

# COTS Commercial Grade 4U Rackmount Computer System

MILITARY | INDUSTRIAL | COMMERCIAL



# C431 Family

Models C43101, C43109, C43110, C43111, C43113

Assembled in the USA  
ISO 9001:2008 Certified  
ITAR Registered

Our C431 computing platform can be used for many computationally-intensive applications, while offering extensive drive bay options. 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

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

## CPU Options

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

## Drive Capacity

- 6(x) 5.25" External Drive Bay
- 1(x) 3.5" External 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
- Customizable I/O Connections
- Variety of Expansion Slots Available

## Environments

Components meet the below specifications.

### HIGH TEMPERATURE

50°C Operational, 85°C Storage  
C43109: 35° Operational, 70°C Storage

### LOW TEMPERATURE

0°C Operational, -20°C Storage  
C43109: 0°C Operational, -40°C Storage

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## Chassis Specifications

### DIMENSIONS

19" X 7" X 26.4" (482.6mm X 177.8mm X 670.6mm)

### WEIGHT

59 pounds, weight varies by configuration

### ENCLOSURE FEATURES

#### Construction

Heavy duty, cold-rolled electroplated steel

#### Front Door

Single door with a twist lock  
Removable/washable air filter

#### Drive Capacity

6(x) 5.25" external drive bay  
1(x) 3.5" external drive bay

#### Indicators

Power on, hard drive access

#### Switches

System power, system reset switches

#### Card Retention

Adjustable hold-down bar for plug-in cards

### FRONT USB PORTS

(2x) ports USB 2.0

### SYSTEM COOLING

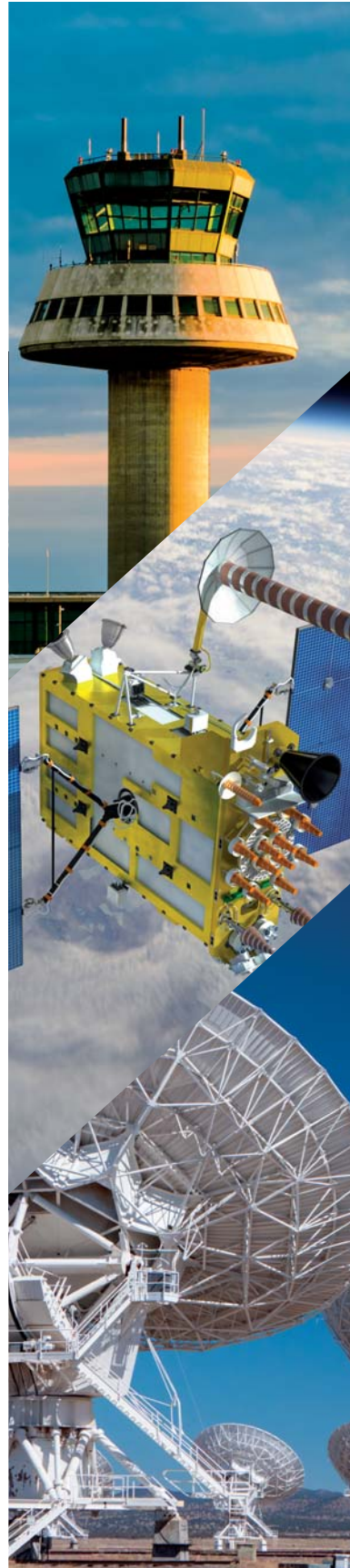
(4x) Hot swappable 92mm cooling fans

### MOTHER BOARD CAPACITY

Designed for EATX-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

REAR I/O

ON BOARD GRAPHICS

AUDIO

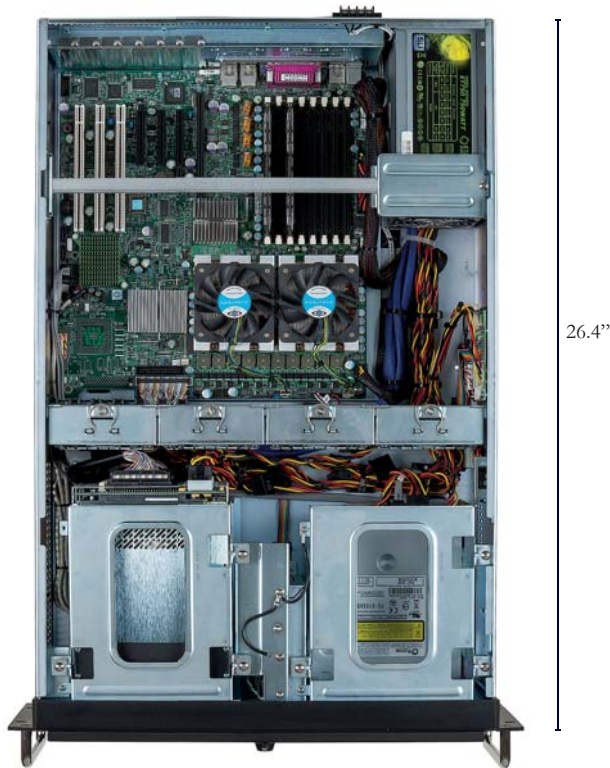
LAN

O/S

## Computer Specifications

C43101	C43109	C43110	C43111	C43113
Single Intel® Core i7®-860, 2.80GHz OR Single Intel® Core i5®-660, 3.33GHz	Single or Dual Intel® Xeon® Processor E5-2658 (20M, 2.10GHz, 8.0 GT/s Intel® QPI) OR Single or Dual Intel® Xeon® Processor E5-2428L (15M, 1.80GHz, 7.2 GT/s Intel® QPI)	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 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® C606 Platform Controller Hub (PCH)	Intel® C600-A Platform Controller Hub (PCH)	Intel® C602 Platform Controller Hub (PCH)	Intel® Q87 Express
