Termination
Resistors

Termination
Power Supply

DDR3 RAM

Resistors:
- R114: 75Ω
- C112: 0.1μF
- C231: 10μF, 6.3V
- C54: 1μF, 6.3V
- R113: 75Ω
- C34: 22μF, 6.3V

Power Supply:
- VIN: 1.7V
- REF_IN: 2V
- EN:
- REF_OUT: 7V
- SENSE: 6V
- VGOOD: 9V
- VOUT: 3V
- GND: 4V
- VCNTL: 10V
- PAD: 11V
- U12: RT9040_DFN10

Capacitors:
- C164: 0.1μF
- C226: 10μF
- C227: 10μF
- C228: 10μF
- C229: 10μF
- C232: 10μF
- C233: 10μF

Terminals:
- DDR_1.5V
- 3.3V
- RAM_VREF
- RAM_VTT
- RAM_A[00: 14]
- RAM_RAS#
- RAM_CAS#
- RAM_WE#
- RAM_BA0
- RAM_BA1
- RAM_ODT0
- RAM_CS0#
- RAM_A[00: 14]
- RAM_BA2
10/100 Ethernet 4-Port Switch

CPU

MAC

Ethernet MII

Defaults to MII PHY mode with 3.3V Levels

All Port 6 pins have PU or PD bias

Auto MDIX is supported

Polarity Correction also supported
CPU Power

PXA168 PCIe rails must be connected to AN_1.8V

CPU

CPU

Technologic Systems
Date Jan. 2, 2013
Title: TS-4712 CPU Power and Bypass caps
Rev: A | Designer Sheet 7 of 10
Micro SD Card Sockets

RTC and Temp. Sensor

CPU Debug UART

Reboot Flag

3.3V --> 5V Level Shifter

SD Card Power

SD Card LEDs

- BAT must be > 2.7V for temp comp to work
- SD Card LEDs have cathode to GND
- Off-Board LEDs have cathode to GND
PCIe 100 MHz
Clock Generator

CPU PCIe

PCIe not supported on PXA166

PXA166 and PXA168 BOM Differences

R57 = 140 ohm for PXA168
R56 removed for PXA168
FB6, FB7 removed for PXA166
U24 removed for PXA166
U2 = PXA166 Commercial Temp
or = PXA168 Industrial Temp