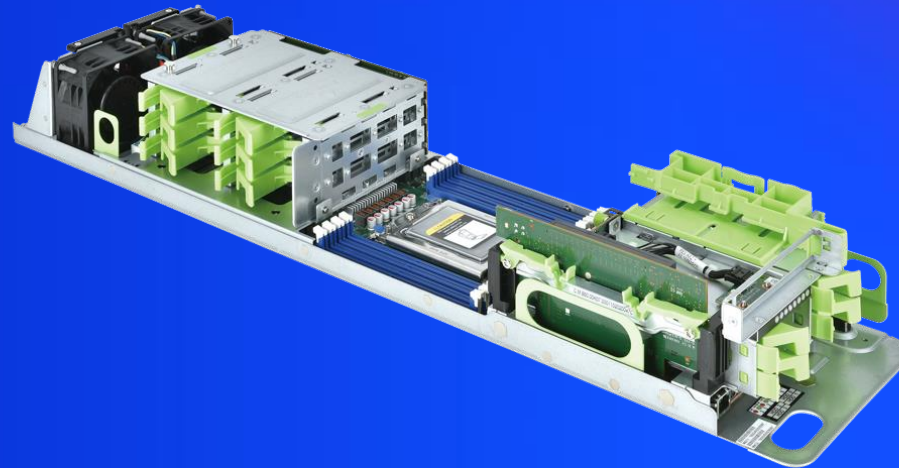




MiTAC AMD ROME 1P OCP Computing Sled

Code Name: Capri (E8020)



Vince Chen, Product Marketing Manager, MiTAC
Version: 02 (Date: 2021/1/27)

Product Overview

Performance

- 64C/128T CPU support
- 128 PCIe Gen4 Lane

Flexibility and capacity

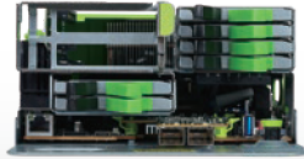
- Hybrid support on SATA/NVMe drive
- Support up to 10 NVMe 2.5" drive

Easy Maintenance

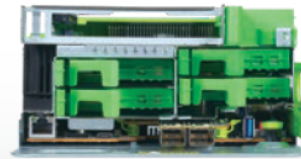
- Tool less and modularize design

Mass Production: 2020/7/31

Capri Spec.



Advanced



Ultra

	Advanced (E8020-A)	Ultra (E8020-U)
Processor	(1) AMD EPYC™ 7002 (Rome) / 7003 (Milan) Series Processor, TDP 225W (Rome)	
Memory	(8) DIMM slots, 8 channels • Up to 1,024 GB RDIMM/LRDIMM, DDR4 3200 MT/s	
PCIe Extension	(2) HHHL PCIe Gen4 x16	(1) FHHL PCIe Gen4 x16
Boot Drive (for OS)	80/110mm M.2 (SATA/PCIe Gen3 x4)	
Storage Extension - Front	(6) 2.5" 7mm SATA SSD	(4) 2.5" U.2 SSD (Hot Plug) (1) 2.5" 7mm SATA SSD (optional) ^[1]
Rear PCIe Extension - Rear	(6) 2.5" U.2 SSD	
Mezzanine	(1) OCP NIC 2.0	
Management Port	(1) 1GbE RJ45, Intel i210, support NC-SI	
BMC	ASPEED AST2500 • Support IPMI 2.0 and DMTF Redfish® 1.7 (DSP0266 1.7.0 Specification and Redfish Schema 2019.1)	
Dimension	D28.5" x W6.9" x H3.5" (724 x 175 x 89mm)	
Power Supply	Centralized OCP power shelf (12V DC)	
OS Certification	VMWare • ESXi 6.7 U3 Red Hat® • RHEL 8.2.2	



