



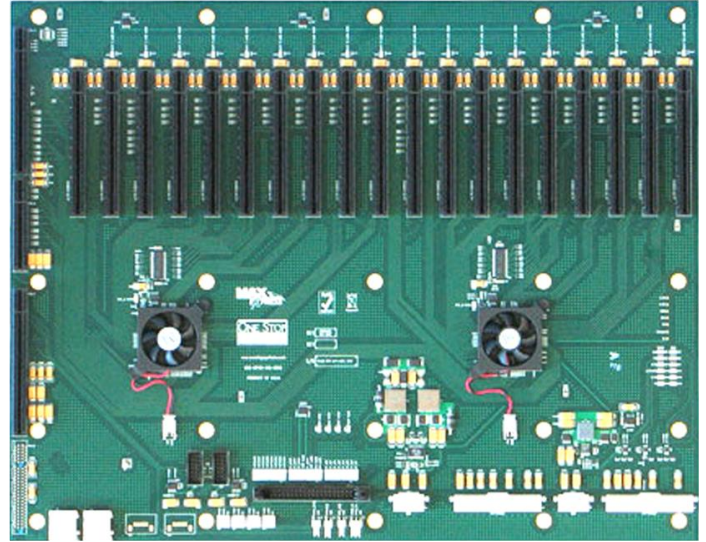
## PCIe Backplane

20-slot PCI Express Gen 2 based backplane with 1 SHB slot and 19 PCIe I/O slots.

PN: OSS-PCIe-BP-2022

### Features

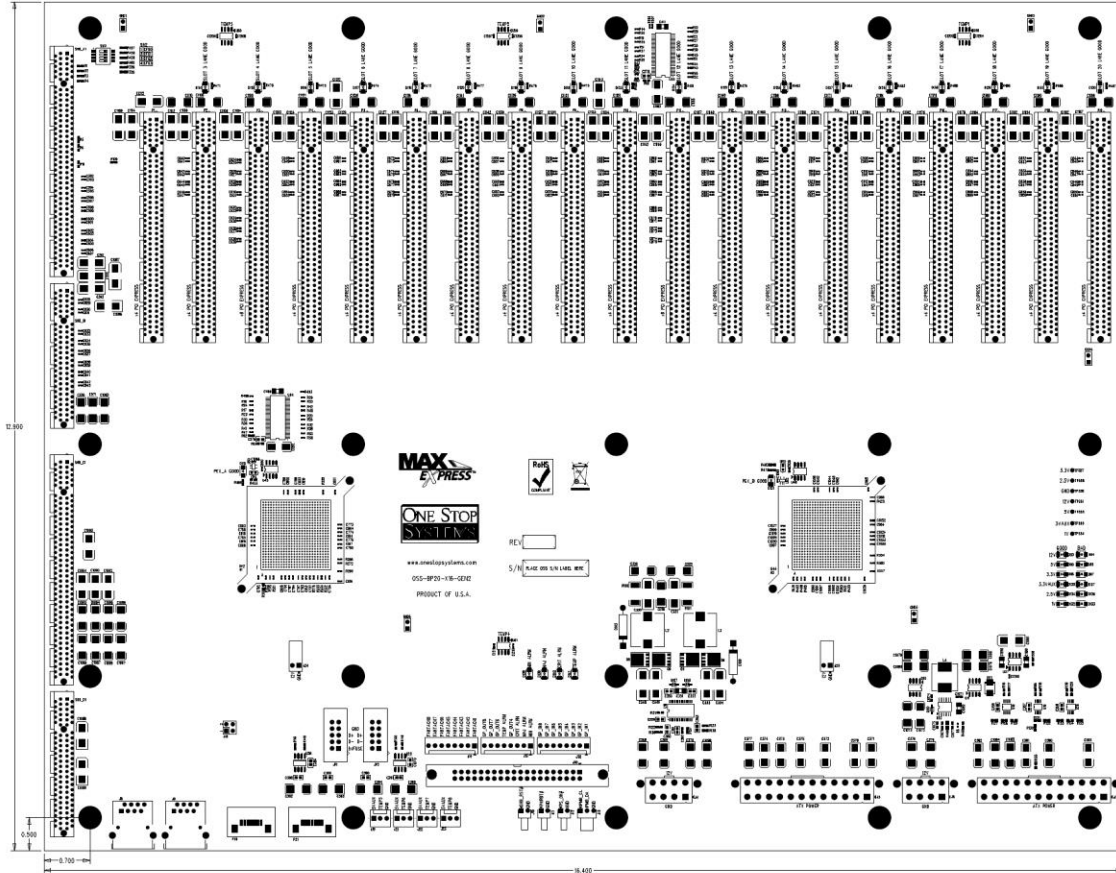
- 1 system host board slot
- 17 PCIe x4 slots with x16 connectors
- 2 PCIe x8 slot with x16 connectors
- 2 Ethernet connectors
- Supports 4 USB ports
- 2 ATX power connectors



