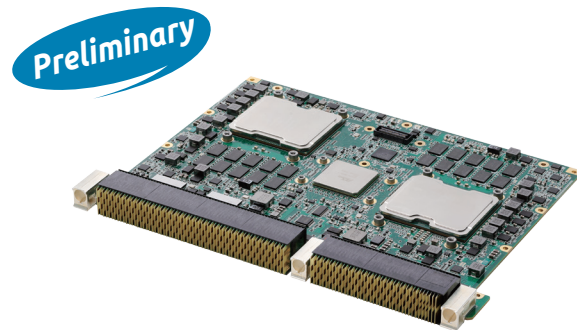


# VPX6100

## Rugged 6U VPX Processor Blade with Dual Intel® Xeon® Processors

### Features

- Intel® Xeon® D-2187NT Processor SoC, 16 cores (formerly Skylake-D)
- DDR4 soldered ECC SDRAM, up to 16GB per node
- Dual 10GBASE-KR and dual 1000BASE-KX ports per node
- PCIe x16 Gen3 interface supporting non-transparent bridge
- 32GB SLC NAND SATA flash storage per node



### Specifications

#### Processor & System

##### CPU

Intel® Xeon® D-2187NT Processor SoC (formerly Skylake-D), 16 cores, 2.0 GHz, FCBGA package, TDP 110W (default 45W)

##### Memory

Dual channel DDR4-2666MHz ECC soldered SDRAM, up to 16GB per node, 8GB per channel

##### BIOS

AMI EFI on 64-bit SPI flash, dual BIOS failover per node, supports Intel Server Platform Services (SPS)

##### VITA Standards

VITA 46.0 VPX  
 VITA 46.4 PCI Express on VPX Fabric Connector  
 VITA 46.6 Gigabit Ethernet Control Plane on VPX  
 VITA 46.10 Rear transition module on VPX  
 VITA 46.11(draft) System Management on VPX  
 VITA 48.0 Ruggedized Enhanced Design Implementation Mechanical Base Specification  
 VITA 65 OpenVPX Architecture Framework for VPX

##### Ethernet

10G Interfaces:  
 2x 10GBASE-KR to rear  
 1G Interfaces:  
 2x 1000BASE-KX to P4/P5 for CPU-A  
 2x 1000BASE-KX to P4/P6 for CPU-B

##### Graphics

1x HDMI to P5 for CPU-A  
 1x HDMI to P6 for CPU-B

##### USB

2x USB 3.0 to P3, 2x USB 2.0 to P5 for CPU-A  
 2x USB 3.0 to P4, 2x USB 2.0 to P6 for CPU-B

##### Serial Port

2x RS-232/422 to P5 for CPU-A  
 2x RS-232/422 to P6 for CPU-B  
 Supports Serial Over LAN (SOL)

##### PCI Express

PCIe switch: PEX 8750  
 1x PCIe x16 Gen3 to P2 (configurable 2 x8, 4 x4)  
 1x PCIe x8 Gen3 (signals combined from P3/P4/P5)

#### Storage

##### SBC

One 32GB SLC NAND SATA flash per node by mezzanine card  
 2x SATA 6Gb/s to P5 and one SATA 6Gb/s to P3 for CPU-A  
 2x SATA 6Gb/s to P6 and one SATA 6Gb/s to P4 for CPU-B

#### Operating System

##### OS

Windows 10  
 Linux RHEL7.3  
 VxWorks 7

#### Miscellaneous

##### GPIO

8-bit GPIO to P3 for CPU-A  
 8-bit GPIO to P4 for CPU-B

##### HW monitor

CPU and system temperatures and voltages via IPMI  
 Watchdog Timer: System reset or NMI with programmable interval via BIOS

##### LEDs

Front panel status LEDs: CPU, PCH, Memory, Port 80, P12V, P5V power good

##### Reset Button

Recessed system reset button

#### Mechanical & Environmental

##### Form Factor

6U VPX, 233.35 mm x 160 mm

##### Operating Temperature

-40°C to +75°C (at wedge lock)

