

COTS Commercial Grade 2U Rackmount Computer System

MILITARY | INDUSTRIAL | COMMERCIAL



C221 Family

Models C22101, C22107, C22108, C22110, C22113

Assembled in the USA
ISO 9001:2008 Certified
ITAR Registered

Our C221 computing platform can be used for many computationally-intensive applications, while taking limited rack space. With the added security of sturdy construction, this system has revision controlled, long-life components that provide stability for long program duration.

Specifications for our standard products can always be customized to fit your unique application requirements.

In-house Engineering
Department

Rapid Prototyping

CPU Options

- Single Intel® Core i5® or i7®
- Single Intel® Xeon® E3 Series
- Single or Dual Intel® Xeon® E5 Series

Drive Capacity

- 4(x) 5.25" External Drive Bay
- 1(x) 3.5" External Drive Bay
- 1(x) 3.5" Internal Drive Bay

Applications

- Aviation
- Broadcast
- Energy
- Telemetry
- Diagnostics
- Simulation
- C4ISR
- Communications
- Imaging
- Persistent Surveillance
- Public Safety
- Automation
- Test and Measurement
- Transportation
- Medical



Benefits

- Revision-Controlled Components
- Long-Life Components
- Optimal for Long Program Life Cycles
- Excellent Value over Program Life
- Variety of Expansion Slots Available

Environments

Components meet the below specifications.

HIGH TEMPERATURE

50°C Operational, 85°C Storage
C22109: 35° Operational, 70°C Storage

LOW TEMPERATURE

0°C Operational, -20°C Storage
C22109: 0°C Operational, -40°C Storage

Contact us today!
858.571.4330 or saleseng@chassisplans.com
www.chassis-plans.com

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Chassis Specifications

DIMENSIONS

19" X 3.5" X 25.6" (482.6mm X 88.9mm X 650.2mm)

WEIGHT

33 pounds, weight varies by configuration

ENCLOSURE FEATURES

Construction

Heavy duty, cold-rolled electroplated steel

Front Door

Single door with 2(x) thumb screws

Drive Capacity

4(x) 5.25" internal drive bay

1(x) 3.5" external drive bay

1(x) 3.5" internal drive bay

Indicators

Power on, hard drive access

Switches

System power, system reset switches

FRONT USB PORTS

(2x) ports USB 2.0

SYSTEM COOLING

(4x) 80mm cooling fans

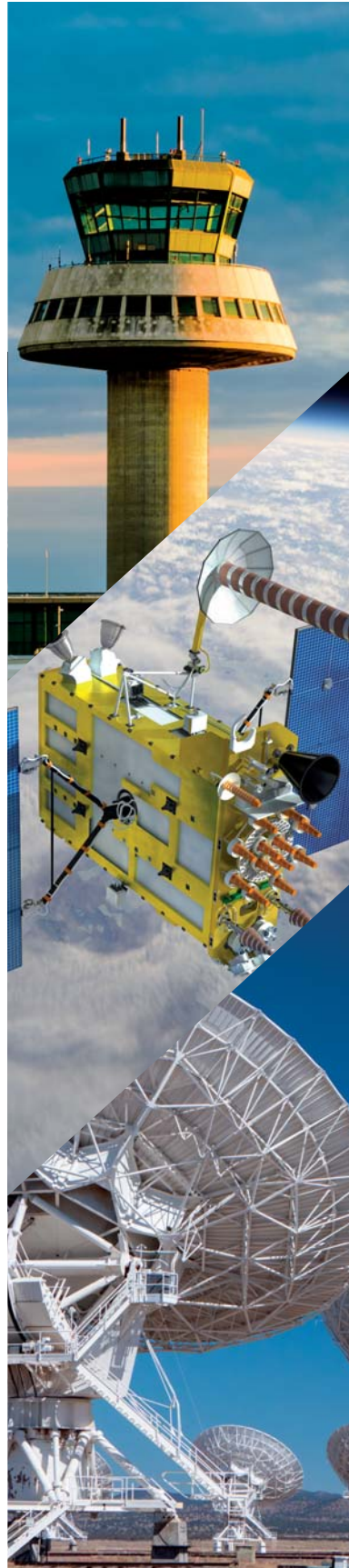
MOTHER BOARD CAPACITY

Designed for ATX-sized motherboard (13" X 12")

