TS-8550

Rev. A to Rev. B Changes

Relayout of 5V Regulator
Added res for SD Boot
Power Sw also switches 5V Input Power
Added PU resistor to CN1 pin 54
Title: TS-8550 MagJacks, JTAG, Battery

Rev: B  Designer  Sheet 2 of 9

Technologic Systems  Date  Dec. 12, 2014

FPGA JTAG Header

RTC Battery

Gig MagJack

10/100 MagJack

Swapped RX and TX Pairs
2.9V <--- 5V
Level shifter

RS-232 Transceiver

RS-485 Driver

COM DB9M

2.9V <--- 5V
Level shifter

Board ID = 19

CAN Tranceiver

TS-4800 requires 3.0V max on the RXD pins

TS-4200 has 1.8V levels on the CAN RXD

TS-4200 has 1.8V levels on the CAN RXD
**Bias Res.**

**SATA Port**

PCle Diff Pairs can be Polarity swapped

SATA can NOT have polarity swapped

SATA and PCle Diff pairs do NOT have to be length matched

**Mini PCIe 1.5V Reg.**

**Mini PCIe Socket**

To Support Half-Size Mini-PCIe
This switch selects whether the TS-4900 SPI Flash or the Base Bd. Flash is used to Boot

CN1_87 allows software to take control of which SPI Flash chip is accessed
High-speed differential pairs are not routed to these headers.

USB, SATA, Ethernet, SD card, PCIe and Ethernet pairs are not connected because this would mismatch the transmission lines.

CPU JTAG

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**Technologic Systems**

**Title:** TS-8550 CPU JTAG, Headers for SBC

**Date:** Dec. 12, 2014