



Quanta[™]
Optimize Your Datacenter



Quanta JB9 (M4600H) JBOD System Overview

Quanta JB9 (M4600H) System Specification

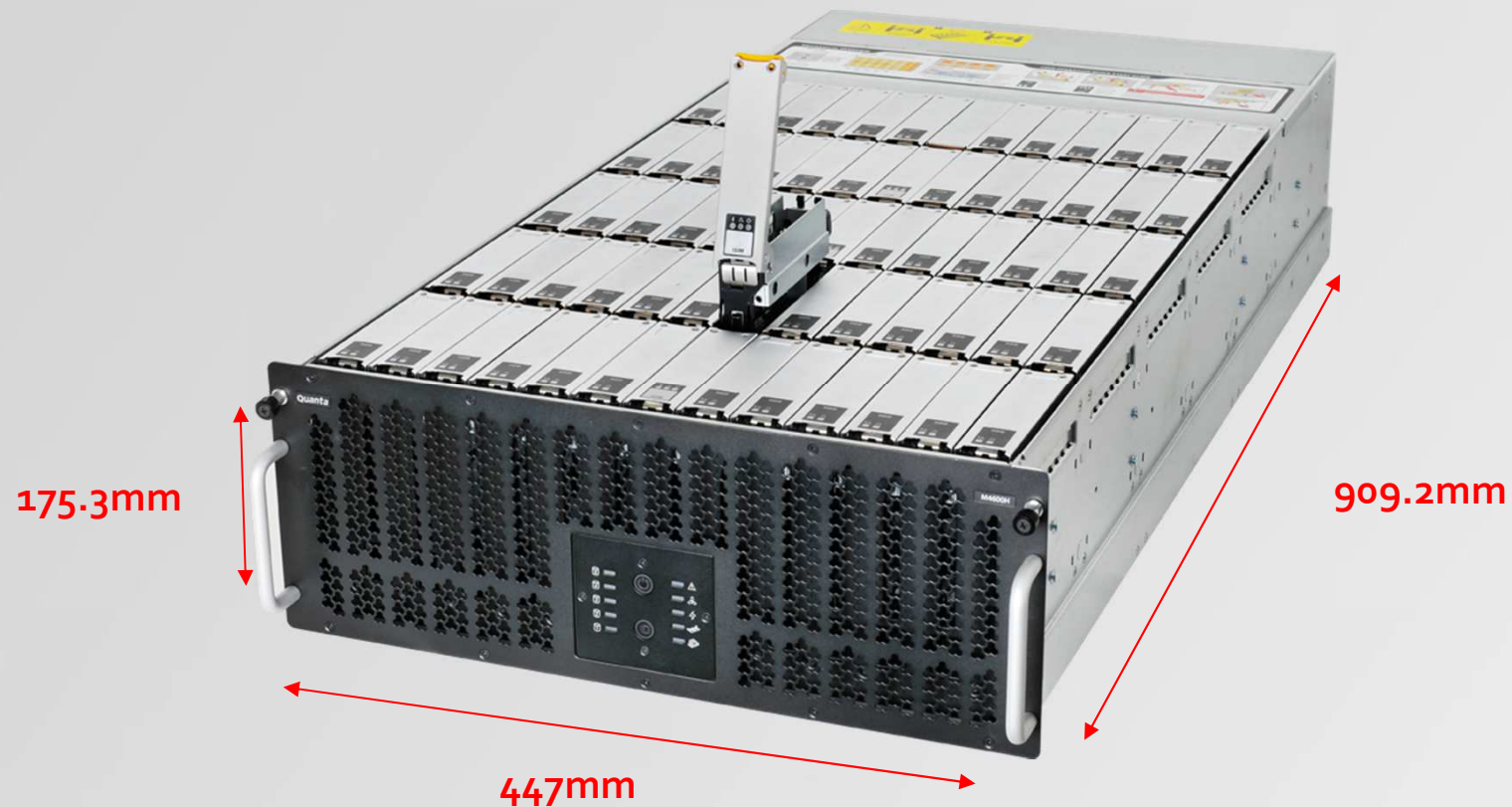
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Enclosure Form Factor	4U
HDD Support	60 x 6Gb/s 3.5" or 2.5" SAS/SATA HDDs
Host Interface	4 x 6Gb/s mini-SAS Ports per Rear SAS Interface Module (SIM)
Hot-Swap and Redundancy	
Controller Module	Dual Hot Swappable Rear SAS Interface Modules (SIM) 4 x Hot-swappable Internal SAS Interface Modules (ISIM)
Disk Drives	60 x Hot Swappable 6Gb/s 3.5" or 2.5" SAS/SATA HDDs
Cooling Fans	4 fans with 2 rotors in each fan. Total 7+1 Redundant in the system Each PSU has one built-in Fan
Power Supply	Dual 1,400W (80plus platinum) Redundant Power Supplies, 240VAC
Monitoring and Notification	
LED Indicators	Power LED, System ID LED, Status LED, Fan Status LED, PSU Status LED, HDD Activity/Status LED, SIM Status/Activity/ID LED, ISIM Status/Activity/ID LED,
Firmware Management	SCSI Enclosure Service (SES-2)
OS Support	Windows, Linux, Open Solaris
Dimension	W/O CMA: (D)909.20mm x (W)447mm x (H)175.3mm (35.80" x 17.60" x 6.90") W/ CMA: (D)1103.10mm x (W)447mm x (H)175.3mm (43.43" x 17.60" x 6.90")

