19"/2 Server CS1105

Xeon Server in a 19inch2 form factor

The CS1100 series provides a powerful Xeon server optimized for virtual server applications. It comes with a 3 disk hardware RAID and a wide range of interfaces and options. It is optimized for low size, weight and power (SWaP) to meet industry requirements without sacrificing reliability, ruggedness or performance.

Mounting

The 19”/2 standard enables flexible mounting with customized brackets. The unit can be mounted in a 19” rack, half racks, directly to a surface and in any angle.

Built to take a beating

The Computer is built to withstand the harshest conditions over the long haul. It features aluminum casing, rugged MIL connectors and IP65 rated disk caddies to enable the unit to work in demanding environments.

Features

- Up to 128 GB RAM
- Intel Xeon D1577 CPU
- Up to 16 cores (32 threads)
- RAID 0, 1, 5
- 1000BASE SX
- Replaceable CMOS battery

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Connector Interfaces

X4 DC IN (front)	• 1x Power
FAN (back)	• 1x FAN
SERVICE (back)	• 1x RS232 Service
X1 (front)	• 1x DVI-D
X2 (front)	• 3x USB • 1x Remote Power On • 2x RS232
X3 (front)	• 2x ETH 1000BASE-SX
X5 (back)	• 2x USB 3.0
X6 (front)	• 2x USB 2.0

Other Interfaces

3x MilDef Disk Slot (front)
1x Battery Cover (right side)
1x System Button (front)

Technical Specification

Blanking	Double-pressing the System button
Computer Memory	Up to 128 GB RAM
Computer Processor	Intel Xeon D1577 CPU
Computer Storage	RAID 0, 1, 5
LAN 1000BASE-SX	1000BASE SX standard with MM (50/125um) 850nm fiber
CMOS Battery	Replaceable CMOS battery, located behind a cover for easy access.
WMI Support	
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Power consumption	160W
Power input	16-32 VDC
Coating and color	Dupont AE0305-6603120 (RAL6031)
Dimensions Width and Height	220x88mm (8,7x3,5 inch) (WxH)
Earth point	M6 12mm
Rack Mounting depth	430mm
Surface treatment chassis	Chromit-Al
Weight	8 kg (17,7 lbs)
MTBF	Greater than 25000 h

Environmental Specification

Functional Shock - Operating	MIL-STD-810G. Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40g 11 ms
High temperature - Operating	MIL-STD-810G, Method 501.5, Procedure II - Operation 55 °C (131 °F)
High temperature - Storage	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 %rh Ten 24-hour cycles
IP Class (Solid Particle Protection)	IP Class 6X
IP Class (Water)	IP Class X5
Low air pressure - Rapid Decompression	MIL-STD-810G, Method 500.5, Procedure III - Rapid Decompression 75.2kPa, corresponding to 2,438m (8.000 ft) 17kPa, corresponding to 12192m (40.000 ft)
Low air pressure - Operating	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4572m (15.000 ft)
Low temperature - Operating	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage	MIL-STD-810G, method 502.5, Procedure I - Storage -40 C (-40 °F)
Noise level	Maximum noise level of 40dB SPL A-weighting @ 1m (3,3 ft) distance
Salt fog	MIL-STD-810G Method: 509.5 5% +- 1% (by weight) Two cycles, 24h wet + 24h dry /cycle
Temperature Shock - Operating	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) - 40 °C (-40 °F)
Transit drop, in shipping package	MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table 516.6-VI, Transit drop test, < 45.4 kg (100 lbs), < 91 cm (36 inch), Manpacked or man-portable

Vibration - Helicopter	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose Cargo	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/ trailer - loose cargo
Vibration - Tracked Vehicles	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles
Vibration - Wheeled Vehicle	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

EMC Specification

CE EMI	EN61000-6-3:2007
CE EMS	EN55032:2015
EMI conducted CE102	MIL-STD-461F, Method CE102 BASIC CURVE 10kHz to 10MHz
EMI radiated RE102	MIL-STD-461F 2MHz – 18Ghz Navy Mobile & Army
EMS conducted CS101	MIL-STD-461F, Method CS101, conducted suceptibility, power leads CURVE #1 30Hz to 150kHz
EMS conducted CS114	MIL-STD-461F 10kHz - 200MHz Army, Ground
EMS conducted CS115	MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation
EMS conducted CS116	MIL-STD-461F 10 kHz to 100 MHz
EMS radiated RS103	MIL-STD-461F 2MHz to 1GHz Army
ESD	EN61000-4-2:2009 Level 3 EN50024:1998 Performance criteria B + A1:2001 + A2:2003