CRYSTAL SPECS

Crystal Group RE1312 Rugged Embedded Computer

Field-tested, fail-safe and long-life performance in extreme conditions. Feature-rich Crystal Group embedded computer systems are powerful, compact, and rugged. Easily configurable to meet specific customer needs, the embedded product line boasts advanced thermal management and a carbon fiber chassis field-tested to withstand shock and vibration, extended temperature ranges, harsh elements, and harsh environments. Our embedded computer systems follow the Intel® roadmap to ensure access to the latest, most powerful Intel chipsets and processors.

Innovative solutions. Crystal Group's portfolio of rugged and industrial computing products are engineered and tested to withstand challenging environments, meet and exceed military standards, and provide the latest COTS technologies and benefits, such as cost, availability, upgradability, and flexibility.

Dependable services. When a computing application requires a custom solution, Crystal Group delivers with vertically-integrated services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product life-cycle planning.

Dedicated support. Our expert staff and global network provide fast and effective product support when and where it is needed. Count on Crystal Group for prompt response times, quick turnarounds, 5+ year warranties, and quality service around the clock and around the globe.

FEATURES

- Lightweight, composite construction 4.5"H x 12"W x 9"D footprint (6-8lb) provides low SWaP
- Up to 16 Intel Xeon® D processor cores
- Core i7 CPU options
- 18-36 VDC power
- Up to 64GB unbuffered, non ECC DDR4 1.2V SO-DIMM or 128GB ECC DDR4 with Xeon D
- Two 15mm SSD or three 7mm SSD storage options, removable drives
- MIL-STD-461 CE102, RE102 compliant
- Bulkhead or tray mounting options

A clear advantage.

Crystal Group RE1312 Rugged Embedded Computer

Specifications

Mechanical

Height: 4.5" (11.43 cm) max

Width: 12" (30.48 cm)

Depth: 9" (22.86 cm) excluding connectors

Weight: 6.3-8.5 lbs. (2.9-3.86kg)

Power: 55-80W with select configurations; CPU dependent

Expansion

One PCIe 3.0x16 low-profile expansion bay

Internal Bay

Up to three SATA 2.5" SSD (externally removable)

Cooling

Three high-reliability 60mm fans

Power Supply

Option 1: 18-36 VDC

Other options under development

System Board

Option 1: X11SSV-Q, LGA 1151, Mini-ITX, H4 i7/i5/i3, DP, HDMI, DVI-I, 2X 1G LAN, 5X SATA3, 2X Serial, HD audio, 1X PCI-E 3.0 X 16, 6x USB 3.0

Option 2: X10SDV-6C-TLN4F, FCBGA 1667, Mini-ITX, Xeon-D 1528, 6 Cores, 2x 1GB LAN, 2x 10G LAN, 1x PCI-E 3.0 x 16

Option 3: Fujitsu/Kontron D3633-S,LGA1151, 8th/9th Gen Core i3/i5/i7/ i9 series, CPU, Q370 Chipset, up to 64GB via 2x DDR4 So-Dimm, 4x SATA, M.2, PCIe x16, 2x 1GbE, HD Audio, Intel HD Graphics via 1x DVI-D and 2X Displayport, 4x USB 2.0, 4x USB 3.1, PS/2 K/M

Environmental Standards

MIL-STD-810, Operational temperature: -40°C to +60°C[1]

MIL-STD-810, Storage, Method 501, Procedure I/II: -40°C to +85°C[1]

MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit[2]

MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport[2]

MIL-STD-810, Vibration, Method 514, Procedure I: 5.5G, 5-2,000Hz, 60 min/ axis, 3 axis with vibration kit[1]

Electromagnetic Compatibility Standards

Some standards may require an internal kit

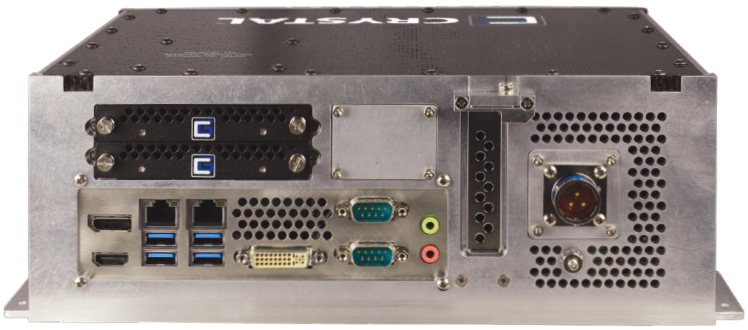
MIL-STD-461, CE102, RE102[2]

Mounting

Tray or bulkhead using ears supplied

Software Compatibility

Windows® 10, RHEL® 6.6/6.7/7/7.1, SUSE SLES® 11, Ubuntu® 16, or Centos® 7.1 VMware®



1 - Test report available
2 - Designed to meet standard

AS9100D CERTIFIED ISO 9001

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