1. The netname "P1P2V" represents connection to the +1.2V power plane.
2. The netname "P1P9V" represents connection to the +1.9V power plane.
3. The netname "P3P3V" represents connection to the +3.3V power plane.
4. The netname "P2P5V" represents connection to the +2.5V power plane.
5. The netname "P5V" represents connection to the +5.0V power plane.
6. The netname "P12V" represents connection to the +12.0V power plane.
7. The netname "GND" represents connection to the ground plane.
8. A "Z" suffix on a signal name indicates an active low signal.
9. All components with designators "U", "Q", and "D" are electrostatic discharge sensitive.
10. All components with designators above 500 are mounted solder side of the board.
11. All capacitor values in microfarads unless otherwise specified.
12. All resistor values are in ohms.
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30-Bit Parallel Port Interface

LVDS Front End Interface

CCA MOUNTING HOLES

Front End Interface Connector
NOTE:
The input data channels can be configured to optimize board layout for each port.
Bitwise reordering is not supported.
For example, Y data could be connected to Port A, B, or C.
Port configuration is handled in the API Software.

NOTE:
If only one input clock is used, then P1A_CLK should be connected, and P1B_CLK and P1C_CLK should not be connected.
NOTE:
Place series termination resistors near the ASIC. These resistors should have 1% tolerance.
Do Not Install Resistor if DMD is mounted

TPS 2.5V GENERATION

POWER DOWN CIRCUITY
NOTE: Place crystal circuit and associated components near ASIC.
Fans, Light Sensor and EEPROM

FANS

LED LIGHT SENSOR

TILT SENSOR

EEPROM & TEMP SENSOR

Fans, Light Sensor and EEPROM
GPIO, I2C, and LED Control

NOTE:
Dedicated I2C pins have I2C specific drivers.
GPIO I2C pins (GPIO_8 and GPIO_9) do not
have I2C specific drivers.

LED DRIVER INTERFACE

NOTE:
Dedicated I2C pins have I2C specific drivers.
GPIO I2C pins (GPIO_8 and GPIO_9) do not
have I2C specific drivers.
NOTE: The RS-232 interface is used for test interface and debug. It is not required for production designs.

NOTE: This buffer prevents the USB host from detecting the slave device before ARM processor initialization.

NOTE: The SSP0 bus is currently not used in the DLPC6401 Formatter Only design.

NOTE: The RS232 interface is used for test interface and debug. It is not required for production designs.

NOTE: The USB interface is used for test interface, debug and high-speed flash memory programming capability. It is not required for production designs where I2C is the primary communication bus.
Flash Memory Interface
Schematic Revision History

Rev. A: Initial Release

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Roger Perry
10/13/2011
08/31/2015
A3

TEXAS INSTRUMENTS

DRAWING NO

REV

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SHEET 16 OF 16
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