

CG2400



TELCO CENTRAL OFFICE AND AI EDGE SOLUTIONS



COMPACT 2U, 20-INCH DEEP CARRIER GRADE RACKMOUNT SERVER

- ▶ Dual-socket 1st/2nd Generation Intel® Xeon® Scalable processors
- ▶ Designed to meet NEBS-3/ETSI certifications;
- ▶ 6x hot-swap, tool-less, 2.5" SAS HDDs / SATA SSDs
- ▶ Up to 7x PCIe slots for flexible I/O acceleration

CG2400 PRODUCT OVERVIEW

BENEFITS OF DUAL 2ND GEN INTEL XEON SCALABLE

In keeping with a proven history dedicated to designing 'long-life' carrier grade communication servers, Kontron introduces the CG2400.

Designed to meet NEBS-3/ETSI certification this ruggedized yet sophisticated server is the ideal server to support most telecom fixed-wireless central office or any mission-critical edge use cases that require High Availability. Services can range from security and fintech, to surveillance and deep learning data and video analytics.

The CG2400 server can also support manufacturing, industrial, oil & gas, utility, and even military applications where a rugged, highly reliable server is required for harsh environments that involve dust, high altitude, fire hazard, earthquake propensity, and high ambient temperatures.

The Kontron CG2400 Carrier Grade Server is a compact, high-density, rack-mount server with support for the Intel® Xeon® Scalable processor series and up to sixteen DDR4 DIMMs (eight for each processor). The CG2400 server also supports High Availability features such as hot-swappable and redundant power supply modules, hot-swappable and redundant fans, and up to six hot-swappable 2.5-inch hard disk drives, as well as two M.2 NVMe storage or Z280 flash storage support.

For added versatility, the CG2400 can support up to seven (7) PCIe cards. For advanced power management, any PCIe card that consumes more than 75W, such as a GPU card, can then be directly fed by an internal Power Distribution Board that provides auxiliary power.

The scalable architecture of the CG2400 server supports a variety of operating systems.

FEATURES AND BENEFITS

DUAL SOCKET SUPPORT FOR FIRST & SECOND GENERATION INTEL® XEON® SCALABLE	Intel® Xeon® Platinum 81xx/82xx processor Intel® Xeon® Gold 61xx/62xx processor Intel® Xeon® Gold 51xx/52xx processor Intel® Xeon® Silver 41xx/42xx processor Intel® Xeon® Bronze 31xx/32xx processor
MINIMUM FIVE YEAR LIFECYCLE SUPPORT*	Reduced customer risk with fewer platform transitions and greater lifecycle stability.
SHALLOW 20-INCH (508 MM) DEPTH	Increases installation and service flexibility. Meets typical depth needed for most central office installations.
850W AC OR DC HOT-SWAP, REDUNDANT POWER SUPPLIES WITH PMBUS SUPPORT	Flexibility of either AC or DC power installation. Power supply unit is 80 Plus Platinum compliant and supports PMBus power management.
TELCO ALARM MANAGEMENT	Telco alarm LEDs on front panel. Relay connector on rear panel supports central office alarm systems. (Note: available in 1H 2020 via firmware update)
HOT-SWAP, REDUNDANT FANS	Greater uptime and improved serviceability.
DUAL REAR-PANEL 10GBE NIC (Cu) PORTS	Two on-board NIC ports are standard.
SIXTEEN RDIMM MEMORY SLOTS (SUPPORTS UP TO DDR4-2933MHZ; MAXIMUM SPEED DEFINED BY PROCESSORS USED)	Supports six channel per processor and two slots per channel. Integrated memory controller in CPU enables higher performance at lower power.
DRIVE TRAYS FOR UP TO SIX HOT-SWAP 2.5-INCH SATA / SAS HARD DISK DRIVES	Choice of SAS drives. Improved serviceability with hot-swap drives. Large number of drives enables a variety of RAID options. Improved drive reliability due to proprietary rotational vibration suppression technology. SATA Solid State Drives are supported. (SAS drives support require an additional PCIe RAID or HBA controller)
INTEGRATED INTEL PCH RAID (SW) 0/1/10	Data storage virtualization that combines the disk drive components into a logical unit for data redundancy
REMOTE MANAGEMENT	Lights-out management via a dedicated management NIC. This allows secure remote access and control from the network; IPMI 2.0 and SNMP v2c and v3 compliant
CUSTOMIZABLE FRONT BEZEL	Adaptable to customer needs and environment.