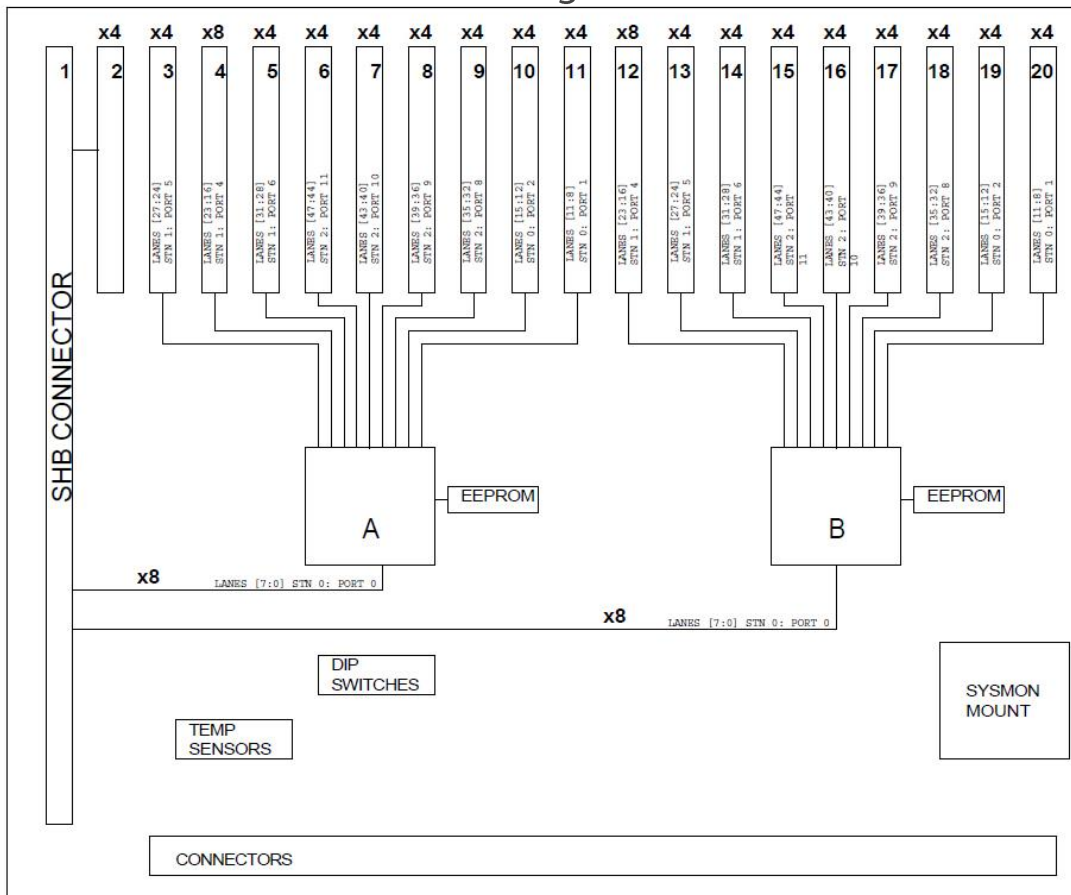
## Specifications

<b>20- Slot Configuration:</b>	One system host board slot 17 PCI Express x4 slots with x16 connectors 2 PCI Express x8 slots with x16 connectors
<b>Power Connections:</b>	Two 24-pin ATX Two 8-pin auxiliary power
<b>Industry Specification:</b>	PICMG 1.3 System Host Board PCI Express Specification
<b>Power Indicators:</b>	+5V, -5V, +12V, -12V and +3.3V
<b>Backplane I/O Connections:</b>	2 Ethernet ports Up to 4 USB ports 8 fan tach inputs 8 LED outputs 4 general purpose outputs 8 general purpose inputs
<b>Temperature Sensors:</b>	3 near rear of chassis on backplane 1 near front of chassis on backplane 4 external temperature sensor headers
<b>Operating Temp:</b>	0° to 60°C (32° to 140°F) ambient. Short-term (30 mins) operating temp -5°C to 55°C ambient.
<b>Storage Temp:</b>	-40°C to 70°C
<b>Operating Humidity:</b>	10-90% @ 40°C (non-condensing)
<b>Non-Operating Humidity:</b>	0-95% @ 40°C (non-condensing)
<b>Vibration:</b>	5-17 Hz 0.5" double amplitude displacement; 7-2000Hz, 1.5g acceleration.
<b>MTBF:</b>	Minimum of 75,000 hours

## Dimensional Drawing



## Block Diagram



## Connector Pin-Outs

Connector	Definition
J4, J5, J6, J7	Input Power
J10	SHB Reset Button
J11	Power Button
J12	Force Power On
J13	IPMB
J14	Sysmon Fan Tach
J15, J16	Sysmon Alarm
J18	I2C Interface
J19, J21, J22, J23	Temp Sensors
