



Pioneer DreamMicro

Blade Server – **S75 Series**

Advantage of Blade Server?

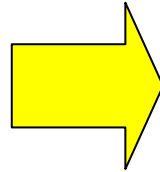
Easy Maintenance – Hot Swappable

High Availability – Redundant Architecture

Space Saving – Cableless



Rack Mount Server



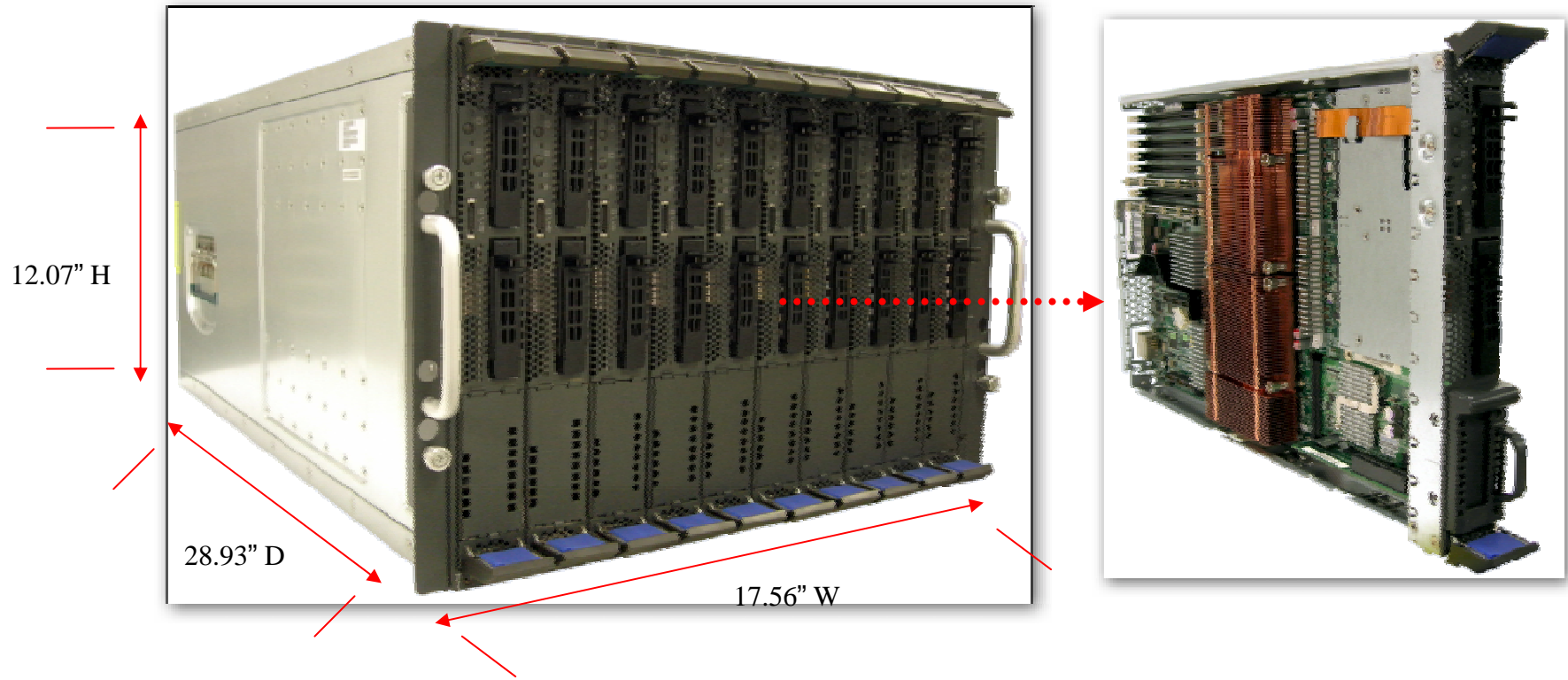
Blade Server

Pioneer Blade Server



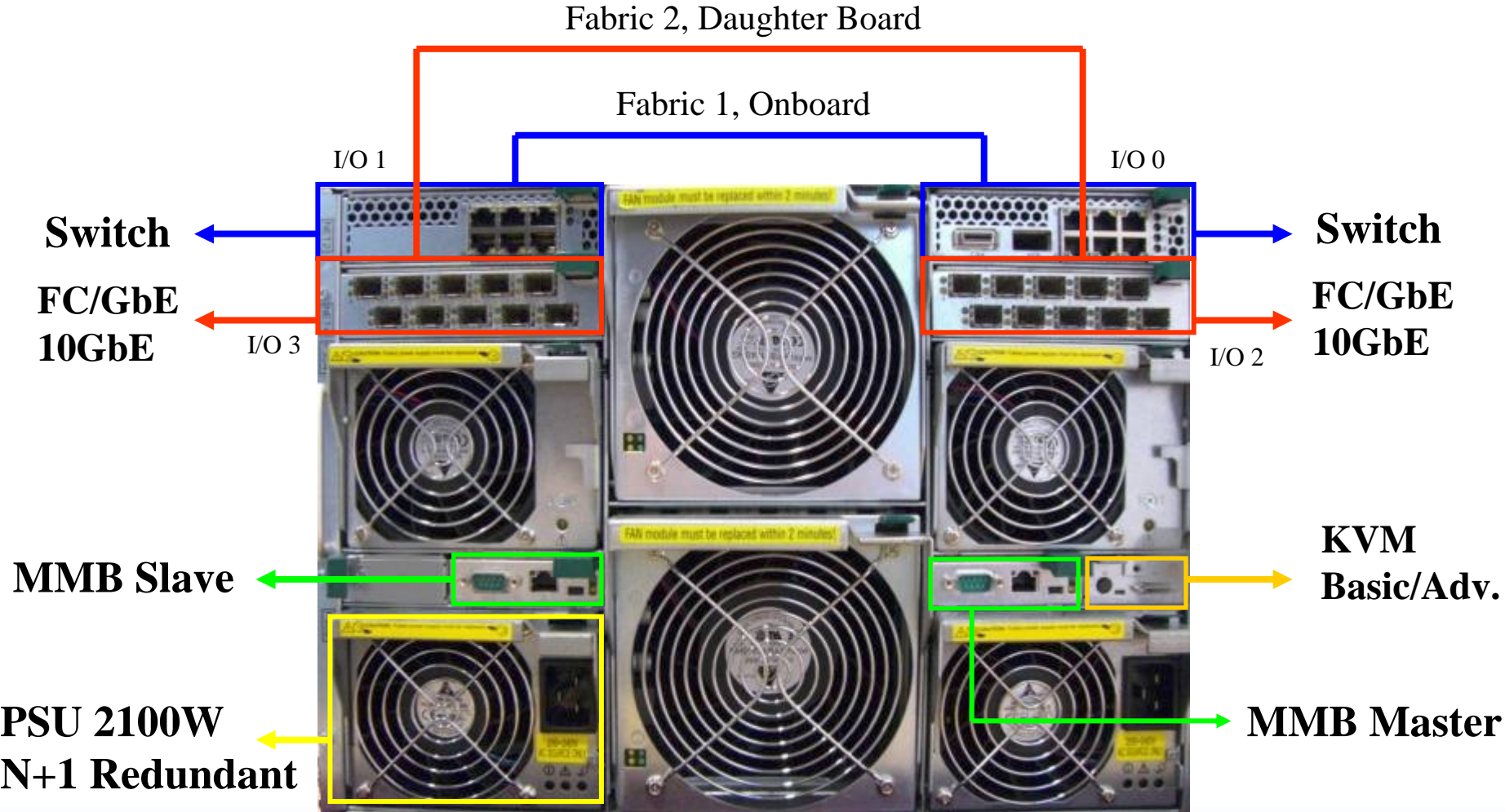
- 7U chassis
- 10 Server Blades
 - Intel Server Blade
- No Single Point Failure
 - Redundant Power, Cooling, CMM, I/O, etc
- Multiple I/O Technologies Support
 - GbE, FC, SAS Expander
 - Switch and Pass-Through Solutions
- Storage Solutions
 - SAN, NAS, DAS
- Integrated KVM Switch
 - Entry KVM,
 - Adv KVM (G01) –KVM over-IP
- Out-Of-Band Chassis Management
- Power Supply Unit: N+1 (2100W for each)
- Mid-plane: 100% Passive