ME Proposal

MiTAC OCP ESA Kit Applied for 19" Rack

19" EIA Rack
1RU=44.45mm

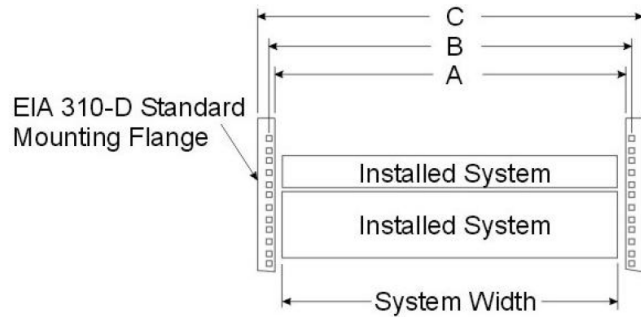
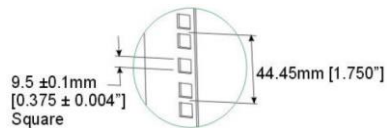
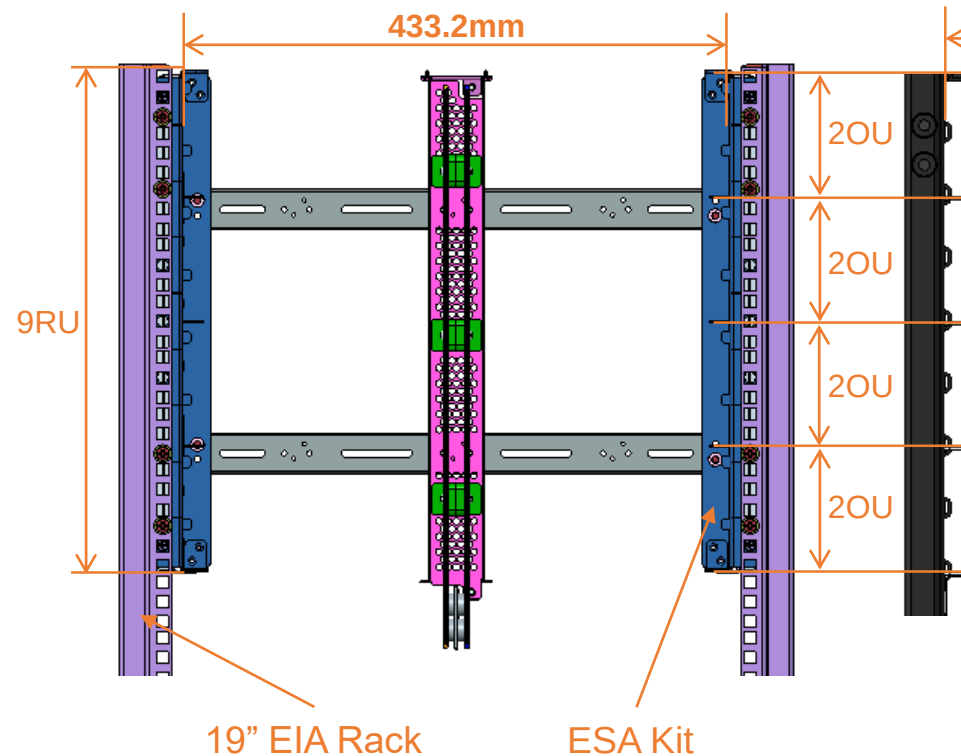


Table 2: EIA Standard Dimensions

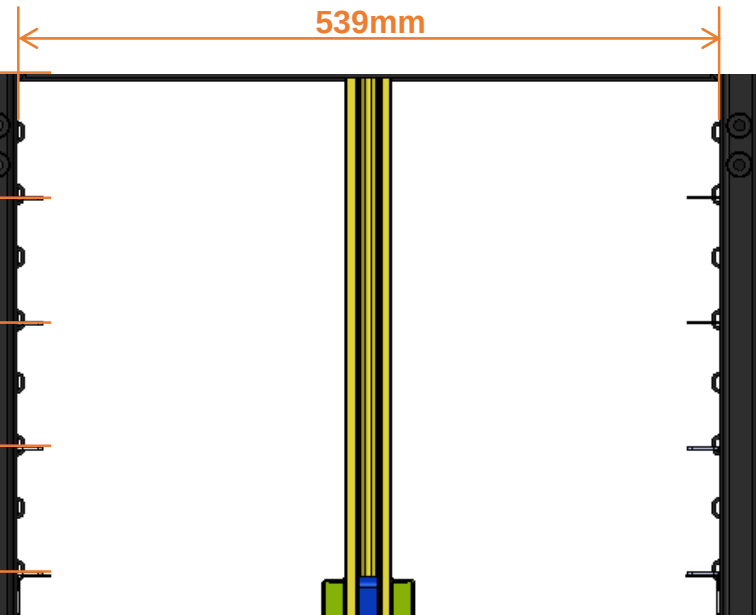
A = Front Cabinet Aperture	B = Hole-to-Hole Spacing	C = Panel / Bezel Aperture
450mm [17.717"] minimum	465mm [18.307"] nominal†	483.4mm [19.031"] minimum



