

Expansion Backplane, 8 PCIe x4 slots (416)

Requires an OSS target adapter card in the host interface card slot. Cable and adapter card sold separately.

PN: OSS-BP-416



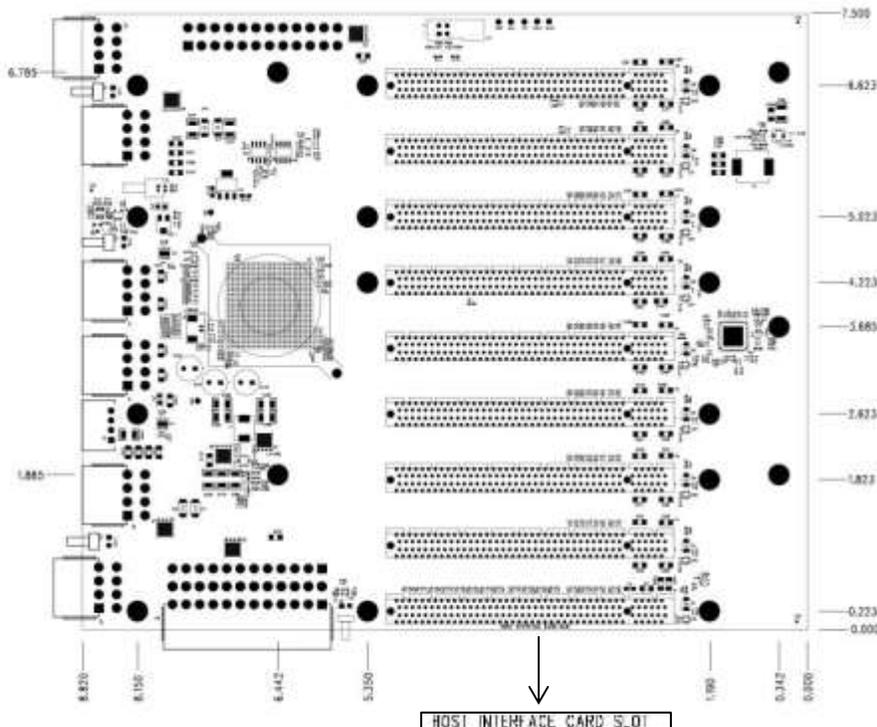
Features

- One OSS PCIe x16 3.0 target slot for OSS target cable adapter
- Eight PCIe x4 3.0 expansion slots (x16 mechanical)
- ATX power input
- Thunderbolt power connector
- Fan speed controller

Specifications

| | |
|--------------------|---|
| Dimension (H x L): | 7.5" x 9.0" |
| Power: | ATX |
| Slots: | 1 OSS target slot (for OSS target cable adapter only) 8 PCIe x4 3.0 electrical; x16 mechanical slots |

Dimensional Drawing



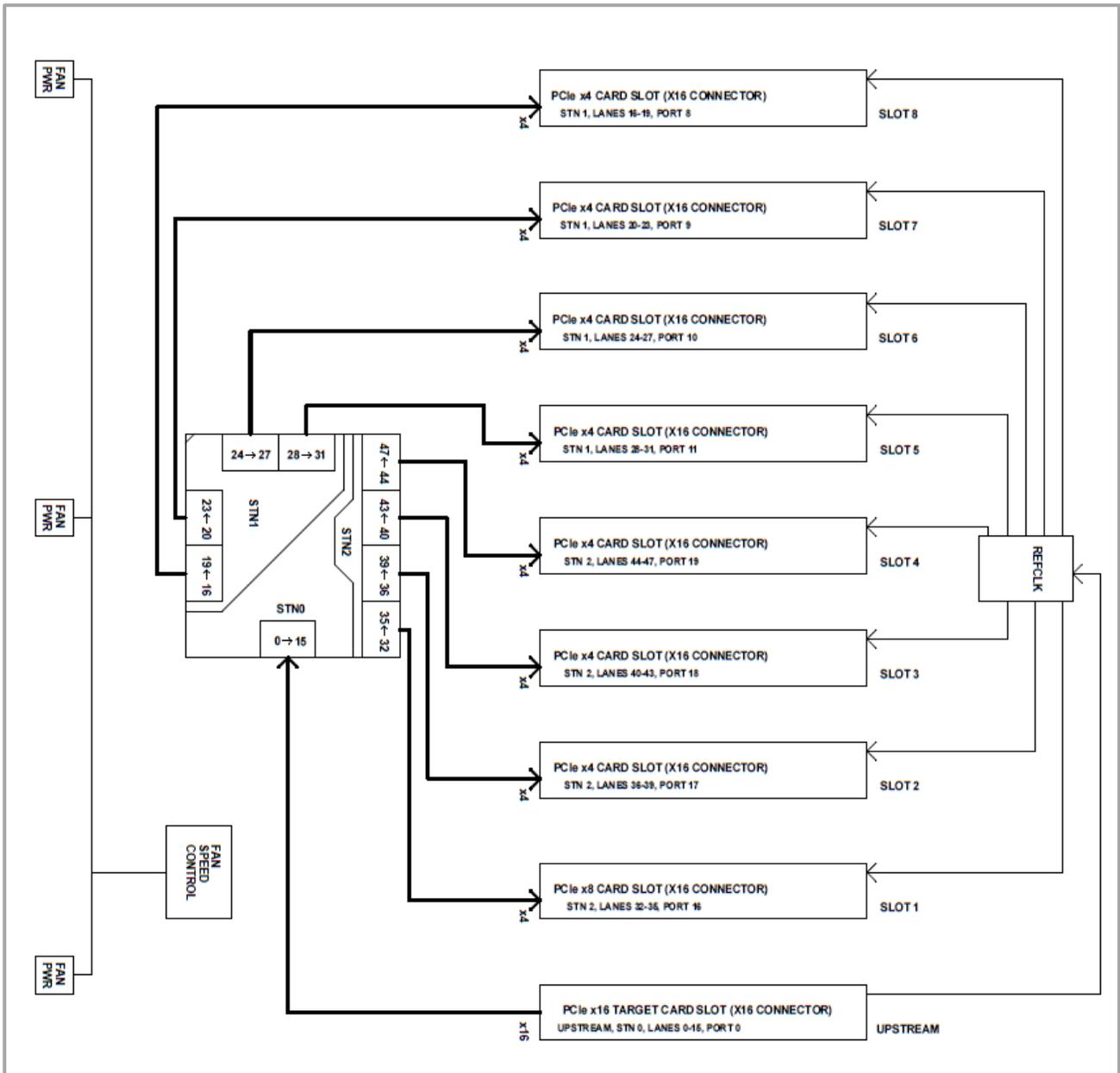
Specifications subject to change without notice