Front View



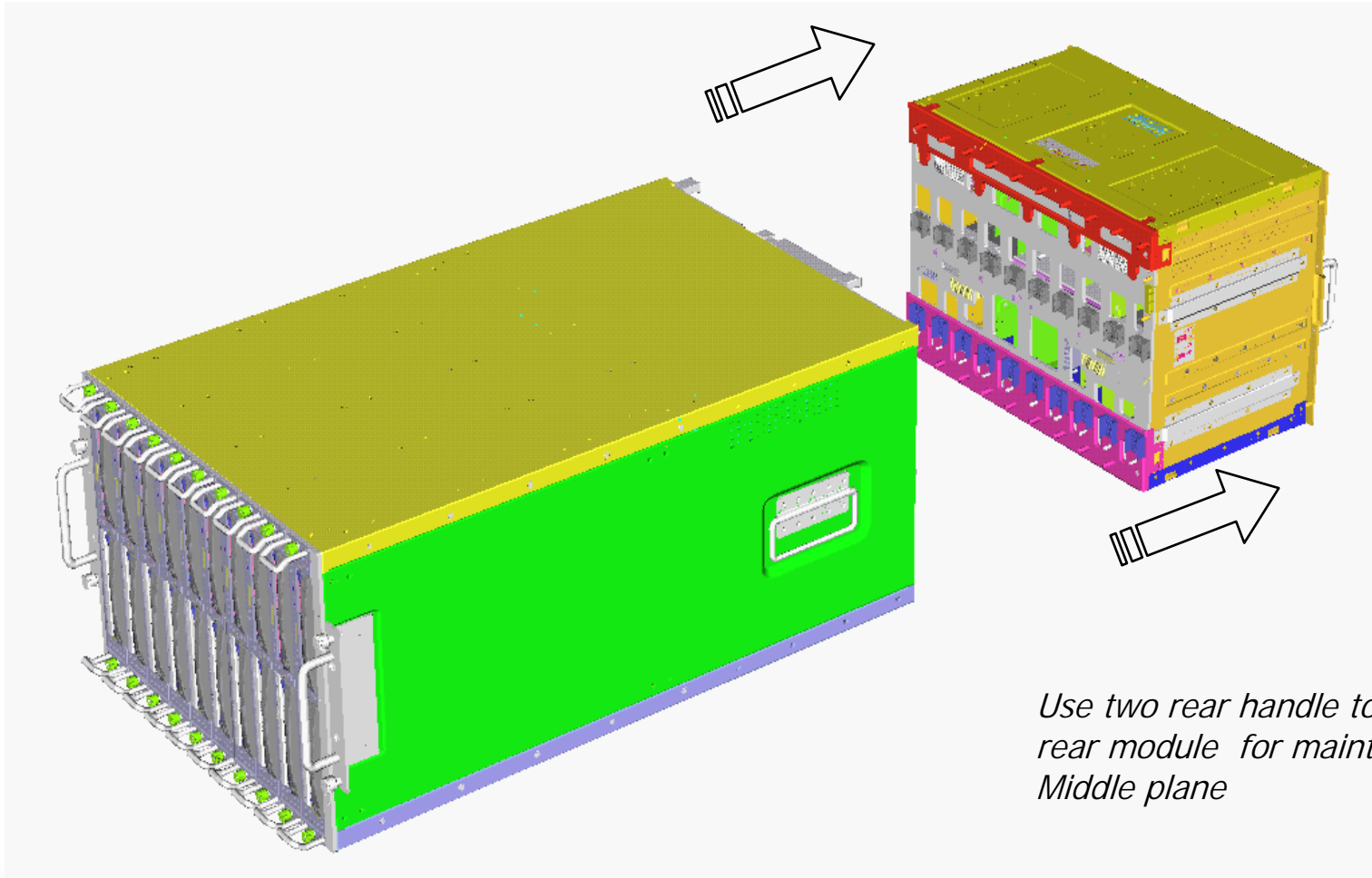
One System Supports Up to **10** Server Blades

