Novena PVT1-E

I2C mappings:
- addresses are already shifted left by one to accommodate s/w bit
- i.e., address is expressed as the write address

I2C: 10k pull-up
- SMBus functions (optional)
- MSH/NSH (8/S4/A) (optional)
- I2C SHIM (8/S4/A) (optional)
- SO-DIMM swap sensor (8/S4/A) (optional)
- Gas gauge and charger via SMB (on battery board)

I2C: 1.8k pull-up
- HDMI DDC (8/S4/A, 0x76)
- PMIC (8/S4/A)

I2C: 2.2k pull-up
- LED D2/D1 (8/S4)
- ISP323 (8/S4)
- FPGA (optional)
- Utility EPROM (8/S4)

Power sequencing:
- Power sequencing
- PMIC (0x10)
- P1.8V_VGEN3 micbias gen option
- P1.8V_SW4 has option to power VTT
- Use this option to lower VTT source to 1.0V to save power

Gas gauge and charger via SMB (on battery board)

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SATA connector arrangement

uses M-F extender combo cables

For boot: compatible ONLY with SATA-II (3Gbps) drives
Optimized for use with SSDs

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Novena PVT1-E

Title

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LCD interface

Designed to work with 66 LED backlight panel.
High-precision capacitance required (0.5% tolerance
Requires custom cable to adjust precise to specific LCD.

HDMI-A connector

Matched Net Length (Declaration: ~30cm)

VOUT

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Microphone configured for pseudo-differential operation

Power management switch for audio circuit

Digital microphone - PDM output
requires 2.4MHz clock - software filter to make PCM
wire for left channel, connector for right-channel mic
power down by stepping clock

Note: TS4990IST can be substituted for NS4890

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High speed expansion notes:
All pins generated in black in expansion board.
Connections via HGL is necessary only if necessary for added speed.
Dedicated FPGA inputs are directly connected to FPGA pins by default.
Clocks derived from FPGA/other on board sources are fed into FPGA board.
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