LCD Board

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Design Notes
1) The PWB shall be fabricated to IPC-6012 Class 2 and workmanship shall conform to IPC-A-600 Class 2 current revision.

2) Board material shall comply with IPC-4101C sheets /126, /129, /130, or /131. Finished board shall be ROHS compliant and Lead Free Assembly Capable.

3) Board thickness to be .062 inch.

4) Board Finish to be Electroless Nickel Immersion Gold (ENIG).

5) Impedance Specs:
Single Ended: 50 ohm +/- 10% ohms
Differential: 90 ohm +/- 10% ohms
Differential: 100 ohm +/- 10% ohms
KEEP THESE RESISTORS TOGETHER
HDMI TX Dxx AND HDMI TX Cx
100 OHM +/- 10% DIFFERENTIAL PAIR
LENGTH MATCH EACH PAIR +/- 5 MIL
MATCH DATA TO CLOCK +/- 125 MIL

DIFF PAIRS CAN BE MOVED BETWEEN RCLAMP0544s

SIGNALS ON RCLAMP0504 CAN MOVE PINS WITH THE EXCEPTION OF CP_5.0VDC

HDMI RX Dxx AND HDMI RX Cx
100 OHM +/- 10% DIFFERENTIAL PAIR
LENGTH MATCH EACH PAIR +/- 5 MIL
MATCH DATA TO CLOCK +/- 125 MIL
DISPLAY VIDEO BUS (VID DISP SIGNALS)
50 OHM +/- 10% SINGLE ENDED
MATCH DATA AND CONTROL TO PCLK +/- 590 MIL

DISPLAY CONNECTOR

TOUCH PANEL CONNECTOR

TOUCH PANEL
I2C ADDRESS = 0x38
EXPANSION 1

Pairs in Green Boxes are Swappable Within Connector

Pairs in Blue Boxes P and M can be swapped

EXPANSION 2

ROUTE EXP SIGNAL TO CPLD (EXPx SIGNALS)
(TREAT EACH CONNECTOR AS SEPERATE BUS)
50 OHM +/- 10% SINGLE ENDED
MATCH SIGNALS TO CLK +/- 175 MIL

ROUTE EXP SIGNAL TO HSMC (HSMA SIGNALS)
(TREAT EACH CONNECTOR AS SEPERATE BUS)
50 OHM +/- 10% SINGLE ENDED
ROUTE PAIRS DIFFERETIALLY WITH SE PAIR SPACING
MATCH PAIRS +/- 5 MILS
MATCH CLOCKS +/- 10 MILS
MATCH SIGNALS TO CLOCKS +/- 50 MILS