Rear View



Structure

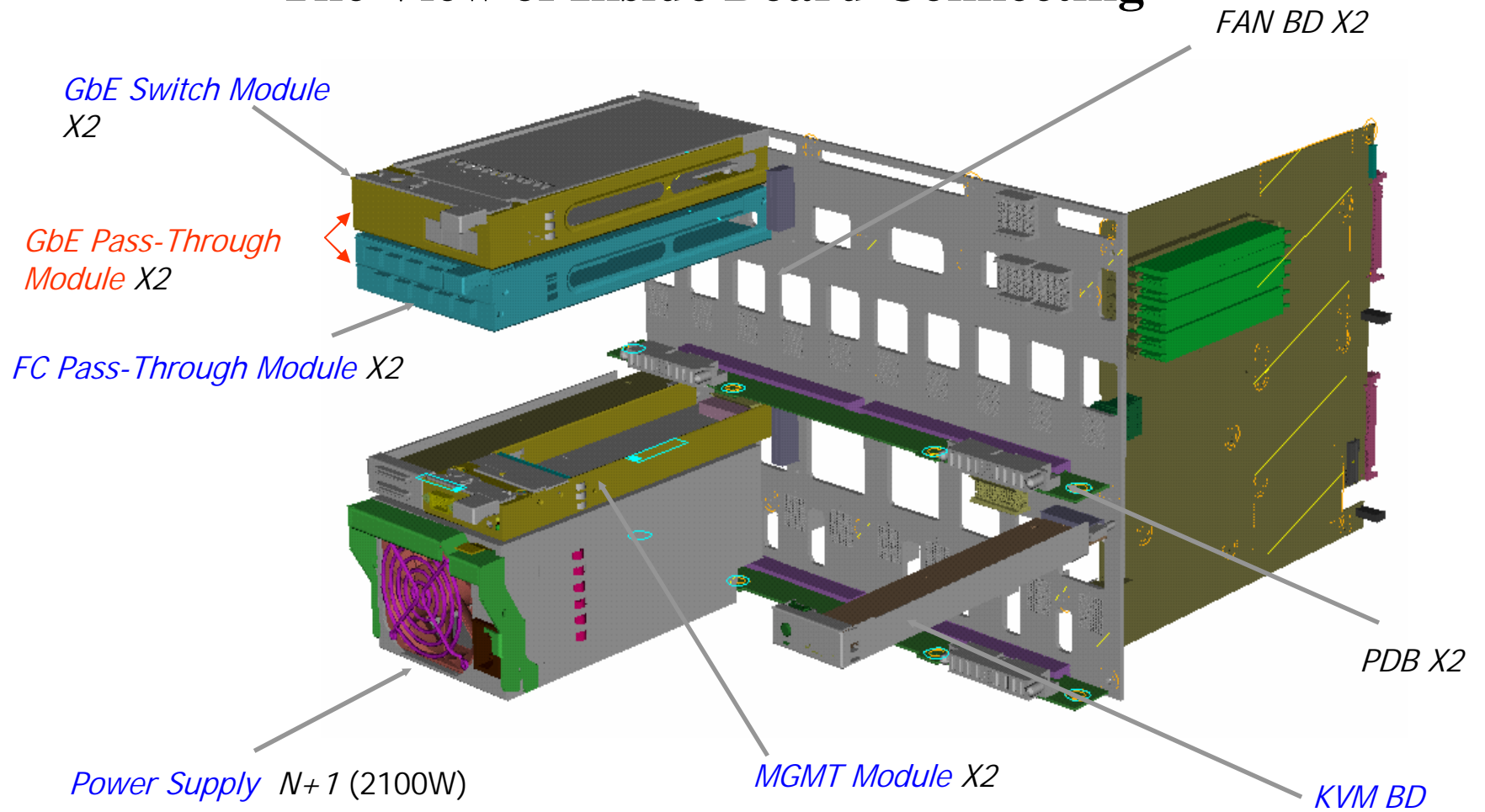
The View of Chassis Side Handle



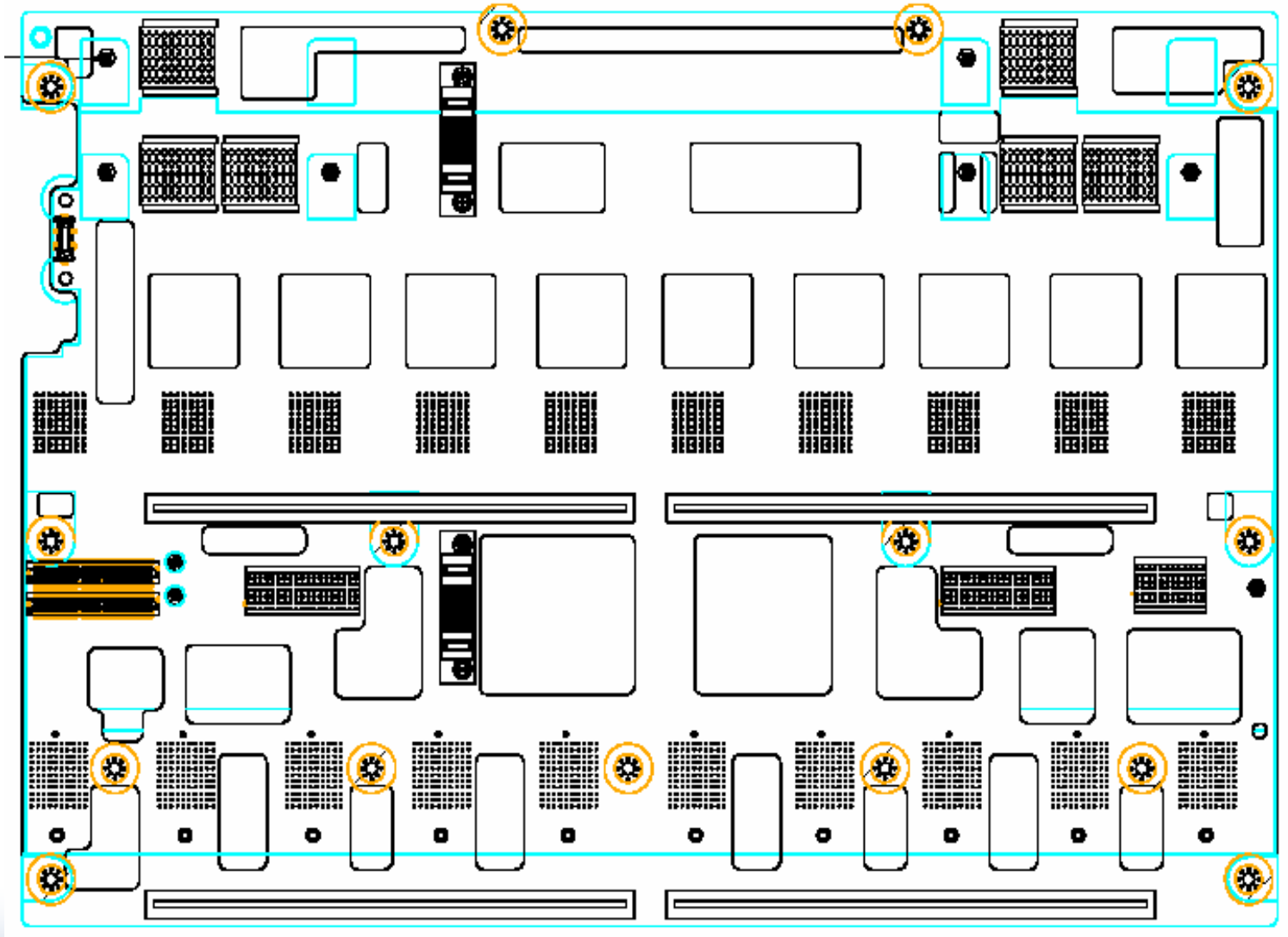
Use two rear handle to remove rear module for maintain Middle plane