Quanta JB9 (M4600H) System Chassis Dimension

System Dimension : 909.20mm x 447mm x 175.3mm (35.80" x 17.60" x 6.90")



Quanta JB9 (M4600H) System Front View



Power Button

On: Green, Power On
Off: Power Off



HDD Status LED

On: Amber, HDD Row# Fail
Off: HDD Row# Good

System Status LED

On: Amber, Warning
Off: Status good

Fan Status LED

On: Amber, Warning
Off: Status good

PSU Status LED

On: Amber, Warning
Off: Status good

SIM Status LED

On: Amber, Warning
Off: Status good

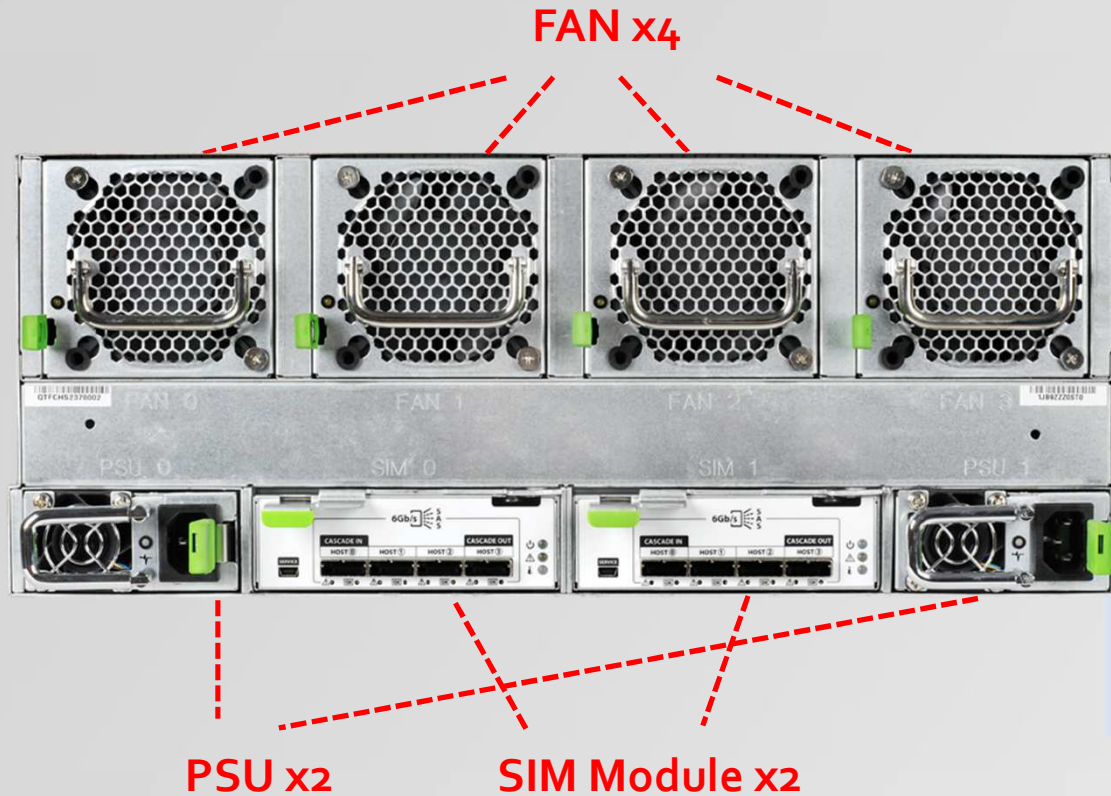
ISIM Status LED

On: Amber, Warning