POWER SUPPLY

Single or redundant 600W 110/220 Volt AC

Other power options available



CPU

CHIP SET

MAX RAM

HARD DRIVES

RAID OPTION

OPTICAL DRIVE

EXPANSION SLOTS

Horizontal Configuration
Full-size Cards

Vertical Configuration
Half-height Cards

REAR I/O

ON BOARD GRAPHICS

AUDIO

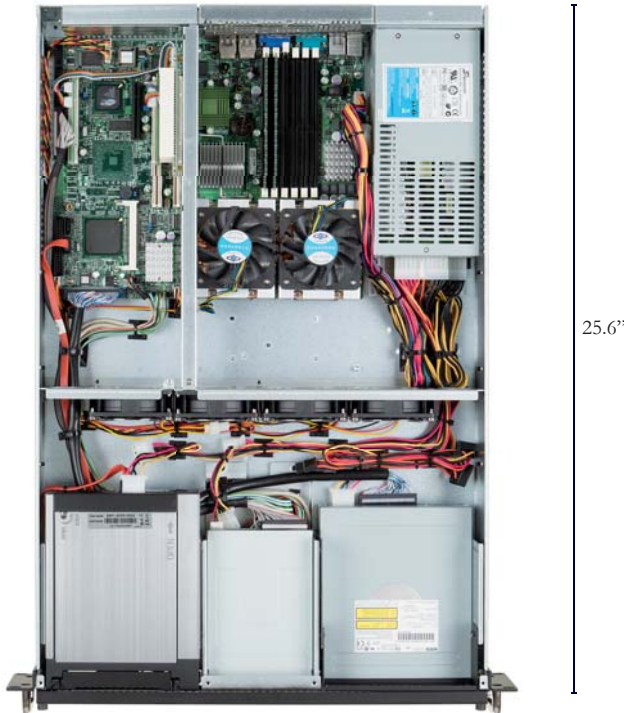
LAN

O/S

Computer Specifications

C22101	C22107	C22108	C22110	C21313
Single Intel® Core i7®-860, 2.80GHz OR Single Intel® Core i5®-660, 3.33GHz	Single Intel® Core™ i7-3770 (8M Cache, up to 3.9GHz), Intel® Core™ i5-3550S (6M Cache, up to 3.7GHz), Single Intel® Core™ i7-2600 Processor (8M Cache, 3.4GHz) OR Single Intel® Core™ i5-2400 Processor (6M Cache, 3.1GHz)	Single Intel® Xeon® Processor E3-1275 (8M Cache, 3.4GHz) OR Single Intel® Xeon® Processor E3-1225 (6M Cache, 3.1GHz)	Single or Dual Intel® Xeon® Processor E5-2658 (20M, 2.10 GHz, 8.0 GT/s Intel® QPI) OR Single or Dual Intel® Xeon® Processor E5-2428L (15M, 1.80 GHz, 7.2 GT/s Intel® QPI)	Single Intel® Core i7-4770S 3.9GHz OR Single Intel® Core i5-4570S 3.6GHz
Intel® Q57 Platform Controller Hub (PCH)	Intel® Q67 Platform Controller Hub (PCH)	Intel® C216 Platform Controller Hub (PCH)	Intel® C600-A Platform Controller Hub (PCH)	Intel® Q87 Express
(4x) 240-pin DDR3 Max. 16GB	(4x) 240-pin DDR3 Max. 32GB	(4x) 240-pin DDR3 Max. 32GB	(16x) 240-pin DDR3, Max. 512GB DDR3 ECC Reg.	(4x) 240-pin DDR3 Max. 32GB
Up to (4x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (4x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (4x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (4x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (4x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.
JBOD, RAID 0, 1, 5	JBOD, RAID 0, 1, 5	JBOD, RAID 0, 1, 5	JBOD, RAID 0, 1, 5	JBOD, RAID 0, 1, 5
24x DVDRW	24x DVDRW	24x DVDRW	24x DVDRW	24x DVDRW
(1x) PCIe x16 (GEN 2.0), (1x) PCIe x4 & (1x) PCI (PCI 2.3)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 2.0) & (1x) PCI (PCI 2.3)	(2x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 2.0)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x8 (GEN 3.0) (1x) PCIe x4 (GEN 2.0)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 1.0) (1x) PCI (PCI 2.3)
(1x) PCIe x16 (GEN 2.0), (1x) PCIe x4 (GEN 1.0), (2x) PCIe x1 (GEN 1.0) & (3x) PCI (PCI 2.3)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 2.0), (1x) PCIe x1 (GEN 2.0) & (4x) PCI (PCI 2.3)	(2x) PCIe x16 (GEN 3.0), (2x) PCIe x4 (GEN 2.0), (1x) Mini PCIe (GEN 2.0) & (3x) PCI (PCI 2.3)	(4x) double-width PCIe x16 (Gen 3.0), (1x) PCIe x8 (Gen 3.0), (1x) PCIe x4 (Gen 2.0)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 2.0) (1x) x1 (GEN 2.0) (3x) PCI (PCI 2.3)
