

19"/2® CS2243



Computer in a 19"/2® form factor

The 19"/2® CS2200 is a high-performance Xeon computer, with a wide range of interfaces including fiber Ethernet and DVI output.

Small form factor

The MilDef 19"/2® form factor is optimized for reduced size, weight, and power (SWaP) to meet industry and military requirements without sacrificing reliability, ruggedness or performance.

Flexible mounting

The 19"/2® standard enables flexible mounting options for a wide array of integration scenarios. The unit can be mounted in a standard 19" rack, half racks, or directly to a surface and in any angle.

Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

Features

- TPM v2.0 chip
- Intel® HD Graphics P630
- Up to 64 GB RAM ECC
- Mildef remote management bus
- 2.0 GHz, Intel® Xeon® 9th Gen, E-2276ML
- Passively cooled

Connector Interfaces	
SERVICE (back)	• 1x RS232 Service
X1 DC IN (front)	• 1x Power • 1x Remote
X2 (front)	• 2x ETH 1000BASE-SX
X3, X4 (front)	2 connectors which each has: • 1x Serial • 2x USB 2.0
X5-X6 (front)	2 connectors which each has: • 1x DVI
X7 (front)	• 1x USB3.2 Gen 1

Other Interfaces	
1x Battery cover (bottom)	
1x MilDef M.2 disk slot (front)	
1x System button (front)	

Technical Specification	
Blanking	Double-pressing the System button
Built in test (BIT)	Displayed by status LED
Computer TPM	TPM v2.0 chip
Computer graphics	Intel® HD Graphics P630
Computer memory	Up to 64 GB RAM ECC
Graphics resolution	1920 x 1200 resolution @ 60 Hz
MilDef remote management bus	Enable remote host to perform the following on this device: Power on/off (Gracefully shutdown) Zeroization(if unit supports it) Unit state readback (Unit ready)
Processor	2.0 GHz, Intel® Xeon® 9th Gen, E-2276ML 6 cores, 12 threads
Secure boot	Supported
Zeroization	Zeroization by pressing the system button for 12 sec
Electronics ground to chassis	Isolated
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Polarity protection	Protected against incorrect polarity connection on the power input within the normal operating voltage range

Power consumption	Idle 25 W (OS only) Typical 70 W (50% load, no USB load) Max 100 W (100% load, max USB load)
Power input	12-32 VDC
Power to chassis	Isolated
Power to electronics ground	Isolated
Chassis material	Aluminum
Coating and color	AE0305-7703520 Axalta (RAL 7035)
Cooling	Passively cooled
Dimensions width and height	220 x 43.4 mm (8.66 x 1.71 in) (WxH)
Earth point	M6 12 mm
Surface treatment chassis	Chromit-Al
Unit depth	368 mm (14.5 in)
Weight	3.8 kg (8.4 lbs)
MTBF	> 100,000 h
CE	Compliant

Environmental Specification	
Functional shock - Operating	MIL-STD-810H, Method 516.8, Procedure I - Functional shock. Table 516.8-IV, Terminal peak sawtooth pulse, Ground material 40 g 11 ms
High temperature - Operating	MIL-STD-810H, Method 501.7, Procedure II - Operation 55 °C (131 °F)
High temperature - Storage	MIL-STD-810H, Method 501.7, Procedure I - Storage 71 °C (160 °F)
Humidity	MIL-STD-810H, Method 507.6, 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-810H, Method 500.6, Procedure III - Rapid decompression 2,438 m (8,000 ft) 12,192 m (40,000 ft)
Low air pressure - Operating	MIL-STD-810H, Method 500.6, Procedure II - Operation/air carriage 4,572 m (15,000 ft)
Low temperature - Operating	MIL-STD-810H, Method 502.7, Procedure II - Operation -40 °C (-40 °F)

Low temperature - Storage	MIL-STD-810H, Method 502.7, Procedure I - Storage -40 °C (-40 °F)
Noise level	Maximum noise level of 40 dB SPL A-weighting at 1 m (3.3 ft) distance
Salt fog	MIL-STD-810H, Method 509.7 5 ± 1% (by weight) Two cycles, 24 h wet + 24 h dry / cycle
Temperature shock - Operating	MIL-STD 810H, Method 503.7, Procedure I-C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) -40 °C (-40 °F)
Vibration - Helicopter	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
Vibration - Loose cargo	MIL-STD-810H, Method 514.8, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
Vibration - Tracked vehicle	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Tracked vehicle
Vibration - Wheeled vehicle	MIL-STD-810H, Method 514.8, Procedure I - General vibration, Category 20 - Ground vehicle - ground mobile, Wheeled vehicle

EMC Specification

EMI conducted CE102	MIL-STD-461F, Method CE102, Conducted emissions, power leads BASIC CURVE 10 kHz - 10 MHz
EMI radiated RE102	MIL-STD-461F, Method RE102, Radiated emissions, electric field Navy Mobile & Army 2 MHz - 18 GHz
EMS conducted CS101	MIL-STD-461F, Method CS101, Conducted susceptibility, power leads CURVE #1 30 Hz - 150 kHz
EMS conducted CS114	MIL-STD-461F, Method CS114, Conducted bulk susceptibility Army, Ground 10 kHz - 200 MHz
EMS conducted CS115	MIL-STD-461F, Method CS115, Conducted susceptibility, bulk cable injection, impulse excitation

EMS conducted CS116	MIL-STD-461F, Method CS116, Conducted susceptibility, damped sinusoidal transients, cables and power leads 10 kHz - 100 MHz
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EMS radiated RS103	MIL-STD-461F, Method RS103, Radiated susceptibility, electric field Army 2 MHz - 1 GHz
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