##### Vibration

15Hz-2KHz, 12Grms, random, each axis, operating

##### Shock

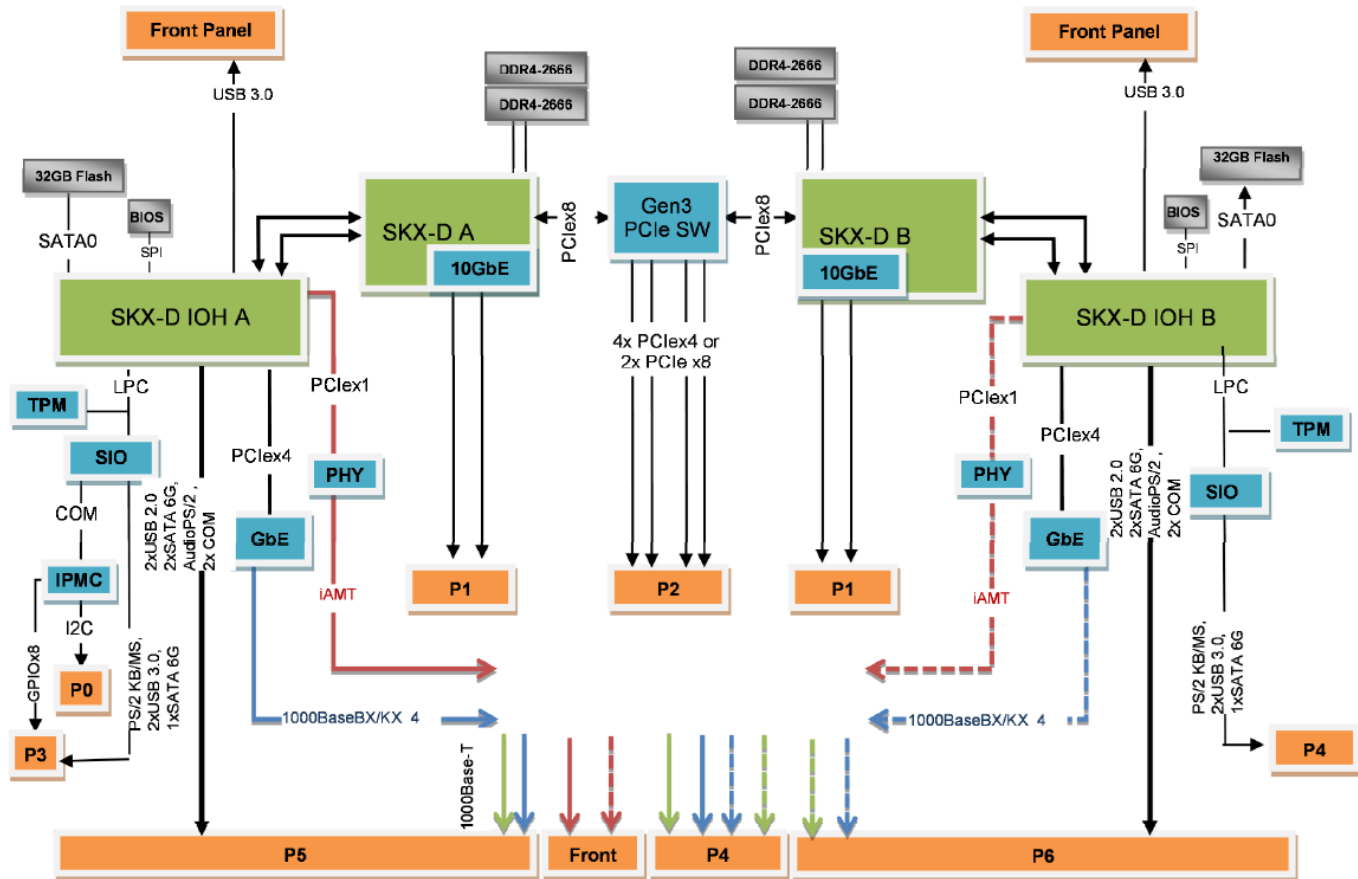
40G peak, 11ms, each axis, operating

##### EMI/EMC

CE, FCC Class A

# VPX6100

## VPX6100 Block Diagram



## Ordering Information

### Processor Blades

- VPX6100EL/D2187/M32/S64-R1,ETT,CC**  
 6U VPX Processor Blade, Intel® Xeon® D-2187NT Processor SoC (formerly Skylake-D), DDR4 16GB, SLC32GB, 1x PCIe x16 Gen3, 1x PCIe x8 Gen3, 2x 10GBASE-KR + 2x1000BASE-KX, USB 3.0/2.0, 2x RS-232/422, conduction cooled, ETT -40°C to +75°C

### Accessories

- VPX-R6100 Rear Transition Module**  
 RTM for VPX6100 with 4x 1000BASE-KX (RJ45), 4x SFP+ connectors for 10GBASE-KX, 2x HDMI, 6x SATA 7-pin connectors, 4x USB 3.0, 1x 5pin header for USB 2.0, 4x RS-232/422, 2x GPIO pin headers, 3x PCIe x8 slots, JTAG, reset button, SMBus, power terminal

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ADLINK Technology:](#)

[VPX6100EL/D2187/M32/S64-R1,ETT,CC](#)