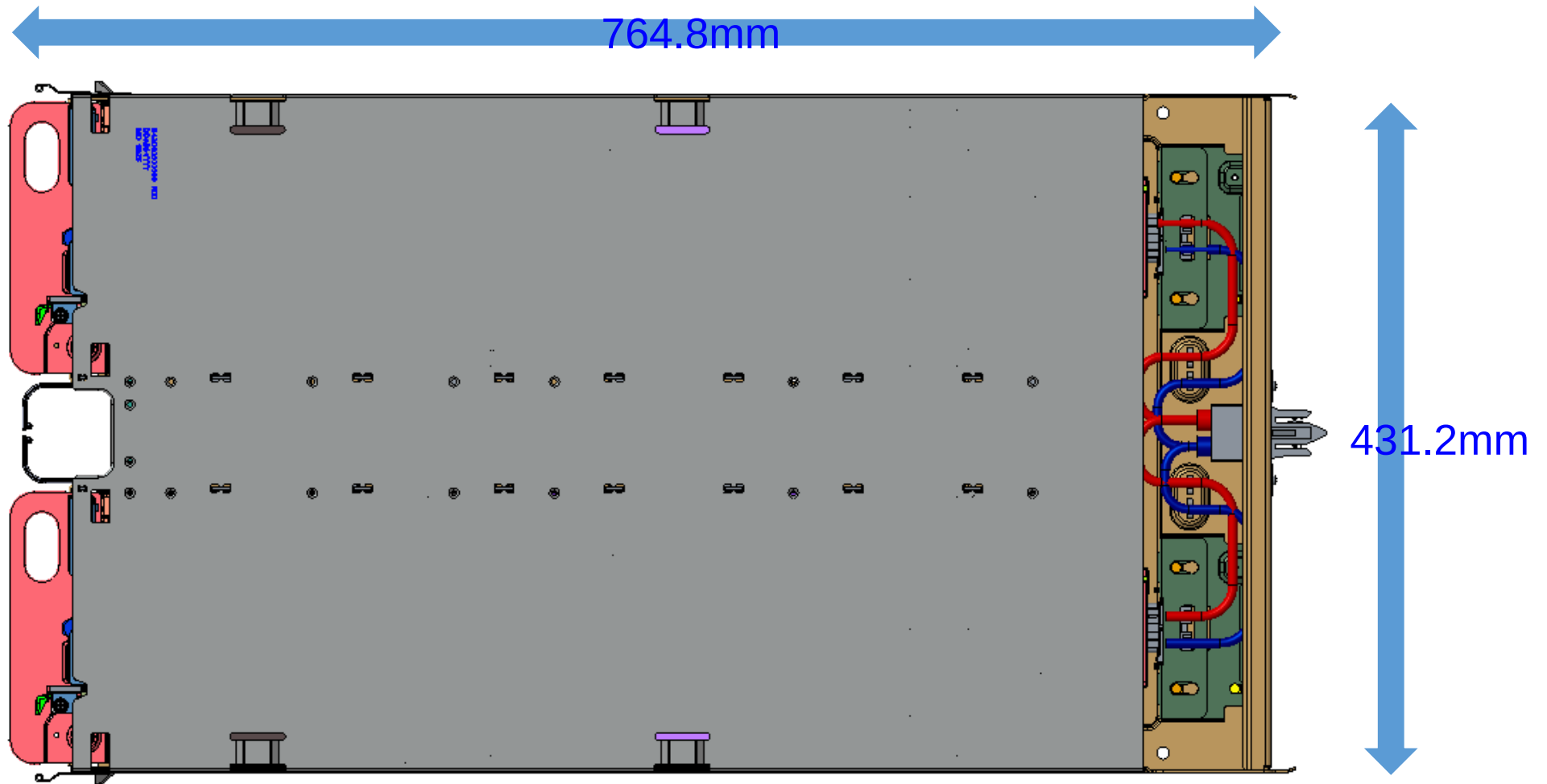
ESA Kit in 19" EIA Rack
1RU=44.45mm, 1OU=48mm