Off: Status good

ID Button

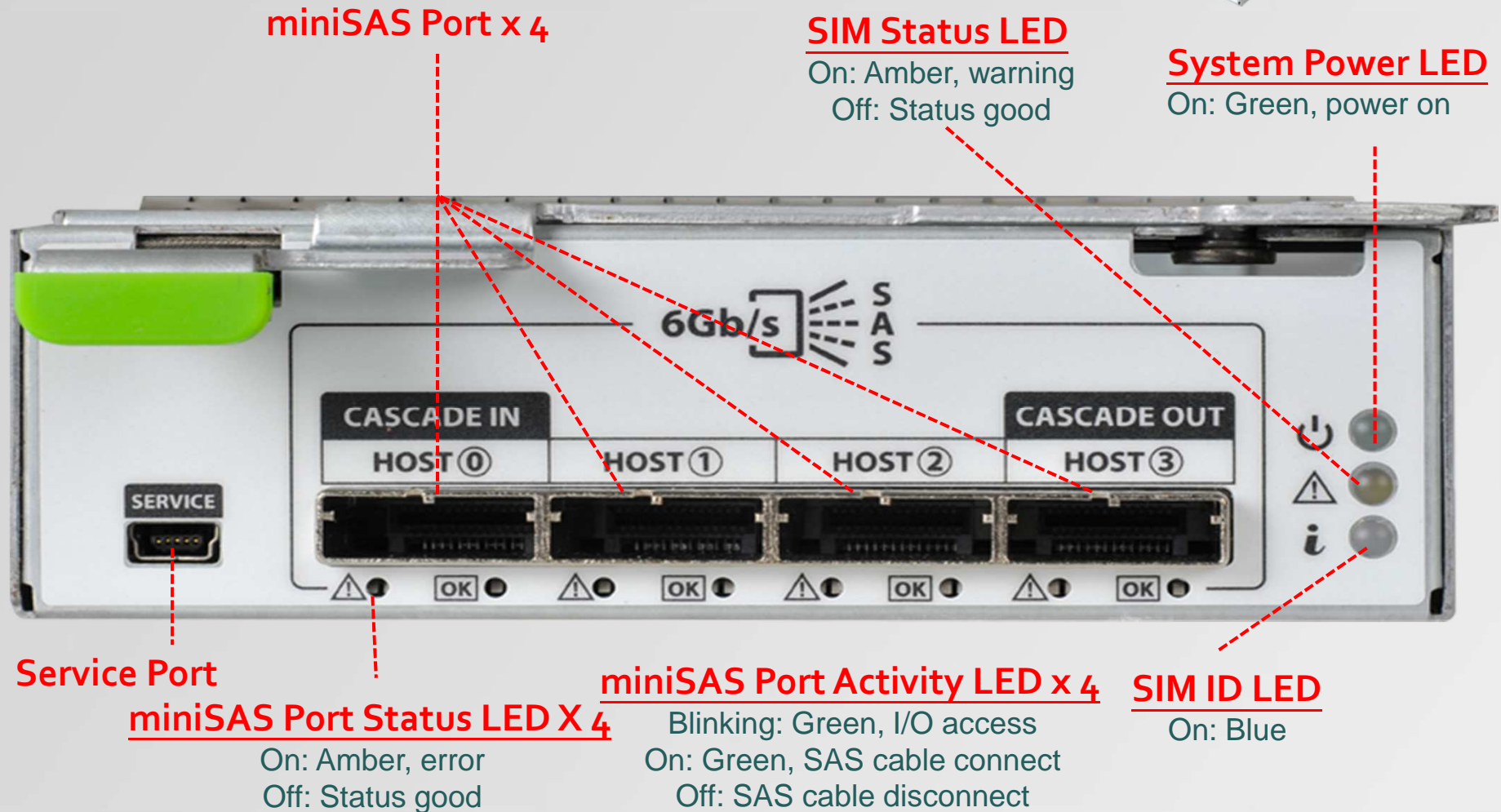
On: Blue

Quanta JB9 (M4600H) System Rear View

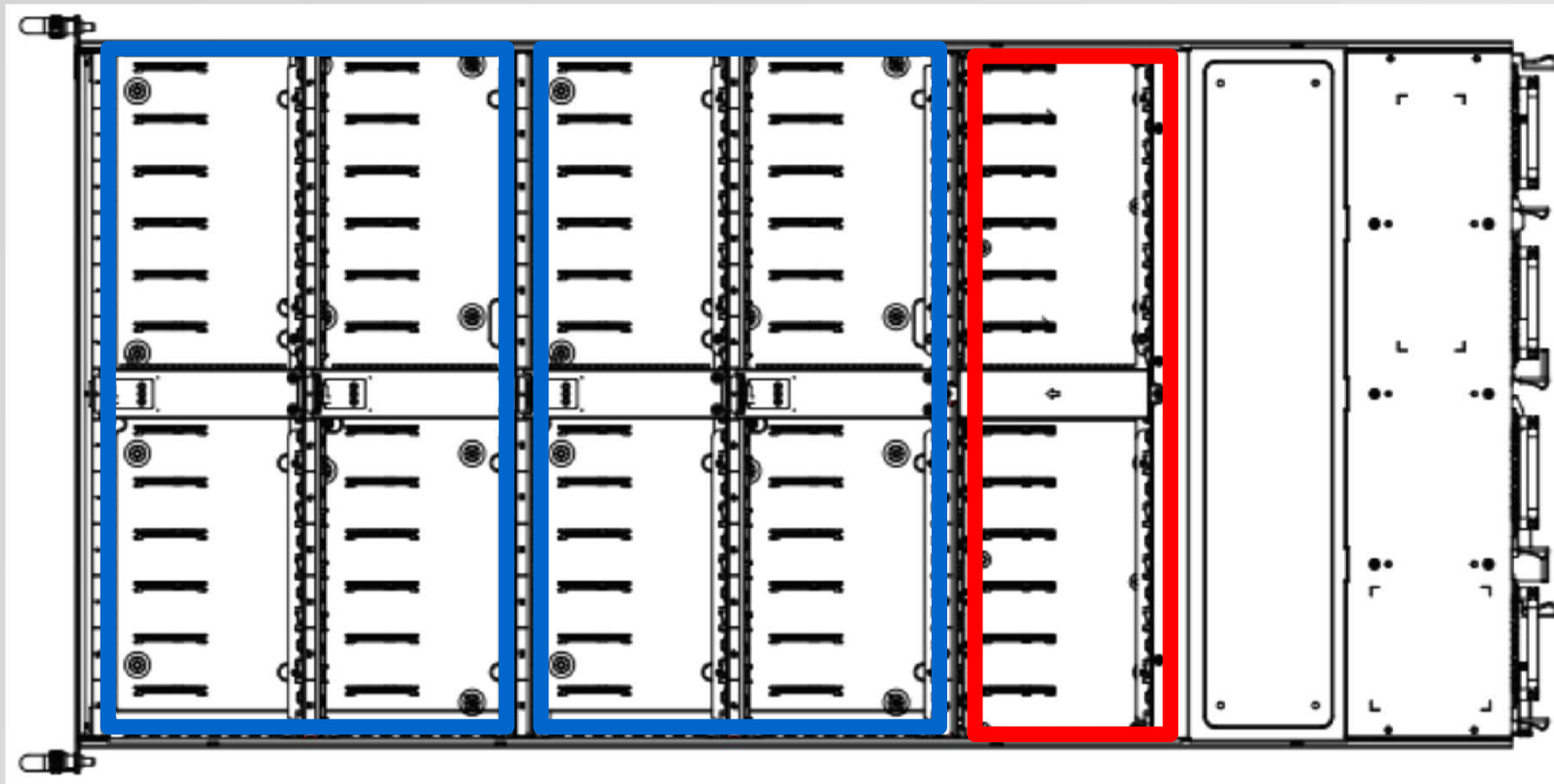


Quanta JB9 (M4600H) SIM Cage Overview

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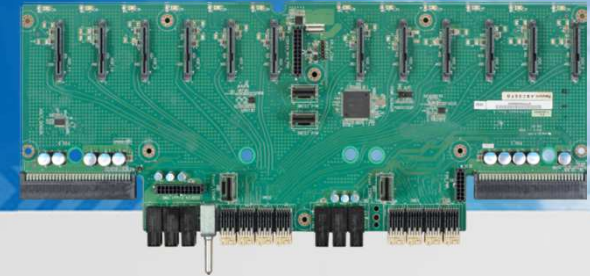