(4x) 240-pin DDR3 Max. 16GB	(8x) 240-pin DDR3 Max. 256GB ECC	(16x) 240-pin DDR3, Max. 512GB DDR3 ECC Reg.	(16x) 240-pin DDR3, Max. 512GB DDR3 ECC Reg.	(4x) 240-pin DDR3 Max. 32GB
Up to (6x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (6x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (6x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (6x) SATA2, 500GB, 7200 RPM, 64GB cache standard. In fixed or removable configurations.	Up to (6x) SATA3, 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 DVD RW	24x DVD RW	24x DVD RW	24x DVD RW	24x DVD RW
(1x) PCIe x16 (GEN 2.0), (1x) PCIe x4 (GEN 1.0), (2x) PCIe x1 (GEN 1.0) & (3x) PCI (PCI 2.3)	(3x) PCIe x8 (GEN 3.0), (1x) PCIe x4 (GEN 2.0), (1x) PCIe x1 (GEN 2.0), (1x) PCI (PCI 2.3)	(4x) double-width PCIe x16 (Gen 3.0), (1x) PCIe x8 (Gen 3.0), (1x) PCIe x4 (Gen 2.0)	(10x) 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) DB-9 RS232 serial port, (2x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) RJ45 dedicated IPMI, DB-15 VGA port, (1x) UID switch	(1x) DB-9 RS232 serial port, (4x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) DB-15 VGA port	(1x) DB-9 RS232 serial port, (2x) RJ45 GbE LAN ports, (4x) USB 2.0 ports, (1x) RJ45 dedicated IPMI, DB-15 VGA port, (1x) UID switch	(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	Matrox G200eW	Matrox G200	Matrox G200eW	Integrated Intel® HD Graphics DVI-I Out (DVI-D only) HDMI
Realtek® ALC262 Stereo ADCs and S/PDIF Interface	N/A	NA	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	(2x) Intel® 82574L Gigabit Ethernet controllers, (1x) Realtek® RTL8201N PHY dedicated IPMI	(4x) Gigabit through Intel® i350-AM Quad 10/100/1000 integrated GbE MAC and PHY controller	Dual Intel® i350 Gigabit ethernet ports & (1x) Realtek® RTL8201N PHY (dedicated IPMI)	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

## C431 Photos



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!  
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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