NOTE: The 416 backplane allows variable speed control on the FAN1 connector using a thermocouple controlled circuit optimized for thermals of the OSS CUBE™ family of products. OEMs should use the other fan connectors (FAN2 & FAN3) for standard 12V power and ground connections.

NOTE: The power ON connector is only used in Thunderbolt cable configurations. Forcing the power ON in PCIe configurations using the header connector on the backplane may cause the expansion backplane to not enumerate properly with the host system.

Block Diagram



Connector Pin-outs

| Connector | Definition |
|--------------------|-----------------------------|
| J3, J4, J7, J8 | Output power |
| J5 | Thunderbolt Drive Power |
| J11, J13, J15, J16 | Input Power |
| J14 | Force Power On |
| J17 | I2C Interface |
| JP1, JP5 | Power Standby LED Connector |
| JP4 | Fan Power Control |

J3, J4, J7, J8 – Output Power (Molex P/N: 87427-0802)

| Pin | Definition | Pin | Definition |
|-----|------------|-----|------------|
| 1 | GND | 5 | +12V |
| 2 | GND | 6 | +12V |
| 3 | GND | 7 | +12V |
| 4 | GND | 8 | +12V |

J4 – Force Power On (Molex P/N: 22-05-3021)

| Pin | Definition |
|-----|------------|
| 1 | CE_PWR_ON# |
| 2 | GND |

J5 – Thunderbolt Drive Power (Molex P/N: 43650-0400)

| Pin | Definition |
|-----|------------|
| 1 | NC |
| 2 | GND |
| 3 | GND |
| 4 | VDD5VAUX |

J11, J13, J16 – Input Power (Molex P/N:87427-2402)

| Pin | Definition | Pin | Definition |
|-----|------------|-----|------------|
| 1 | +3.3V | 13 | +3.3V |
| 2 | +3.3V | 14 | -12V |
| 3 | GND | 15 | GND |
| 4 | +5V | 16 | PS_ON# |
| 5 | GND | 17 | GND |
| 6 | +5V | 18 | GND |
| 7 | GND | 19 | GND |
| 8 | PWRON | 20 | NC |
| 9 | +5VSB | 21 | +5V |
| 10 | +12V1 | 22 | +5V |
| 11 | +12V1 | 23 | +5V |
| 12 | +3.3V | 24 | GND |

J15 – Input Power (Molex P/N:87427-2402)

| Pin | Definition | Pin | Definition |
|-----|------------|-----|------------|
| 1 | GND | 5 | +12V |
| 2 | GND | 6 | +12V |
| 3 | GND | 7 | +12V |
| 4 | GND | 8 | +12V |

J17 –I2C Interface Connector (3M P/N; 929710-10-02-RK)

| Pin | Definition | Pin | Definition |
|-----|------------|-----|------------|
| 1 | SMCLK | 2 | GND |
| 3 | SMDAT | 4 | NC |

JP1, JP5 – Power Standby LED (Samtec P/N; TFM-102-01-L-S-RA)

| Pin | Definition |
|-----|------------|
| 1 | PU_3AUX |
| 2 | GND |

FAN1, FAN2, FAN3 – Fan Speed Control (Molex P/N: 22-05-3021)

| Pin | Definition |
|-----|------------|
| 1 | FAN_12V_PU |
| 2 | FAN_RTN |

NOTE: Fan 3 is Temperature Controlled.