Structure

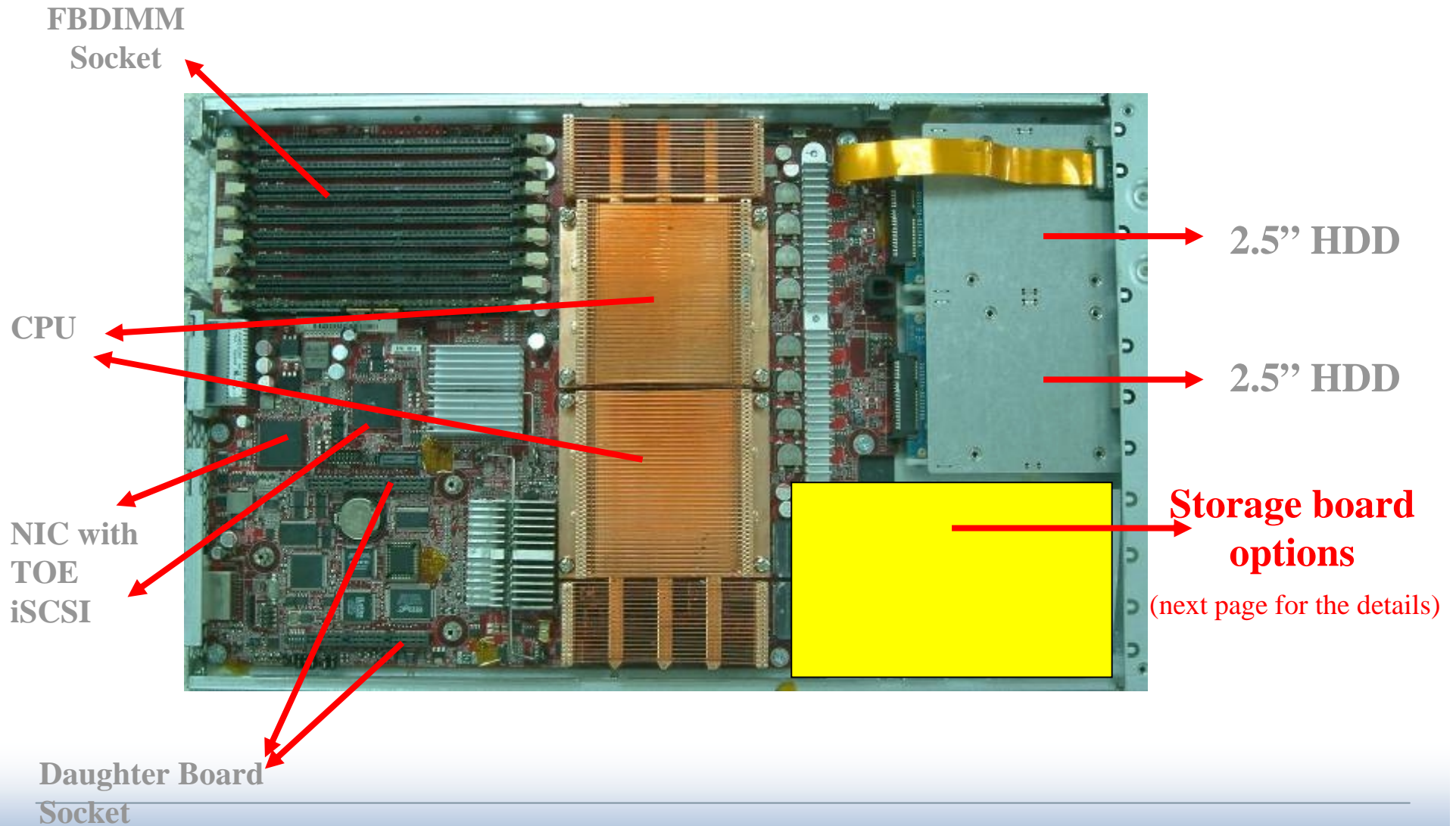
The View of Inside Board Connecting



Mid-plane Placement



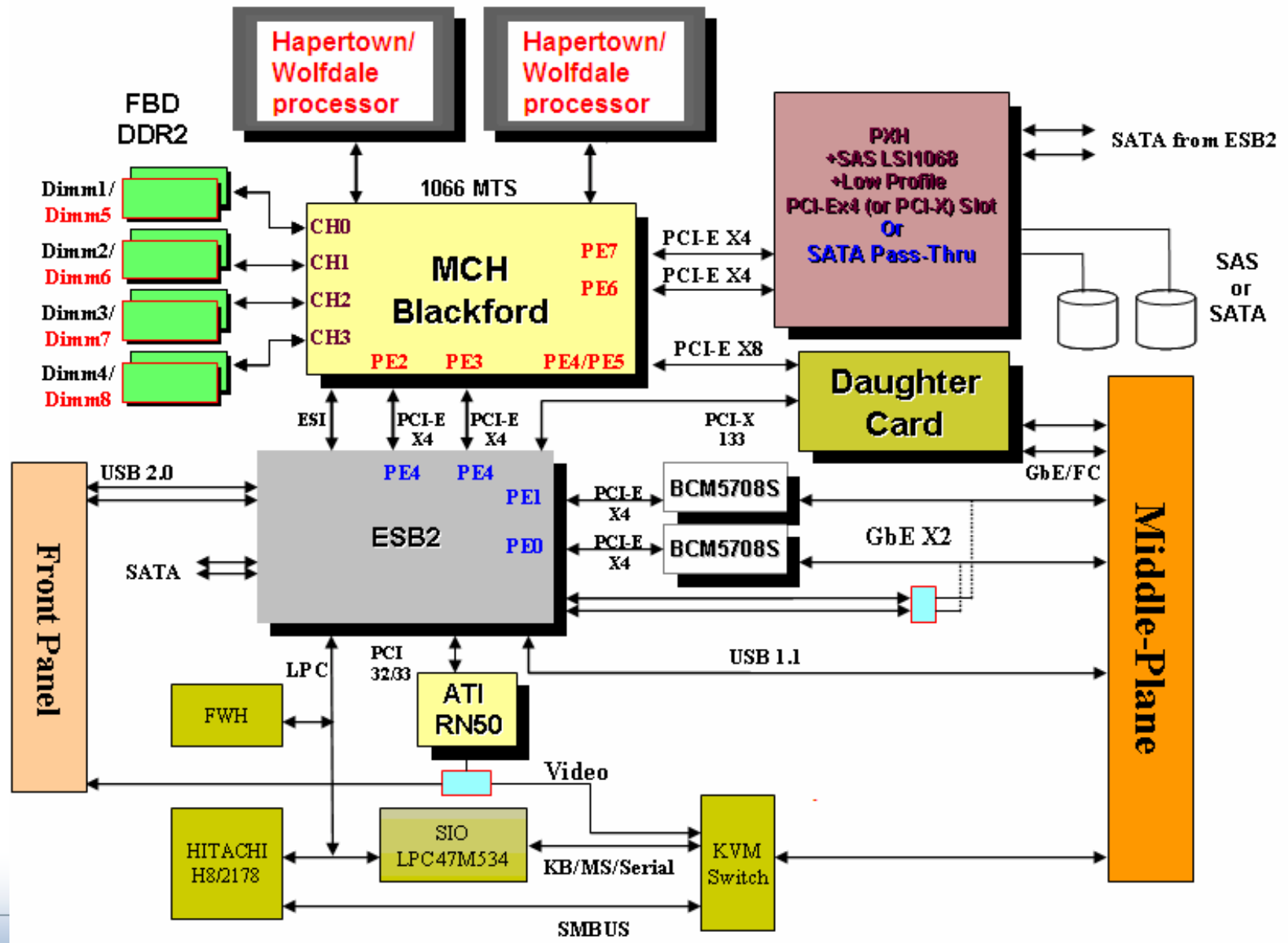
S75A/B Server Blade



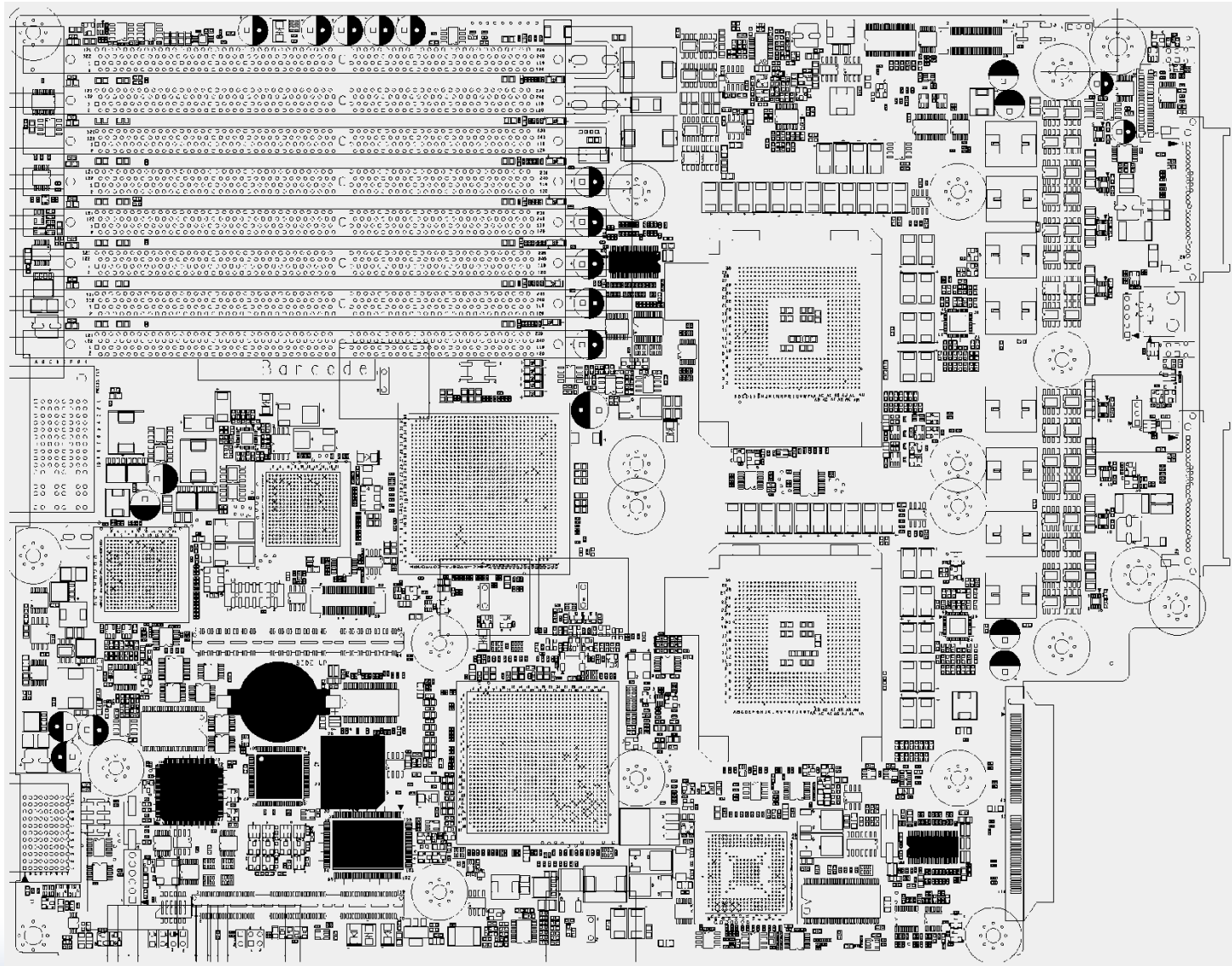
S75B CPU Blade Specification

	Description
CPU	Intel Xeon Dempsey, Woodcrest, Clovertown, Wolfdale-DP, Harpertown LGA771
Chipset	Intel 5000P (Blackford +ESB2)
PCI Slots	One PCI-E (x4) or One PCI-X on front side
Daughter Card	Two PCI-E (x4) or One PCI-X
MB Form Factor	13.1 inches X 10.5 inches, 10 Layers
VGA	ATI RN50 w/ VRAM 16MB
System Memory	8 x DDR2-533/667 FBD (Up to 32GB)
I/O Port (to Mid-Plane)	Two Serdes LAN, VGA, COM, One USB, Two PS2
I/O Port (Front)	Two USB2.0, One VGA, Four LED(NIC, Power, Event, ID), Two SW (Power, ID)
GbE LOM	Two BCM5708S
Drive Controller	Two SATAII Ports by ESB2 or Two SAS Ports by SAS board (LSI1068)
BMC Controller	H8 (HD64F2168)
Power Supply	From Rear side Redundancy Power Supply (Max 420W/Per Blade)
RAID Function Support	Intel SW RAID0,1 (for SATA), LSI SW RAID0,1(for SAS)
HDD	Two SAS/SATA 3.0G
RoHS Compliance	Yes