Quanta JB9 (M4600H) System Board Sets

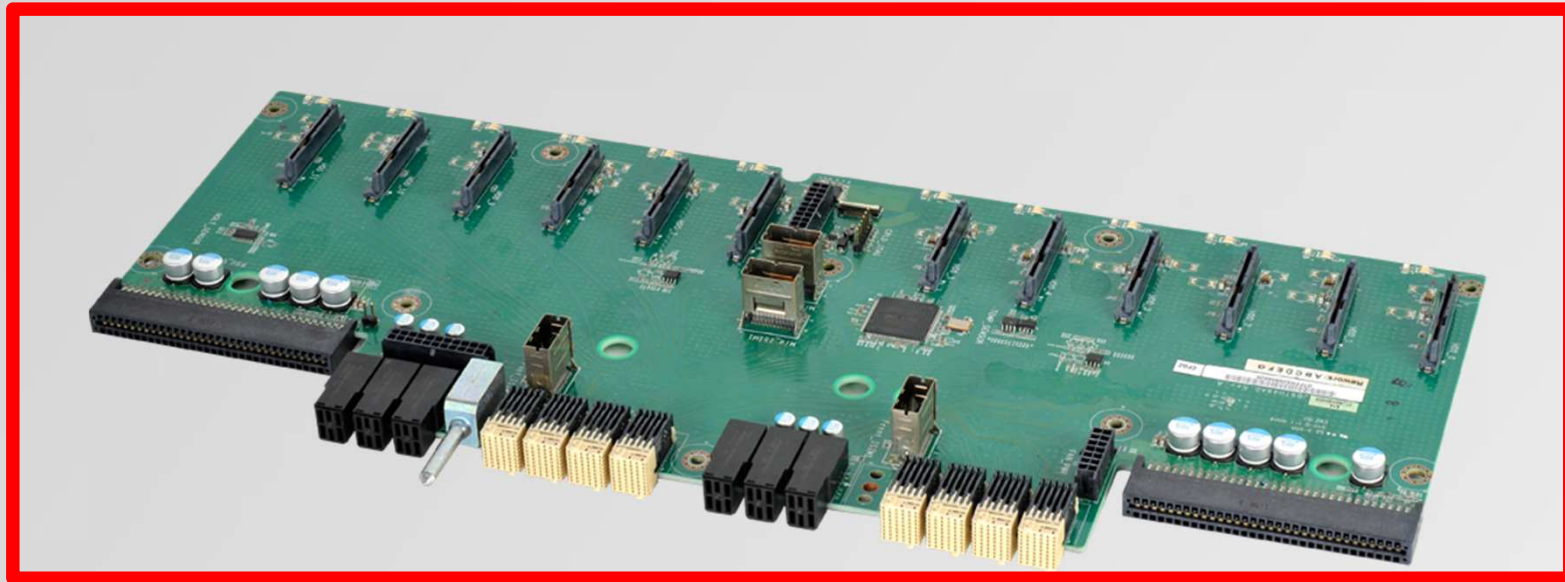


Quanta JB9 (M4600H) 12 HDD Backplane

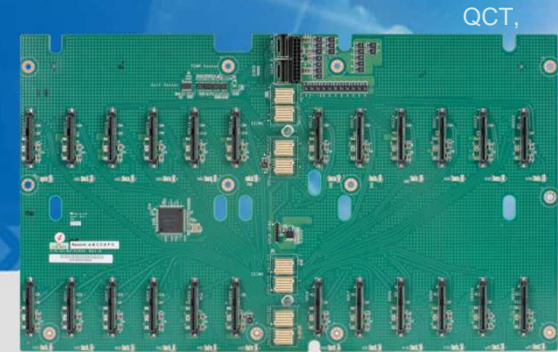
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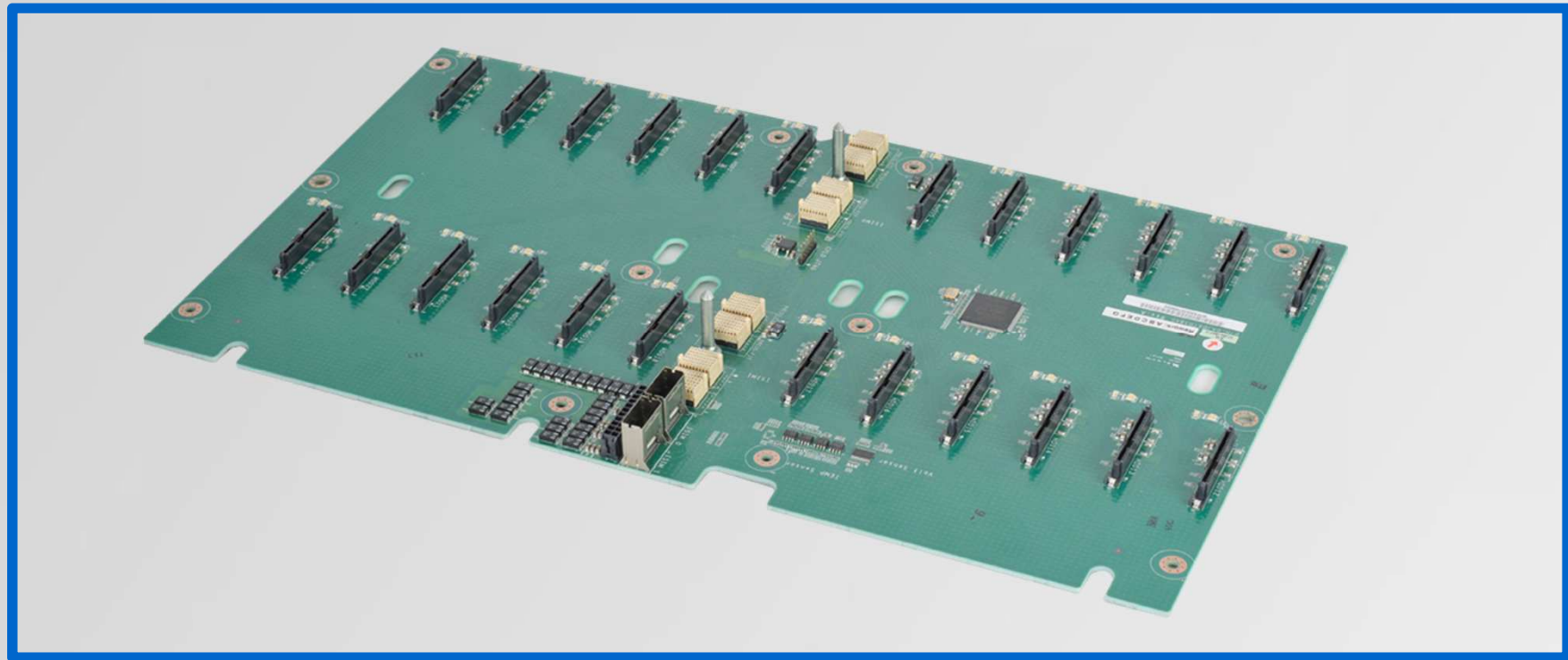
12 HDD Backplane*1 in JB9 (M4600H)