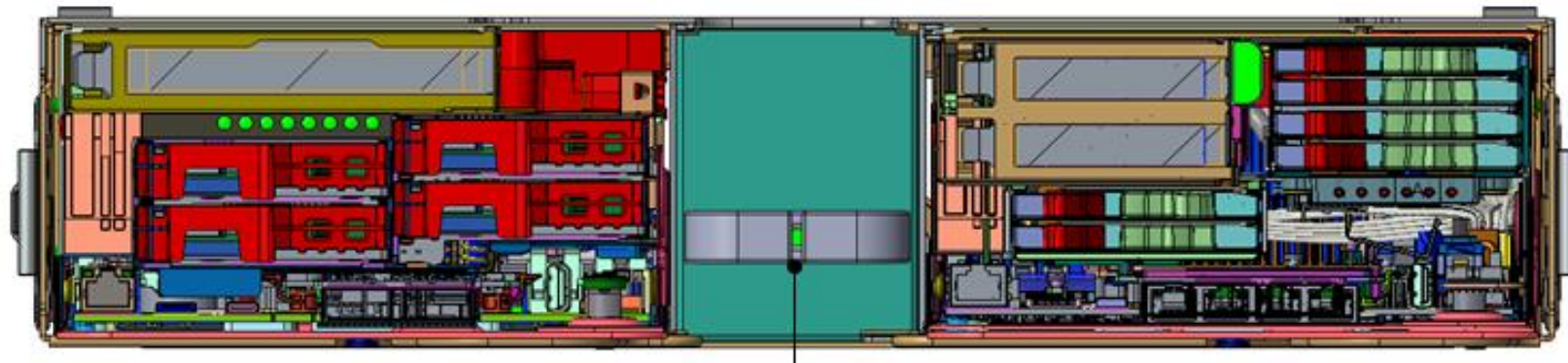
21" Open Rack (v2)
1OU=48mm



19" Shelf w/ 2 Sleds - Top View



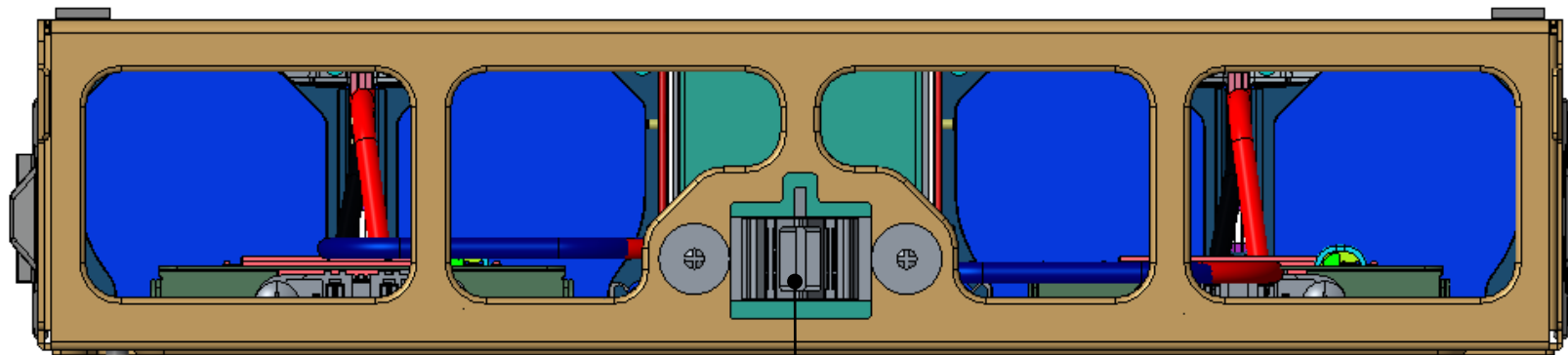
19" Shelf - Front / Rear View



Sled

cable clip