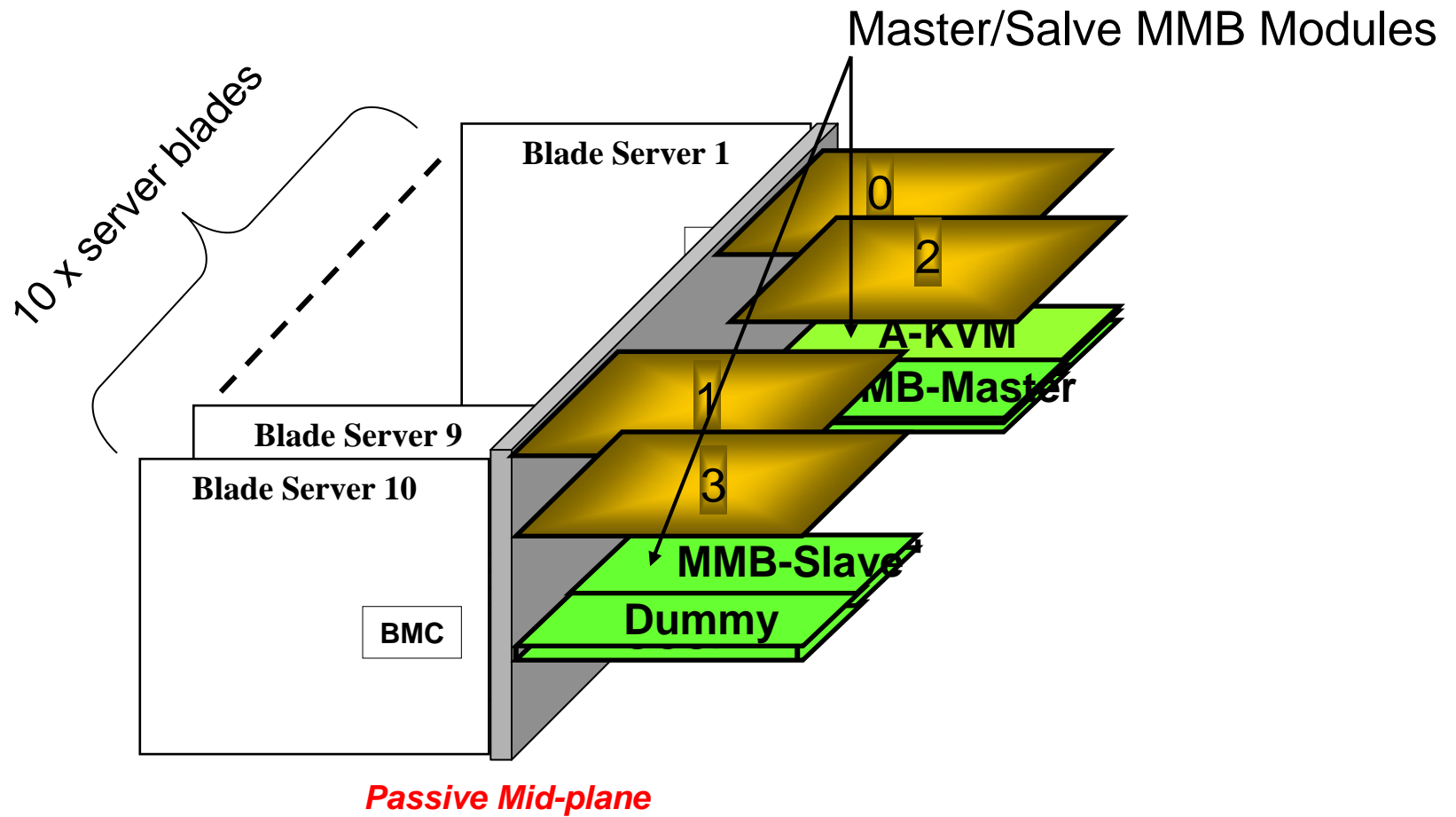
S75A/B CPU Blade Block Diagram



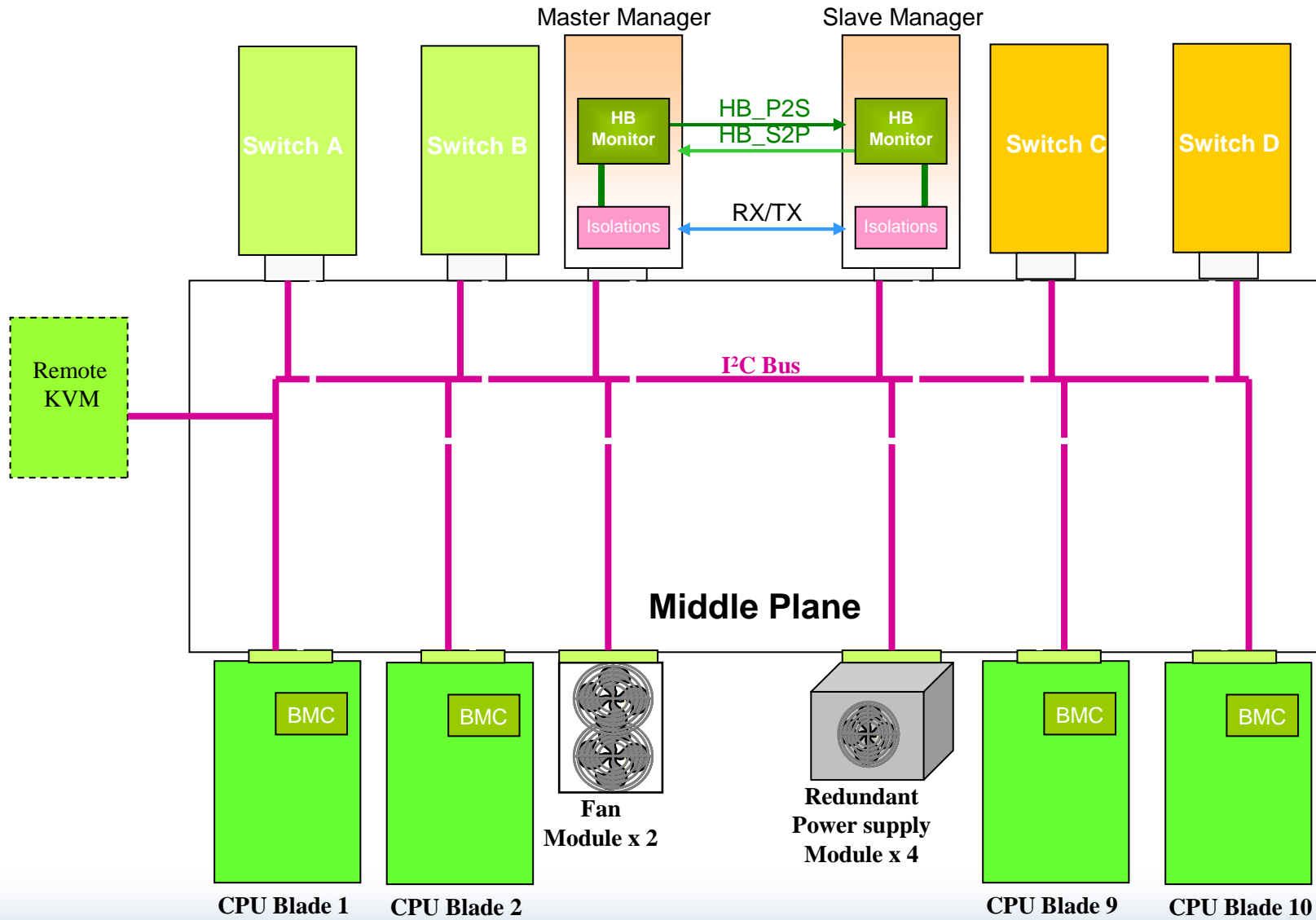
S75A/B CPU Blade Placement



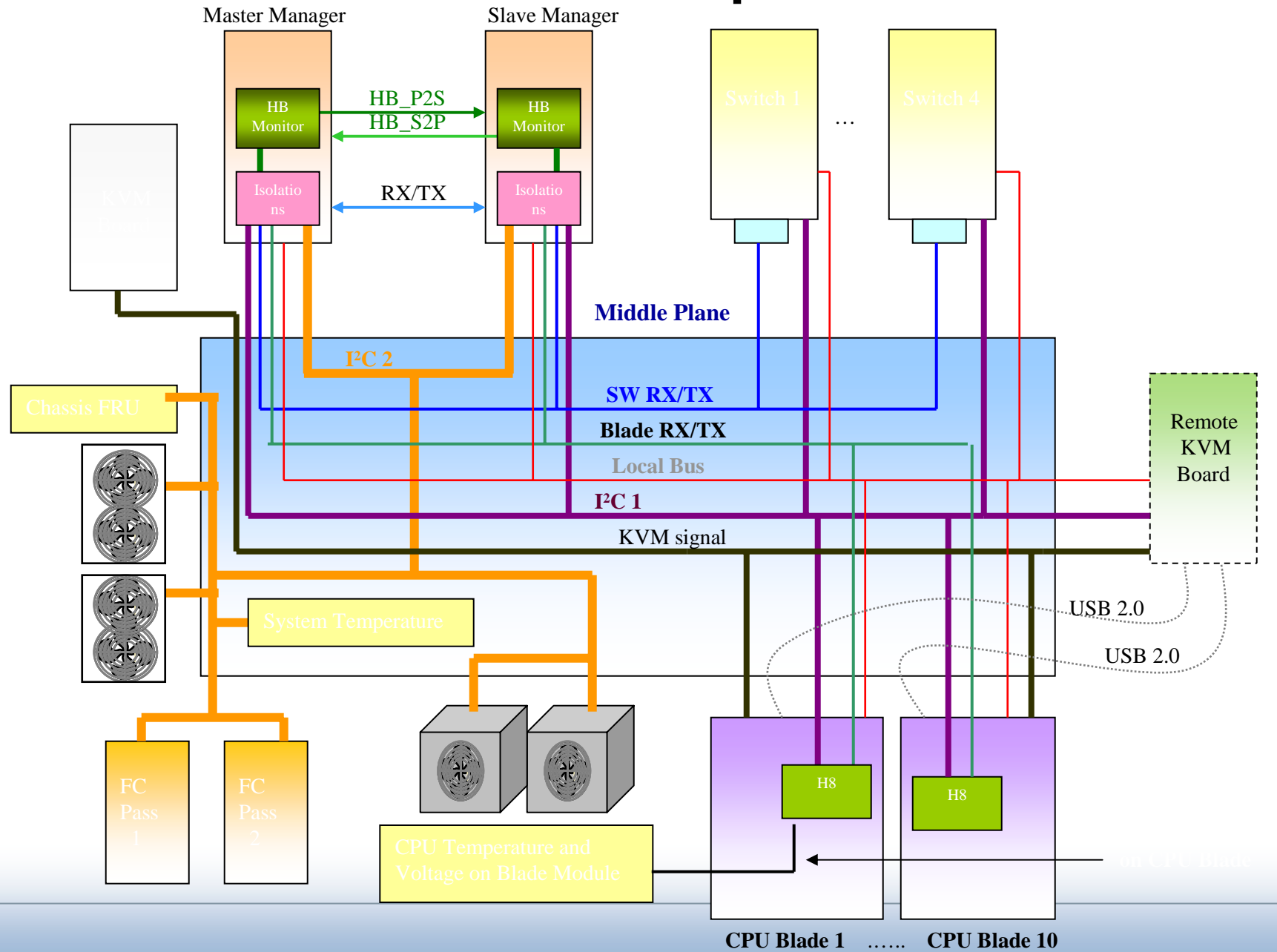
Redundancy MMB and KVM Module



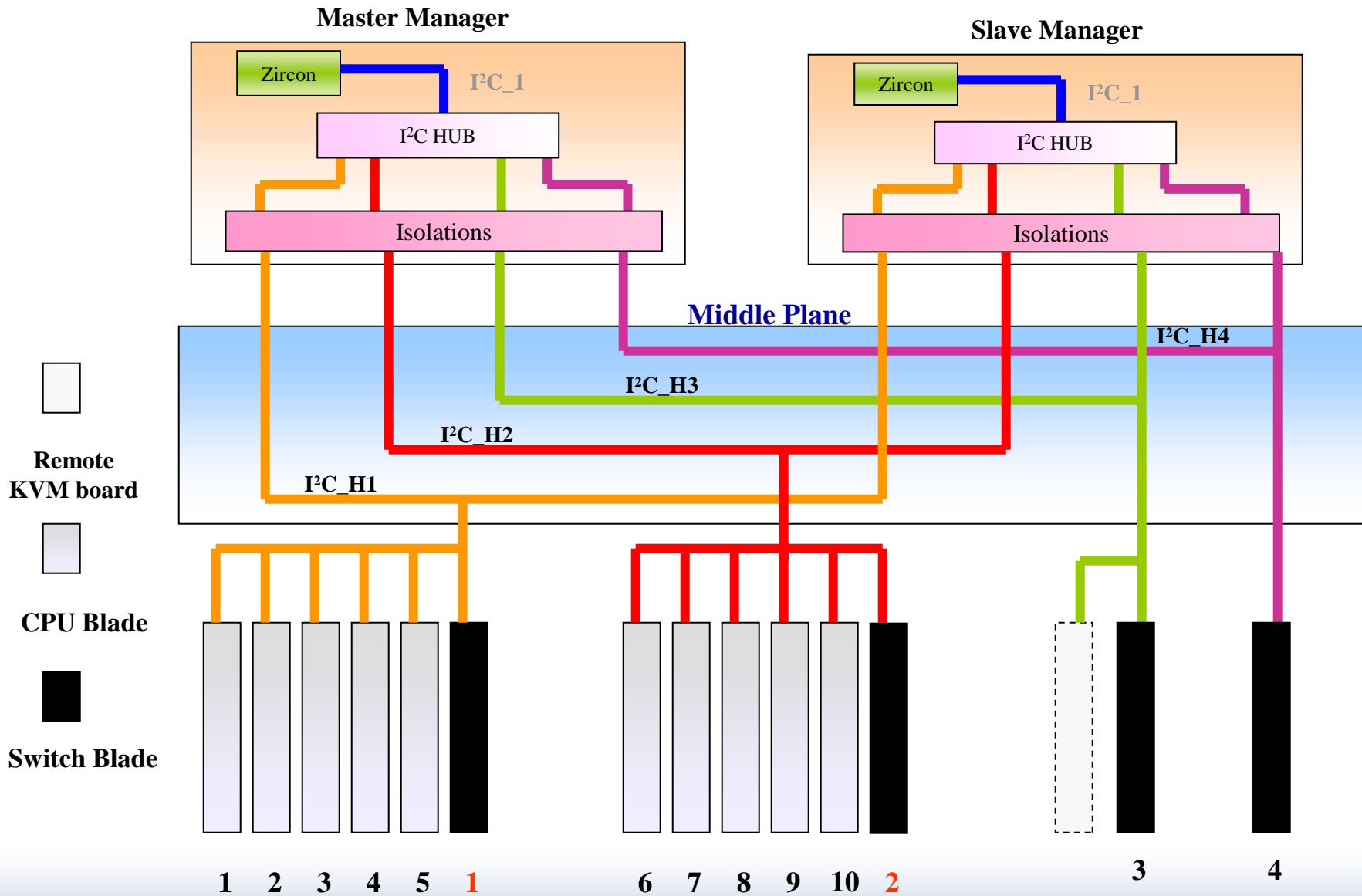
MMB1/2 Interconnect



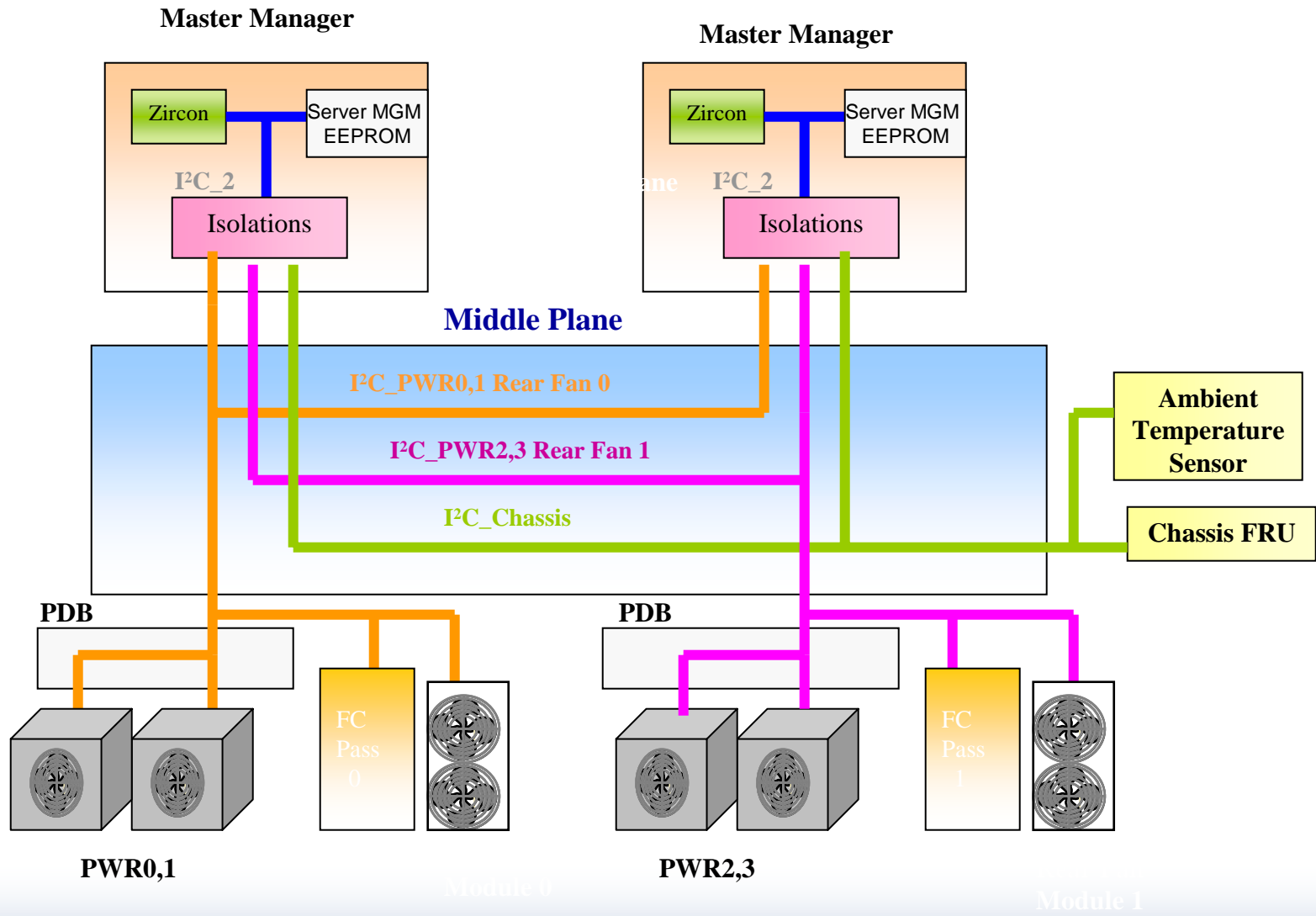
Architecture for Low Speed Interconnect



Block Diagram of I²C Channel 1



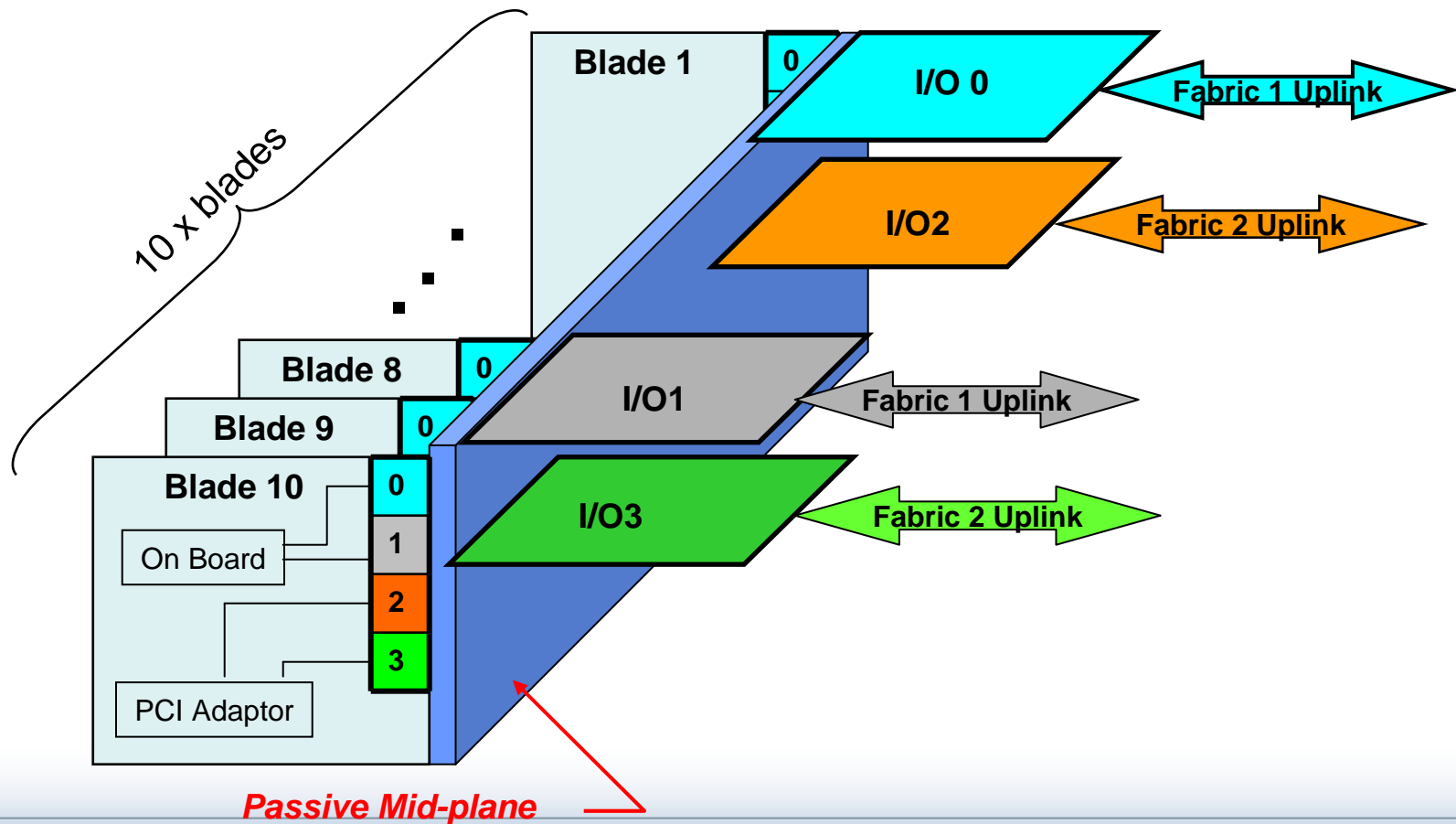
Block Diagram of I²C Channel 2



Dual Redundant Fabrics

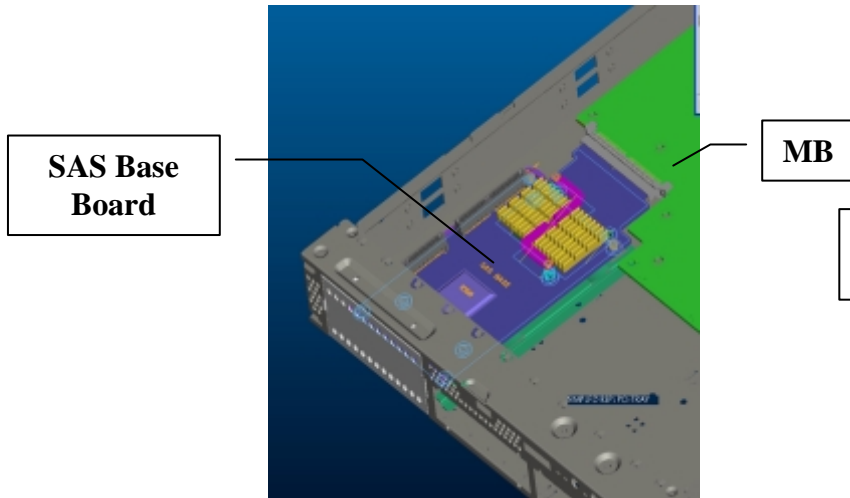