Quanta JB9 (M4600H) 24 HDD Backplane



24 HDD Backplane*2 in JB9 (M4600H)



Quanta JB9 (M4600H) ISIM LED

ISIM ID LED

On: Blue

ISIM Status LED

On: Amber, warning
Off: Status good



Power LED

On: Green, power on



Quanta JB9 (M4600H) HDD LED

HDD Status/ID LED

On: Amber, error
On: Blue, ID
Off: HDD Status Good



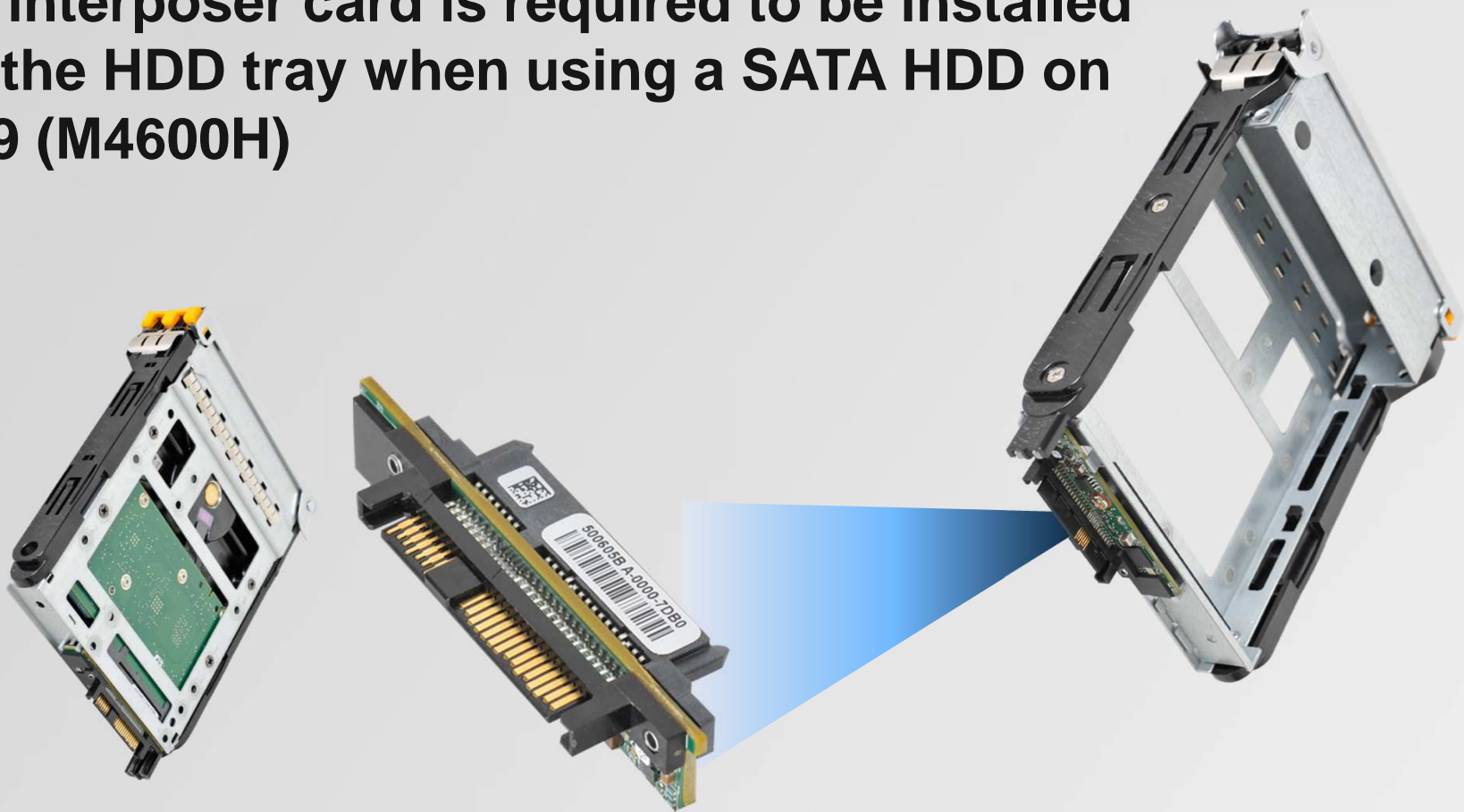
HDD Activity LED

Blinking: when I/O access
On: when HDD connection
Off: when HDD disconnection



Quanta JB9 (M4600H) Interposer Card for SATA HDD

An interposer card is required to be installed on the HDD tray when using a SATA HDD on JB9 (M4600H)

