

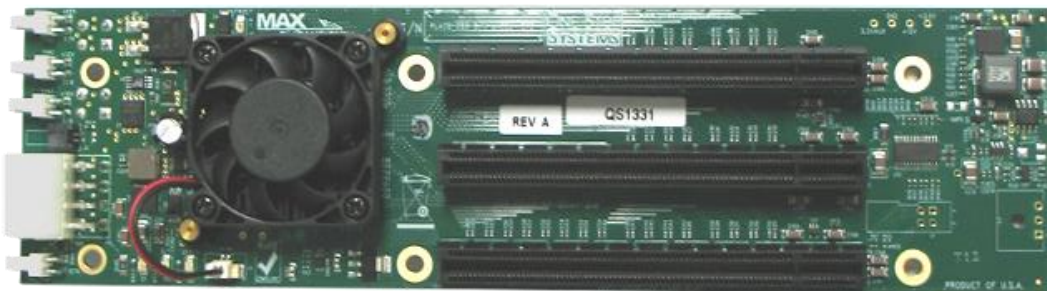
# Expansion Backplane, 2 PCIe x8 slots (419)

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

PN: OSS-BP-419

## Features

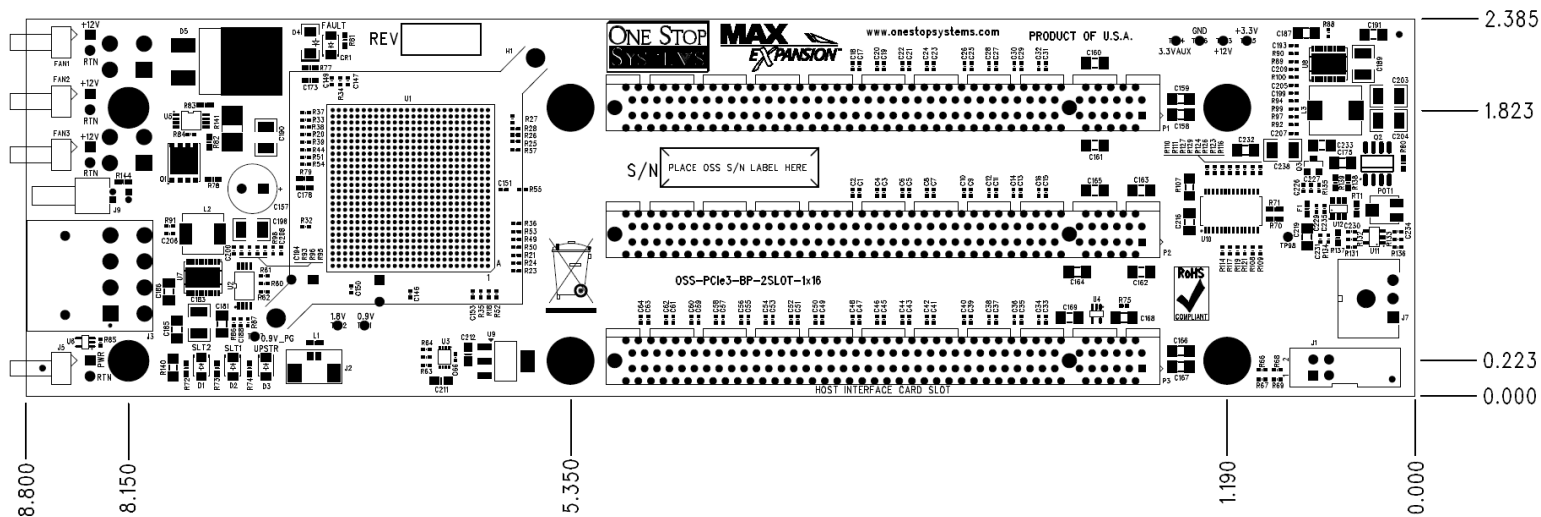
- One OSS PCIe x16 3.0 target slot for OSS target cable adapter
- Two PCIe x8 3.0 expansion slots (x16 mechanical)
- 12 VDC Input
- Thunderbolt power connector
- Fan speed controller