(2x) PS/2 ports, (2x) DB-9 RS232 serial ports, (1x) DVI-I port (DVI-D signal only), (1x) DB-15 VGA port, (2x) RJ45 LAN ports, (4x) USB 2.0/1.1 ports, (1x) Mic-in, (1x) line-in and (1x) line out	(1x) mini-DIN-6 port for PS/2 mouse/keyboard, (2x) DB-9 RS232 serial ports, (1x) DVI-I port (DVI-D signal only), (1x) DB-15 VGA port, (2x) RJ45 LAN ports, (6x) USB 2.0/1.1 ports, (1x) Mic-in, (1x) line-in and (1x) line out	(1x) mini-DIN-6 port for PS/2 mouse/keyboard, (1x) DB-9 RS232 serial port, (2x) DVI-I ports (DVI-D signal only) & (1x) HDMI port, (2x) RJ45 LAN ports, (4x) USB 3.0 ports, (2x) USB 2.0 ports, (1x) Mic-in, (1x) line-in and (1x) line out	(1x) DB-9 RS232 serial port, (4x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) DB-15 VGA port	(1x) PS/2 ports, (2x) DB-9 RS232 serial ports, (1x) DVI-I port (DVI-D signal only), (1x) HDMI Port, (2x) RJ45 LAN ports, (4x) USB 3.0 ports (2x) USB 2.0 ports, (1x) Mic-in, (1x) line-in and (1x) line out
Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics 4000P	Matrox G200	Integrated Intel® HD Graphics DVI-I Out (DVI-D only) HDMI
Realtek® ALC262 Stereo ADCs and S/PDIF Interface	Realtek® ALC886 5.1-channel High Definition Audio	Realtek® ALC886 5.1-channel High Definition Audio	NA	Realtek® ALC886 5.1 High Definition Audio
(1x) Realtek® RTL8111DL PCI Express Gigabit Ethernet controller and (1x) Intel® W82578DM with iAMT6.0 Gigabit Ethernet PHY	(1x) Intel® WG82579LM with iAMT7.0 Gigabit Ethernet Phy & (1x) Intel® WG82574L PCI Express Gigabit Ethernet controller	(1x) Intel® WG82579LM with iAMT8.0 Gigabit Ethernet Phy & (1x) Intel® WG82574L PCI Express Gigabit Ethernet controller	(4x) Gigabit through Intel® i350-AM Quad 10/100/1000 integrated GbE MAC and PHY controller	Intel I210 PCI Express Gigabit Ethernet controller, Intel I217LM with iAMT9.0 Gigabit Ethernet Phy
Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available	Windows XP® Pro, Windows 7® Pro, 32 & 64-bit Other O/S Available

C221 Photos



25.6"



3.5"

19"



I/O connectors are dependent upon the model selected. See specifications for details.

Who We Are

CHASSIS PLANS

- Chassis Plans designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.
- Using COTS components, Chassis Plans provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.
- Chassis Plans is an ITAR Registered and SBA-certified small business that has been operating in Southern California for over a decade.

YOUR CONFIGURATION. ONE PART NUMBER.

- It's our mission to make your life easier. Our Sales Engineers will help you select the right configuration for your project, making sure the details are analyzed and that the system meets your specifications.
- One part number means easier procurement and less paperwork for you.
- Dedicated Sales and Program Managers.
- Last time buy opportunities for end-of-life components.



Contact us today!
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