

# COTS Commercial Grade 2U Rackmount Computer System

MILITARY | INDUSTRIAL | COMMERCIAL



# C220 Family

Models C22001, C22007, C22008, C22013

*Assembled in the USA  
ISO 9001:2008 Certified  
ITAR Registered*

Our C220 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

## 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

### LOW TEMPERATURE

0°C Operational, -20°C Storage

Contact us today!  
858.571.4330 or [saleseng@chassisplans.com](mailto:saleseng@chassisplans.com)  
[www.chassis-plans.com](http://www.chassis-plans.com)

# COTS Commercial Grade 2U Rackmount Computer System

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## Chassis Specifications

### DIMENSIONS

19" X 3.5" X 22.4" (482.6mm X 88.9mm X 569.0mm)

### WEIGHT

29 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" external 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

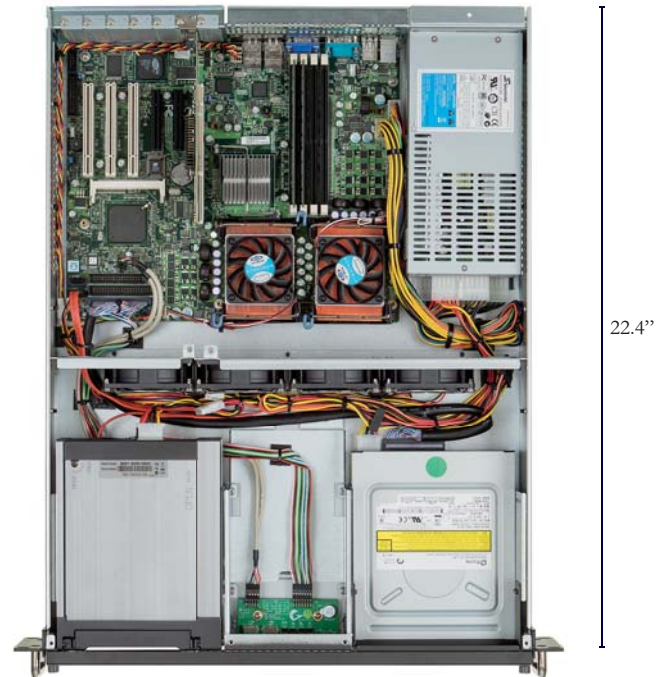
Designed for ATX-sized motherboard (10.5" X 12")

### POWER SUPPLY

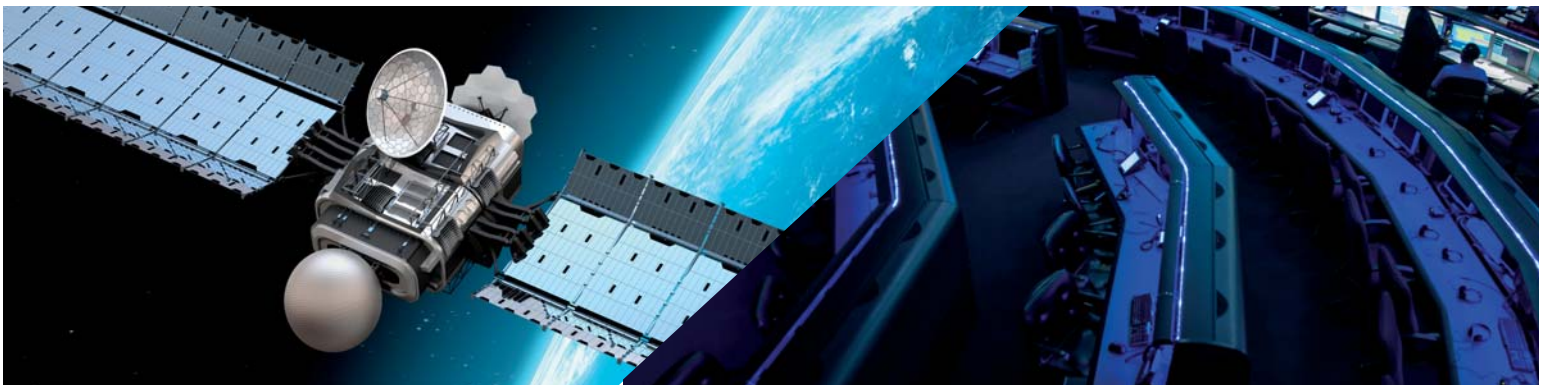
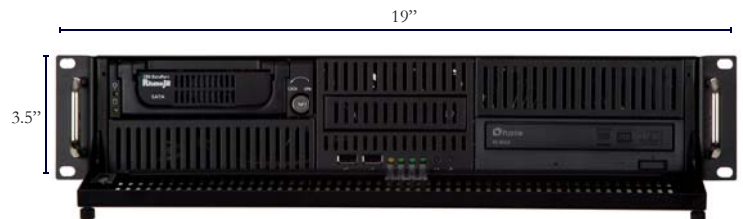
Single or redundant 500W 110/220 Volt AC