JP2, JP1	USB Headers

J5, J7 – 24 Pin ATX Input Power (Molex P/N: 44206-0001)

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

J14 –Sysmon Fan Tach (Molex P/N: 22-23-2081)

Pin	Definition
1	FANTACH1
2	FANTACH2
3	FANTACH3
4	FANTACH4
5	FANTACH5
6	FANTACH6
7	FANTACH7
8	FANTACH8

J16 –Sysmon Alarm (Molex P/N: 22-23-2081)

Pin	Definition
1	GP_IN1
2	GP_IN2
3	GP_IN3
4	GP_IN4
5	GP_IN5
6	GP_IN6
7	GP_IN7
8	GP_IN8

J4, J6 – Input Power (Molex P/N: 44206-0003)

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

JP1, JP2 –USB Headers (Molex P/N: 70246-1001)

Pin	Definition	Pin	Definition
1	VCC_5V_FUSED1	6	VCC_5V_FUSED0
2	USB_DATA1-	7	USB_DATA0-
3	USB_DATA1+	8	USB_DATA0+
4	GND	9	GND
5	NC	10	NC

J10 –SHB Reset Button (Molex P/N: 22-05-3021)

Pin	Definition
1	SHB_RST#
2	GND

J11 –Power Button (Molex P/N: 22-05-3021)

Pin	Definition
1	PWRBT#
2	GND

J12 – Force Power On (Molex P/N: 22-05-3021)

Pin	Definition
1	PWR_ON#
2	GND

J13 – IPMB (Molex P/N: 22-05-3031)

Pin	Definition
1	IPMB_CL
2	IPMB_DA

J15 – Sysmon Alarm (Molex P/N: 22-23-2081)

Pin	Definition
1	MINOR_ALARM
2	MAJOR_ALARM
3	CRITICAL_ALARM#
4	GP_OUT4
5	TEMP_ALARM#
6	GP_OUT6
7	GP_OUT7
8	GP_OUT8

J18 –I2C Interface Connector (3M P/N: 929710-10-02-RK)

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

J19, J21, J22, J23 – Temp Sensors (Molex P/N: 22-23-2031)

Pin	Definition
1	VDD_5VAUX
2	TEMP5, TEMP6, TEMP7, TEMP8
3	GND