

SuperChassis 505-203B



Key Features

1. 9.8" depth small form factor 1U, 200W Gold level power supply
2. Optimized for Mini-ITX (6.75" x 6.75") Motherboard
3. Front I/O Ports
4. 1x 3.5" Internal Drive Bay with 1x Half-height, Half-length PCI
5. OR 2x 3.5" Internal Drive Bay
6. OR 2x 2.5" Internal Drive Bay with 1x Full-height, Half-length PCI
7. OR 4x 2.5" Internal Drive Bay
8. Power Switch, Reset Button and 5x LED Indicators

Note: Image above may show a varied configuration or optional parts, Please refer to parts list for standard parts included.

Specifications

Product SKUs

- CSE-505-203B** ■ SuperChassis 505-203B (Black)

Form Factor

9.8"-Depth Mini 1U chassis support for maximum motherboard size - 6.75" x 6.75"

Processor Support

Single Processor Support

Dimensions

- Height** ■ 1.7" (43mm)
Width ■ 17.2" (437mm)
Depth ■ 9.8" (249mm)
Packaging ■ 25.8" (W) x 6.1" (H) x 18.3" (L)
Gross Weight ■ 10 lbs (4.5kg)
Available Colors ■ Black

Expansion Slots

- Up to 1x full-height, half-length PCI expansions slot*
 *NOTE: Riser Card Required, See 'Drive Bays' for possible configurations

Drive Bays

- Internal Bay**
- 1x 3.5" Internal Drive Bay with 1x Half-height, Half-length PCI
 - OR 2x 3.5" Internal Drive Bay
 - OR 2x 2.5" Internal Drive Bay with 1x Full-height, Half-length PCI
 - OR 4x 2.5" Internal Drive Bay
 - Only SAS or enterprise SATA HDD recommended

Front Panel

- Buttons** ■ Power On/Off button
 ■ System Reset button
- LEDs** ■ Power LED
 ■ Hard drive activity LED
 ■ 2x Network activity LEDs
 ■ System Overheat LED
- I/O Ports** ■ 1x VGA, IPMI, 4xLANs, 1x COM, 4xUSB, 1xKeyboard/Mouse

Motherboard (for CSE-505-203B)

- | | |
|----------------------------------|----------------------------------|
| A1SAI-2550F | A1SAI-2750F |
| A1SRI-2358F | A1SRI-2558F |
| A1SRI-2758F | A2SAV |
| A2SAV-L | X10SBA |
| X10SBA-L | X10SDV-12C-TLN4F |
| X10SDV-16C-TLN4F | X10SDV-2C-7TP4F |
| X10SDV-2C-TLN2F | X10SDV-4C+-TLN4F |
| X10SDV-4C-7TP4F | X10SDV-4C-TLN2F |
| X10SDV-4C-TLN4F | X10SDV-6C+-TLN4F |
| X10SDV-6C-TLN4F | X10SDV-7TP4F |
| X10SDV-7TP8F | X10SDV-8C+-LN2F |
| X10SDV-8C-TLN4F | X10SDV-F |
| X10SDV-TLN4F | X10SLV-Q |
| X11SBA-F | X11SBA-LN4F |
| X9SBAA-F | X9SCAA |
| X9SCAA-L | X9SKV-1105 |
| X9SKV-1125 | X9SKV-B915 |
| X9SPV-F-3217UE | X9SPV-F-3610ME |
| X9SPV-LN4F-3LE | X9SPV-LN4F-3QE |
| X9SPV-M4 | X9SPV-M4-3QE |
| X9SPV-M4-3UE | |

Server(s) for SC505-203B

- | | |
|----------------------------|----------------------------|
| 5018A-FTN4 | 5018D-FN8T |
| 5018D-FN4T | |

Operating Environment (System)

- Operating Temperature Range** ■ 0°C ~ 40°C (32°F ~ 104°F)
- Non-Operating Temperature Range** ■ -40°C ~ 70°C (-4°F ~ 158°F)
- Operating Relative Humidity Range** ■ 8% ~ 90% (non-condensing)
- Non-Operating Relative Humidity Range** ■ 5% - 95% (non-condensing)



Power Supply

200W Low Noise AC-DC power supply with PFC

AC Voltage ■ 100 - 240V, 50-60Hz, 2.6 Amp Max

+5V ■ 8.0 Amp (max.)

+5V standby ■ 2.0 Amp (max.)

+12V ■ 16 Amp (max.)

-12V ■ 0.5 Amp (max.)

+3.3V ■ 8.0 Amp (max.)