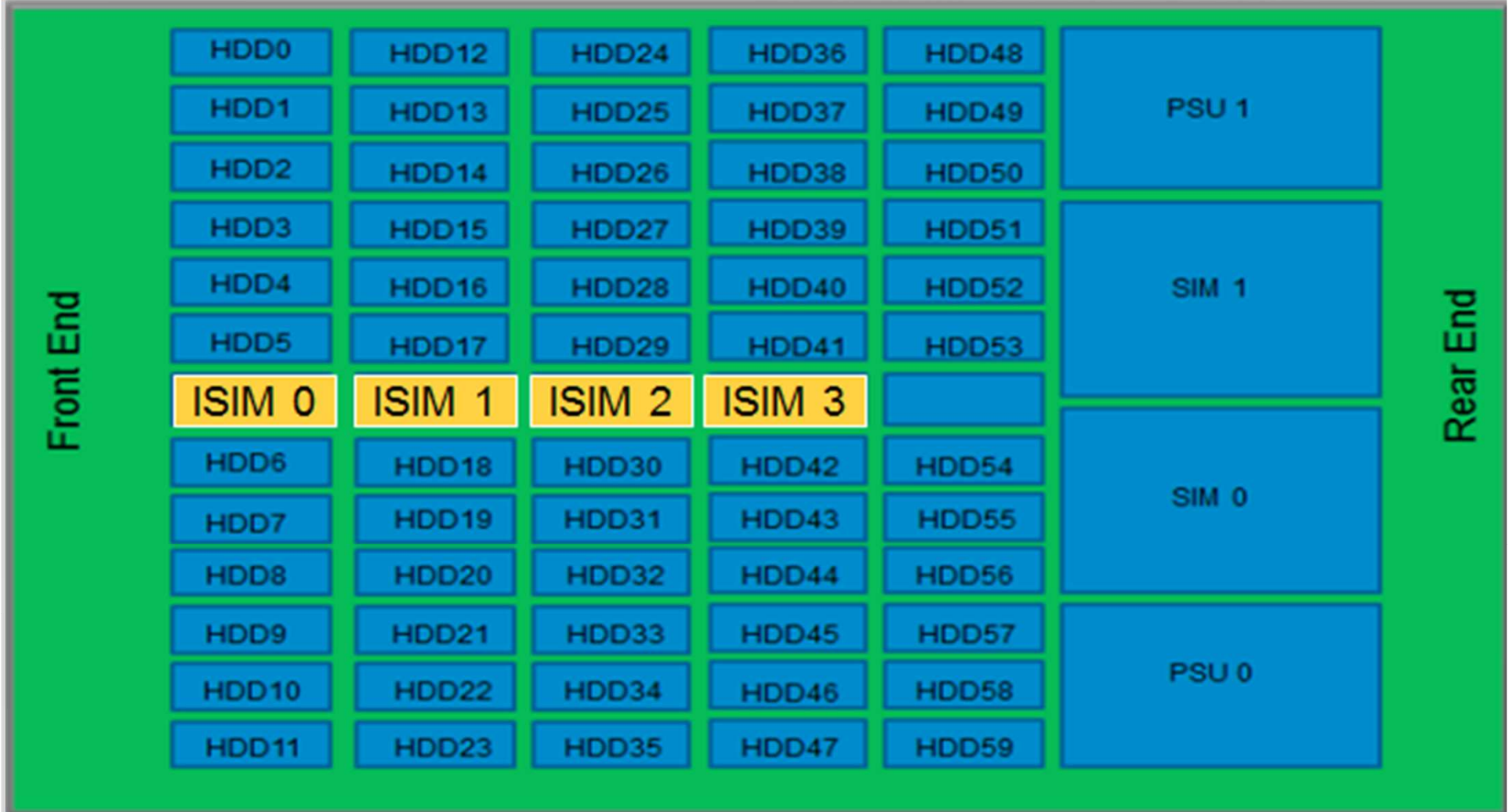


Quanta JB9 (M4600H) System Top View

Internal SAS Interface Module x 4



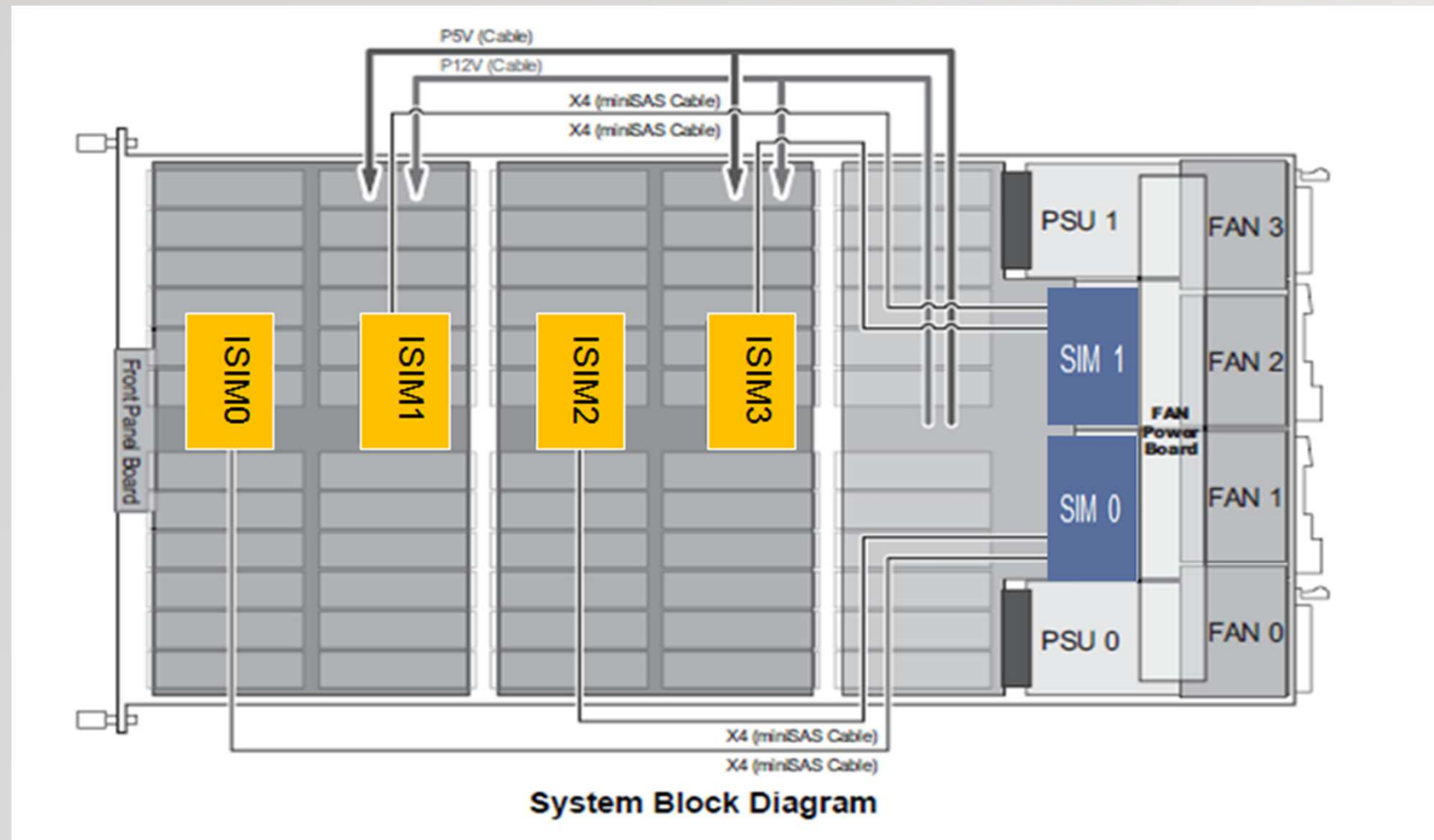
Quanta JB9 (M4600H) Hard Drive / ISIM / SIM / PSU Placement



Quanta JB9 (M4600H) Cable Management Arm



Quanta JB9 (M4600H) System Block Diagram



Quanta JB9 (M4600H) Power supply and cooling

- 2 Redundant 1400W PSUs in JB9 system – Each PSU can sustain whole system independently. Redundancy for PSU is 1+1.
- Each PSU has one built-in fan.
- There are 4 fans module totally in the whole system. The redundancy for fan is 7+1.



Quanta JB9 (M4600H) Firmware Feature (1/3)

- JBOD cards, power supplies (blower built-in) and hard disks status monitor
- Temperature and voltage monitor
- SAS interface error count monitor
- Invalid DWORD, running disparity and loss of sync
- FRU present and absent detection
- JBOD card, power supply and hard disk
- PSU built-in blower speed control
- System and hard disk status LED control

Quanta JB9 (M4600H) Firmware Feature (2/3)

- Command Line Interface thru UART.
- System Diagnostic
- Disk Status
- JBOD card firmware upgrade thru UART and In-band SAS
- SAS/SATA HDD firmware upgrade thru In-band SAS
- Support connecting to host server, external RAID controller and daisy chain.

Quanta JB9 (M4600H) Firmware Feature (3/3)

- SCSI Commands Support
- SCSI INQUIRY(12h), TEST UNIT READY(00h), RECEIVE DIAGNOSTIC RESULTS(1Ch), SEND DIAGNOSTIC(1Dh) commands support
- SES Command and Pages Support
- SES Supported Diagnostics(00h), Configuration(01h), Enclosure Control/Status (02h), String In/Out(04h), Threshold In/Out(05h), Device Element Status(0Ah), EMM System Event Log Retrieval(80h), Power Cycle SATA HDD(12h) pages support
- SMP, SSP and STP Protocol Support
- Zoning