Fabric 1 : From On-Board to I/O 0 and I/O 1 Slots

Fabric 2 : From Optional Daughter Card to I/O 2 and I/O 3 Slots

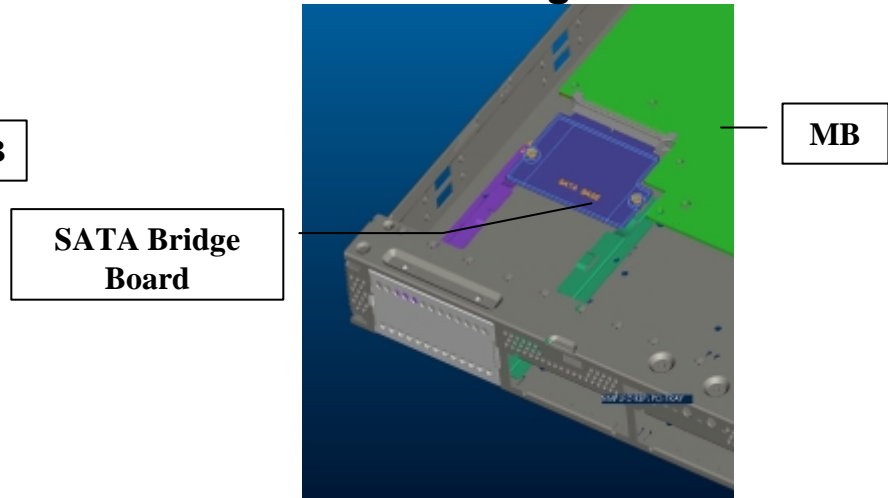


Front I/O Modules (optional)

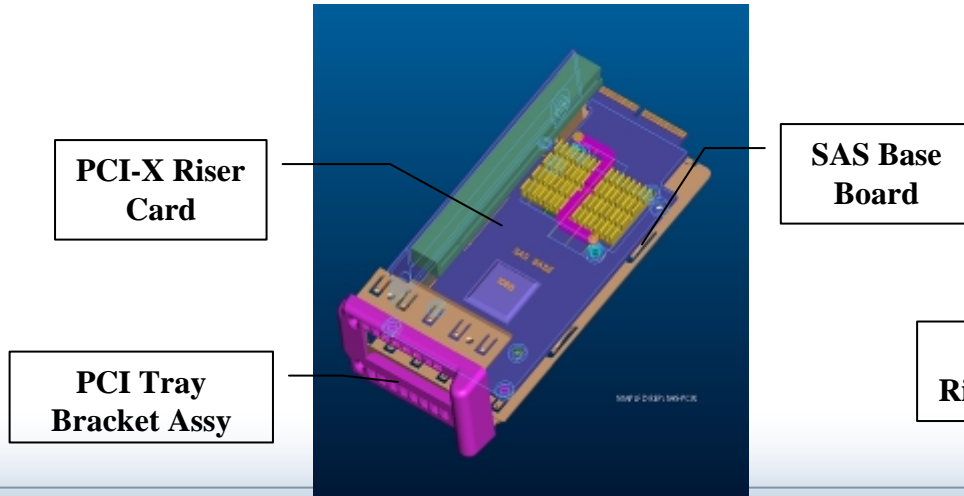
SAS Base Board



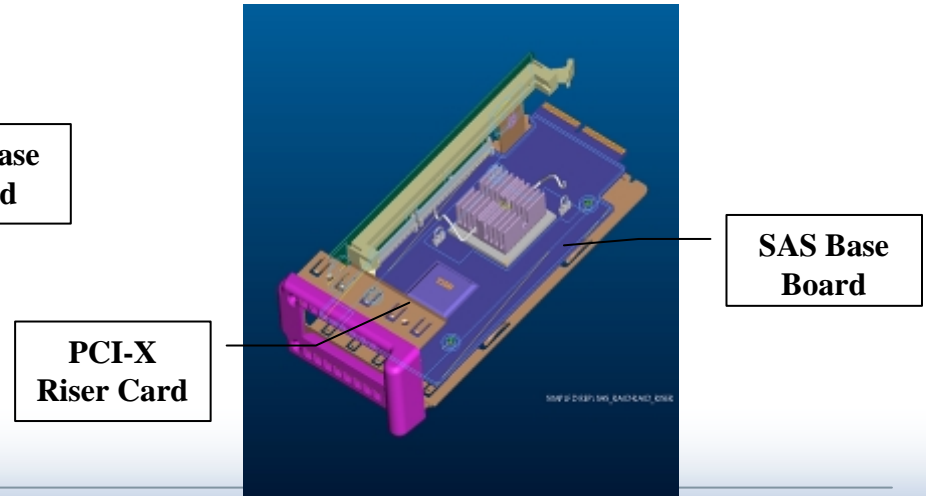
SATA Bridge Board



SAS Base Board + PCI-X Riser



SAS Base Board + PCI-E Riser



Rear I/O Modules (Optional)



Management Blade (MMB)

- Support Out-f-band Management Function
- External Interface Through 10/100 LAN or RS232