Certification



Gold Certified

Regulatory (Power Supply)

**Power
Supply
Safety / EMC**

- USA - UL listed, FCC
- Canada - CUL listed
- CCC Certification
- EN 60950/IEC 60950-Compliant
- Europe/CE Mark
- Germany - TUV Certified

A1SRi-2758F



**Rangeley, Low Power
Communication
Intel® QuickAssist Technology**

Key Features

1. Intel® Atom processor C2758, SoC, FCBGA 1283, 20W 8-Core
2. Up to 64GB DDR3 1600MHz ECC SO-DIMM in 4 DIMM sockets
3. Quad GbE LAN ports
4. IPMI with dedicated LAN
5. 2x SATA3 and 4x SATA2 ports
6. 1x PCI-E 2.0 x8 slot
7. 4x USB 3.0 (2 rear, 1 via header, 1 Type A), 2x USB 2.0 ports (rear)
8. 12V DC or ATX Power input
9. Operating Temperature: 0°C - 60°C
10. 7-Year product life

Specifications

Product SKUs	
MBD-A1SRi-2758F -O	■ A1SRi-2758F (Retail Pack)
MBD-A1SRi-2758F -B	■ A1SRi-2758F (Bulk Pack)
Physical Stats	
Form Factor	■ Mini-ITX
Dimensions	■ 6.75" x 6.75" (17.145cm x 17.145cm)
Processor/Cache	
CPU	<ul style="list-style-type: none"> ■ Intel® Atom™ Processor C2758 ■ CPU TDP 20W (8-Core) ■ FCBGA 1283 ■ System-on-Chip
System Memory	
Memory Capacity	<ul style="list-style-type: none"> ■ 4x 204-pin DDR3 SO-DIMM socket ■ Supports up to 64GB DDR3 ECC Un-Buffered memory
Memory Type	■ 1600/1333MHz ECC DDR3 SDRAM, 204-pin gold-plated DIMMs
DIMM Sizes	■ 16GB, 8GB, 4GB, 2GB
Memory Voltage	■ 1.5 V, 1.35 V
On-Board Devices	
SATA	<ul style="list-style-type: none"> ■ SoC SATA3 (6Gbps), SATA2 (3Gbps) ■ C2000 SoC I354 Quad GbE Controller (MACs)
Network Controllers	<ul style="list-style-type: none"> ■ Virtual Machine Device Queues reduce I/O overhead ■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
IPMI	<ul style="list-style-type: none"> ■ Support for Intelligent Platform Management Interface v.2.0 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ■ Aspeed AST 2400 BMC
USB 3.0	■ Renesas uPD720201
Video	■ BMC integrated Aspeed AST2400

Chassis (Optimized for A1SRi-2758F)	
1U Chassis:	<ul style="list-style-type: none"> ■ SC504-203B ■ SC505-203B
Mid/Mini Tower Chassis:	■ SC721TQ-250B
Mini-ITX Chassis:	<ul style="list-style-type: none"> ■ SC101i ■ SC101S
SuperServer(s) with A1SRi-2758F	
Model(s)	<ul style="list-style-type: none"> ■ SYS-5018A-FTN4 ■ SYS-5028A-TN4
Expansion Slots	
PCI-Express	■ 1x PCI-E 2.0 x8 slot
System BIOS	
BIOS Type	■ 64Mb SPI Flash EEPROM with AMI UEFI BIOS
BIOS Features	<ul style="list-style-type: none"> ■ Plug and Play (PnP) ■ DMI 2.3 ■ ACPI 5.0 ■ USB Keyboard support ■ SMBIOS 2.7.1 ■ UEFI
Management	
Software	<ul style="list-style-type: none"> ■ SuperDoctor® 5 ■ Watch Dog ■ NMI
Power Configurations	<ul style="list-style-type: none"> ■ ACPI / ACPM Power Management ■ Main Switch Override Mechanism ■ Power-on mode for AC power recovery
PC Health Monitoring	
Voltage	<ul style="list-style-type: none"> ■ Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +5V Standby, VBAT, Memory Voltages.
FAN	<ul style="list-style-type: none"> ■ Total of 3x 4-pin fan headers ■ 3x fans with tachometer status monitoring ■ Status monitor for speed control ■ Status monitor for on/off control ■ Low noise fan speed control ■ Pulse Width Modulated (PWM) fan connectors

Input / Output	
Serial ATA	<ul style="list-style-type: none"> ■ 2x SATA3 (6Gbps) ports ■ 4x SATA2 (3Gbps) ports
LAN	<ul style="list-style-type: none"> ■ 4x RJ45 Gigabit Ethernet LAN ports ■ 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> ■ 4x USB 3.0 ports (2 rear, 1 Type A, 1 via header) ■ 2x USB 2.0 ports (2 rear)
Serial Port	<ul style="list-style-type: none"> ■ 2x Fast UART 16550 Serial Port (1 rear, 1 via header)
DOM	<ul style="list-style-type: none"> ■ 1x SATA DOM (Disk on Module) power connector
VGA	<ul style="list-style-type: none"> ■ 1x VGA Port
Others	<ul style="list-style-type: none"> ■ TPM Header

Temperature	<ul style="list-style-type: none"> ■ Monitoring for CPU and chassis environment ■ CPU thermal trip support
LED	<ul style="list-style-type: none"> ■ System Overheat LED
Other Features	<ul style="list-style-type: none"> ■ Chassis intrusion detection ■ Chassis intrusion header ■ 4-pin 12V DC power input or 24-pin ATX Power input
Operating Temperature	
<ul style="list-style-type: none"> • 0°C to 60°C 	