Other power options available

## C220 Photos



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



## Computer Specifications

	C22001	C22007	C22008	C22013
<b>CPU</b>	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 Intel® Core i7-4770S 3.9GHz OR Single Intel® Core i5-4570S 3.6GHz
<b>CHIP SET</b>	Intel® Q57 Platform Controller Hub (PCH)	Intel® Q67 Platform Controller Hub (PCH)	Intel® C216 Platform Controller Hub (PCH)	Intel® Q87 Express
<b>MAX RAM</b>	(4x) 240-pin DDR3 Max. 16GB	(4x) 240-pin DDR3 Max. 32GB	(4x) 240-pin DDR3 Max. 32GB	(4x) 240-pin DDR3 Max. 32GB
<b>HARD DRIVES</b>	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.
<b>RAID OPTION</b>	JBOD, RAID 0, 1	JBOD, RAID 0, 1	JBOD, RAID 0, 1	JBOD, RAID 0, 1
<b>OPTICAL DRIVE</b>	24x DVD RW	24x DVD RW	24x DVD RW	24x DVD RW
<b>EXPANSION SLOTS</b>				
<i>Horizontal Configuration Full-size Cards</i>	(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 x4 (GEN 1.0) (1x) PCI (PCI 2.3)
<i>Vertical Configuration Half-height Cards</i>	(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)	(1x) PCIe x16 (GEN 3.0), (1x) PCIe x4 (GEN 2.0) (1x) x1 (GEN 2.0) (3x) PCI (PCI 2.3)
<b>REAR I/O</b>	(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) 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
<b>ON BOARD GRAPHICS</b>	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics 4000P	Integrated Intel® HD Graphics DVI-I Out (DVI-D only) HDMI
<b>AUDIO</b>	Realtek® ALC262 Stereo ADCs and S/PDIF Interface	Realtek® ALC886 5.1-channel High Definition Audio	Realtek® ALC886 5.1-channel High Definition Audio	Realtek® ALC886 5.1 High Definition Audio
<b>LAN</b>	(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	Intel I210 PCI Express Gigabit Ethernet controller, Intel I217LM with iAMT9.0 Gigabit Ethernet Phy
<b>O/S</b>	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



## 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.

### ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-S-901, in addition to FCC, UL, CE, and country specific agency requirements

### 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.

### FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 23,000 sqft and has dedicated 12,000 sqft to manufacturing and 3,000 sqft to engineering
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

### QUALITY COUNTS

- ISO 9001:2008 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 2-year warranty on all integrated systems and LCD monitor products
- Assembled in the USA



Contact us today!  
858.571.4330 or [saleseng@chassisplans.com](mailto:saleseng@chassisplans.com)  
[www.chassis-plans.com](http://www.chassis-plans.com)

### Chassis Plans

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C220-1014