Basic KVM Module(K01)

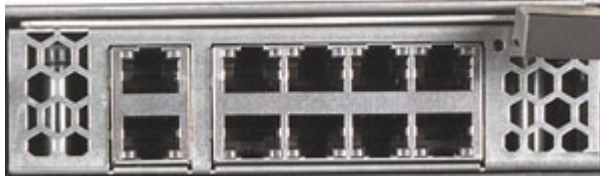
- KVM Direct Interface Through Y-cable

Advance KVM Module (G01)

- KVM over IP (10/100 LAN) Interface



Rear I/O Modules (Optional)

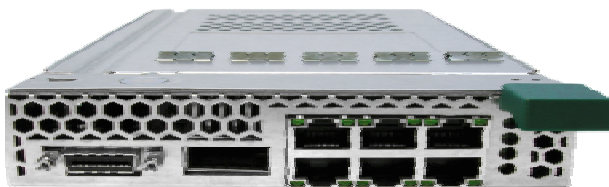


GbE Pass-Through Module

- 10-Channel Internal SerDes Interface
- 10-Channel External RJ45 Interface

FC Pass-Through Module

- 10-Channel Internal Interface
- 10 External SFP Interface



10Gb Lan port Switch

- 10-Channel Internal SerDes Interface
- 6-Channel External RJ45 Interface
- CX4 & XFP External 10GbE Interface

PCI Daughter Card (Optional)



Installed on Server board

- **Host Interface**

- One PCI-X 64-bit/133MHz bus
- One PCI-E (x8) or two PCI-E (x4) buses
- PCI-E Support 2.5Gb/s

- **I/O interface**

- Two I/O channels
 - I/O channel supports 3.125Gb/s
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Why Pioneer Blade Server?

Benefit

Good Cooling and Power System

Scalability

High MTBF - 100% Passive Mid-plane

Lower Cost and High Quality

KVM over IP Supported

No Interoperability Issue