*From launch

OPTIONAL FEATURES AND BENEFITS

ADVANCED REMOTE MANAGEMENT	Advanced management features including remote KVM and virtual media.
FLASH MEMORY SUPPORT	Choice of multiple flash memory options are available: Internal bootable eUSB flash device; Internal M.2 flash drive; Two (2) front accessible SD flash media devices; SATA solid state drives
UP TO SEVEN PCI SLOTS FOR FLEXIBILITY AND ADDITIONAL I/O	Faster performance with PCI-E Gen3/Gen 2. Three low-profile PCI-E slots (one internal without rear I/O accessibility); Choice of risers to support either: (1) Four PCI-E x8 slots; (2) Two PCI-E x16 slots; (3) Two PCI-E x8 or one PCI-E x16

► TECHNICAL SPECIFICATIONS

PROCESSOR	First or Second Generation Intel® Xeon® Scalable
CHIPSET	Chipset Intel® C622 Chipset (PCH)
CONNECTIONS	
PCI ADAPTER SLOT SUPPORT	Supports two risers (4 FL/FH cards) and 3 LP adapters for a total of 7 PCIe Gen2/Gen 3 I/O cards Two riser options for each of two PCIe slots 2 slot FL/FH PCIe x8 passive (right side* - Gen3) 2 slot FL/FH PCIe x8 passive (left side* - Gen3) 1 slot FL/FH PCIe x16 passive (right side* - Gen3) 1 slot FL/FH PCIe x16 passive (left side* - Gen3) 1 slot FL/FH PCIe x16 passive (left side* - Gen3)
SERIAL PORTS	RJ-45 serial connector in front
VIDEO PORTS	One DB-15 video connector (rear)
USB 3.0 PORTS	Two rear
USB 2.0 PORTS	Three (3): one front, two rear
MANAGEMENT PORTS	One RJ-45 connector to support ASPEED AST2500 BMC
STORAGE	
TYPE	Up to six 2.5-inch hot-swap SATA hard drives
REDUNDANCY	Software RAID 0, 1 and 10
INTERNAL	2x M.2 NVMe storage 2280 (80mm) flash storage
EXTERNAL	Carrier with six HDD / SSD tray
SD FLASH STORAGE	Two (2) front accessible Secure Data flash media devices are supported
MEMORY	
TYPE	Up to DDR4-2933 MT/s ECC depending on processor selection
DIMM SLOTS	Sixteen (16) RDIMM or LRDIMM slots
CAPACITY	2048GB (non-mirrored mode with 128GB DIMMs)
PHYSICAL	
HEIGHT WIDTH DEPTH	3.45 inches (87.6 mm) x 17.14 inches (435.3 mm) x 20 inches (508 mm)
ENVIRONMENTAL	
TEMPERATURE, OPERATING	-5°C to 55°C (41° F to 131° F)
TEMPERATURE, NON-OPERATING	-40°C to 70°C (-40° F to 158° F)
HUMIDITY	95%, non-condensing at temperatures of 23° C (73° F) to 40° C (104° F) Designed to meet or exceed Telcordia GR-63 and ETSI EN 300 019 humidity requirements for operating, transport and storage environments.
ALTITUDE	0 to 1,800 m (0 to 5,905 ft) @ 40° C; 0 to 3,200 m (0 to 13,123 ft) @ 30° C
SHOCK AND VIBRATION	Meets or exceeds Telcordia GR-63 and ETSI EN 300 019 requirements for operating transport and storage environments.
ELECTROSTATIC DISCHARGE (ESD)	Meets or exceeds NEBS and CE mark requirements for ESD immunity Tested ESD levels up to 15kV air discharge and 8kV contact discharge
ROHS	RoHS 6/6 compliant
SAFETY COMPLIANCE	
USA/CANADA	cULus mark to UL 60950-1, 2nd Edition with Am.1 and Am.2/CSA 22.2 No. 60950-1 2nd Edition with Am.1 and Am.2
EUROPE	CE mark to Low Voltage Directive, 2006/95/EC, EN 60950-1, 2nd Edition with Am. 1 and Am.2;
INTERNATIONAL	CB Certificate and Report to IEC60950-1, 2nd Edition with Am. 1 and Am.2 and all international deviations
USA	FCC 47 CFR Parts 15, Class A

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