## Specifications

Dimension (H x L):	2.385" x 8.8"
Power:	12 VDC
Slots:	1 OSS target slot (for OSS target cable adapter only) 2 PCIe x8 3.0 electrical; x16 mechanical slots

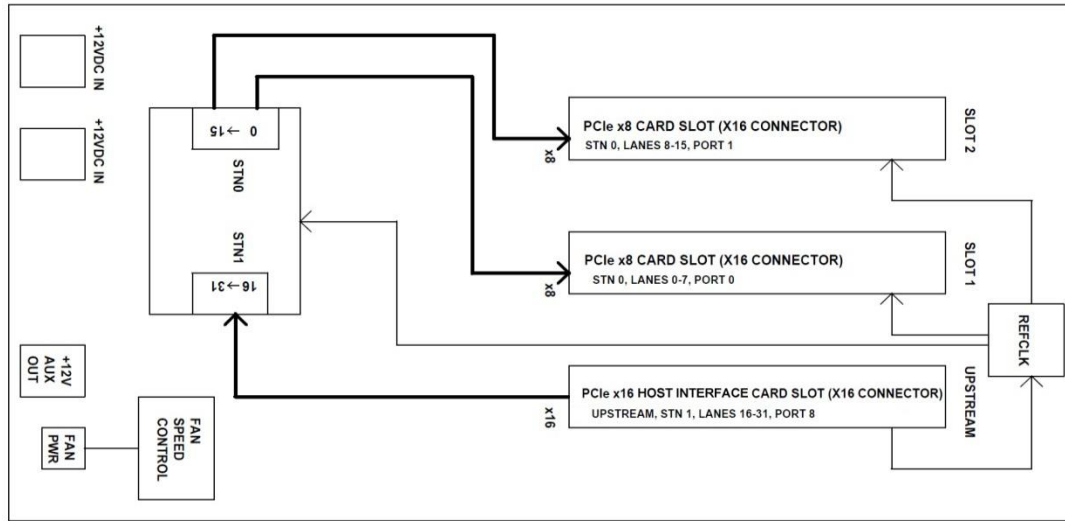
## Dimensional Drawing



**NOTE:** The 419 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
J1	I2C Interface
J3	Aux Target Power
J5	Force Power On
J4, J6	12V Input Power
J7	Thunderbolt Power
J8, J9	Power Standby LED

J1 – I2C Interface Connector (3M P/N; 929710-10-02-RK)

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

J3 – Aux Target Power (Molex P/N: 39-30-1080)

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

J5 – Force Power On (Molex P/N: 22-05-3021)

Pin	Definition
1	CE_PWR_ON#
2	GND

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

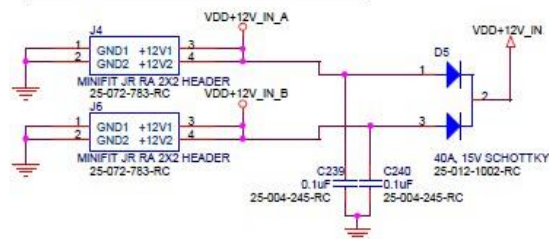
Pin	Definition
1	+12V
2	FAN_RTN

**NOTE:** Fan 1 is Temperature Controlled.

J4, J6 – 12V Input Power (Molex P/N; 0366330020)

Pin	Definition	Pin	Definition
1	GND1	3	+12V1
2	GND2	4	+12V2

#### 12V INPUT POWER



J7 – Thunderbolt Power (Molex P/N: 43650-0300)

Pin	Definition
1	VDD+12V_IN
2	GND
3	NC

J8, J9 – Power Standby LED (Samtec P/N; TFM-102-01-L-S-RA)

Pin	Definition
1	3VAUX_PG_LED
2	GND

12V CIRCUIT BREAKER  
iLimit = .050 / Rsense = 33A