USB Power Switch

USB OTG Port

Internal USB Headers

Dual Host USB Ports

1400 mA typ. current limit

Not normally Populated

Molex 47890-0001
or 47889-0001
2.9V < -- 5V
Level shifter

RS-232 Transceiver

COM1 RS-485 Driver

COM2 RS-485 Driver

CAN Tranceiver

COM2 RS-422 Receiver
DIO Port

DIO Header

Technologic Systems

Title: TS-8390 DIO, COM Ports

Rev: B

Designer

Sheet 3 of 10
5V Power Supply (3.0 Amps)

5V to 28V Input

Power Conn.

5V Powe Supply (3.0 Amps)

3.3V Power Supply for LCD

Technologic Systems
Title: TS-8390 5V Power, LCD 3.3V Power
Rev: B Designer Sheet 6 of 10

Date: Jan. 17, 2011

- MSS1260T: 3.1A @ 85 deg. 37 mohm 12.5 x 12.5 x 6mm 86 cents @ 500
- DR127-220-R: 4.0A rms @ 85 deg. 59 mohm 12.5 x 12.5 x 9mm 83 cents @ 350
BackLight Power

Zener
Protects against
Open circuit load

200 mA maximum continuous
that LED Backlight is rated at.

1000 nit LCD requires 260 mA
R11 installed will allow 260 mA

Test 4.7 uH and
10 uH for L3

Force Boot
to SD card

M0DE2

Speaker Amp

Board ID = 2 + 64

Technologic Systems

Date Jan. 17, 2011
Title: TS-8390 Backlight Power Ethernet
Rev: B Designer RLM Sheet 7 of 10
2nd Ethernet Port

SMSC USB Hub

SMSC Ethernet Port

Typical 3.3V current with all ports active is 288 mA (950 mW)

Test pins: must be wired as shown

Technologic Systems
Date: Jan. 17, 2011
Title: TS-8390 Ethernet 2 Port
Rev: B Designer Sheet 8 of 10
16-bit A/D Converter

Four single-ended 0-10V Inputs
Two differential pairs 0-2V range

A/D Header

P2.0KDBTR-ND = 2K 0.1% 0603
RG16P6.04KBTR-ND = 6.04K 0.1% 0603