side of the PCB.

## **Production Shipment Schedule**

From June 2014.

#### **Contact Information**

If you have any questions related to this PCN, please contact Trenz Electronic's Technical Support at

- forum.trenz-electronic.de
- wiki.trenz-electronic.de
- support%trenz-electronic.de (subject = PCN-20140730)
- phone
  - national calls: 05223 65301-0
  - international calls: 0049 5223 65301-0



# **Disclaimer**

Any projected dates in this PCN are based on the most current product information at the time this PCN is being

issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information,

please contact your local Trenz Electronic sales office, technical support or local distributor.