

19"/2[®] CS2207



Computer in a 19"/2[®] form factor

The 19"/2[®] CS2207 is a high-performance Xeon computer, with a wide range of interfaces including CAN, USB3.0 and SDI 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.

Customizable

Are you looking for additional features and functions? MilDef specializes in customized solutions, to include change of connectors, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you tailor a solution to meet your exact requirements.

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

- Intel[®] HD Graphics P630
- Up to 64 GB RAM ECC
- 2.0 GHz, Intel[®] Xeon[®] 9th Gen, E-2276ML
- Passively cooled

| Connector Interfaces | |
|-------------------------|---|
| SERVICE (back) | <ul style="list-style-type: none"> 1x RS232 Service |
| X1 DC IN (front) | <ul style="list-style-type: none"> 1x Power 1x Remote Power ON/OFF |
| X2 (front) | <ul style="list-style-type: none"> 4x ETH 1000BASE-T 2x CAN2.0B |
| X3 (front) | <ul style="list-style-type: none"> 1x DVI 1x USB2.0 1x Remote power on |
| X4 (back) | <ul style="list-style-type: none"> 1x DVI 1x USB2.0 1x Remote power on |
| X5 (front) | <ul style="list-style-type: none"> 1x Audio 5x USB2.0 3x RS232 |
| X7 (front) | <ul style="list-style-type: none"> 1x USB3 |
| X8 (front) | <ul style="list-style-type: none"> 1x USB3 |
| X9, X10 (back) | 2 connectors which each has: <ul style="list-style-type: none"> 1x 3G SDI Level A out 75 ohm (duplicated from the same source) |

| 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 |
| Computer graphics | Intel® HD Graphics P630 |
| Computer memory | Up to 64 GB RAM ECC |
| Processor | 2.0 GHz, Intel® Xeon® 9th Gen, E-2276ML 6 cores, 12 threads |
| Electronics ground to chassis | Non-isolated |
| MIL-STD-1275E | Fully compliant |
| Polarity protection | Protected against polarization failure on the power input in the voltage range of normal operation |
| Power consumption | Idle 25 W (OS only) Typical 60 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 | Dupont AE0305-1101320 (RAL 1013) |
| 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 | 354 mm (14 in) |
| Weight | 4 kg (8.9 lbs) |
| MTBF | 69,031 h |
| CE | Compliant |

| 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 40 g 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 h 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 75.2 kPa, corresponding to 2,438 m (8,000 ft) 17 kPa, corresponding to 12,192 m (40,000 ft) |
| Low air pressure - Operating | MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4,572 m (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 40 dB SPL A-weighting at 1 m (3.3 ft) distance |
| Salt fog | MIL-STD-810G Method: 509.5 5 % ± 1 % (by weight) Two cycles, 24 h wet + 24 h 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)

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 vehicles MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

EMC Specification

EMI conducted CE102 MIL-STD-461F, Method CE102 BASIC CURVE 10 kHz to 10 MHz

EMI radiated RE102 MIL-STD-461F Navy Mobile & Army 2 MHz - 18 GHz

EMS conducted CS101 MIL-STD-461F, Method CS101, conducted susceptibility, power leads. CURVE #1 30 Hz to 150 kHz

EMS conducted CS114 MIL-STD-461F Army, Ground 10 kHz - 200 MHz

EMS conducted CS115 MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation

EMS conducted CS116 MIL-STD-461F 10 kHz - 100 MHz

EMS radiated RS103 MIL-STD-461F Army 2 MHz - 1 GHz