Sled



Bus Bar cable

95.2mm

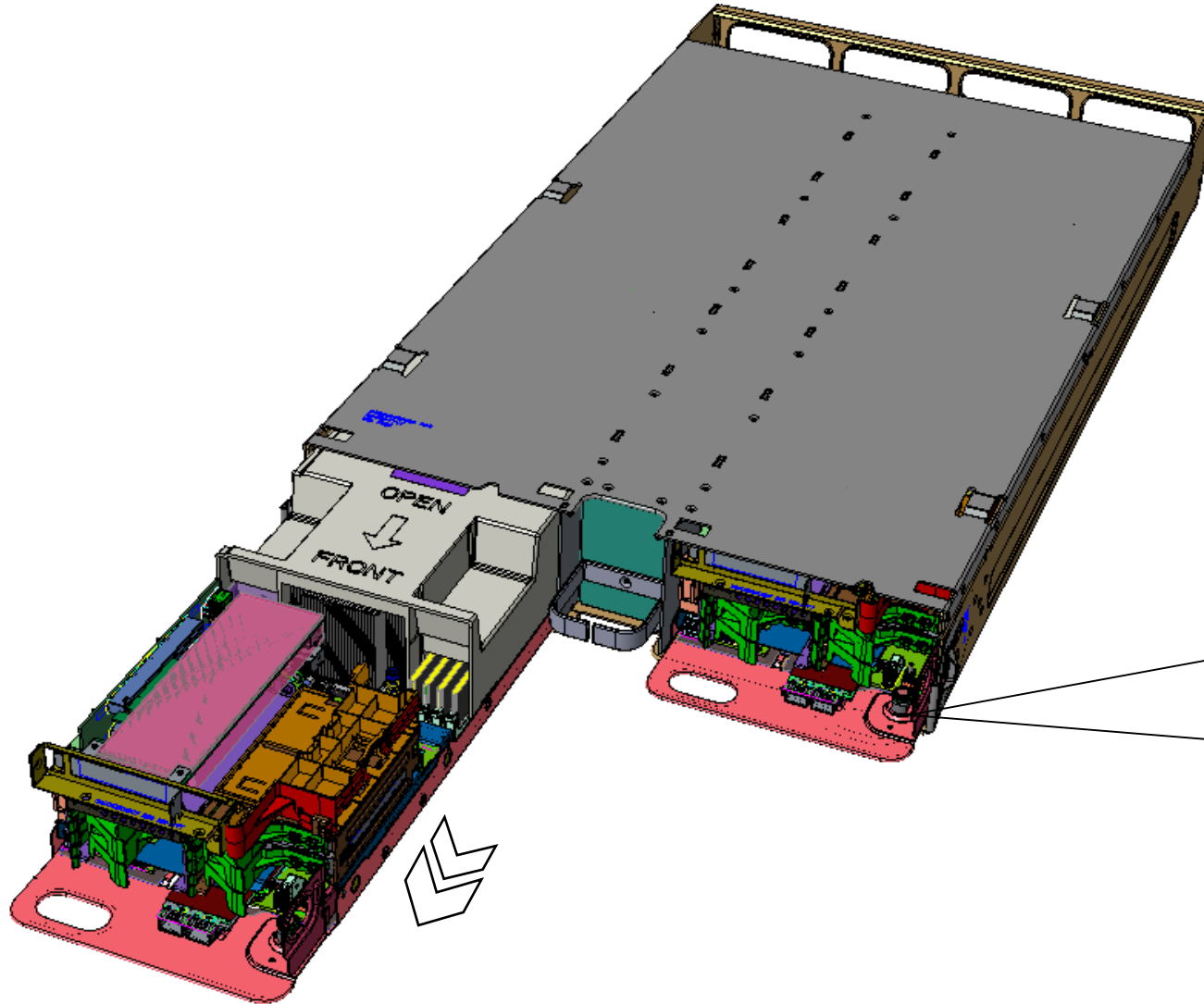


Empowering a Connected World of Infinite Possibilities

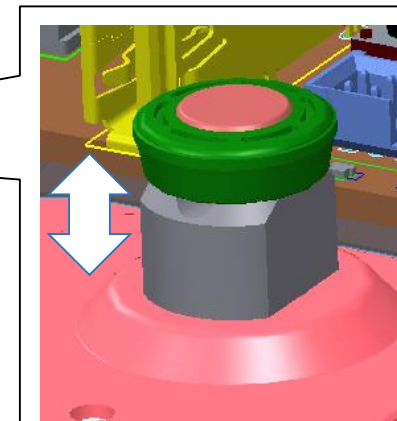
19" Shelf w/ Sled Photos



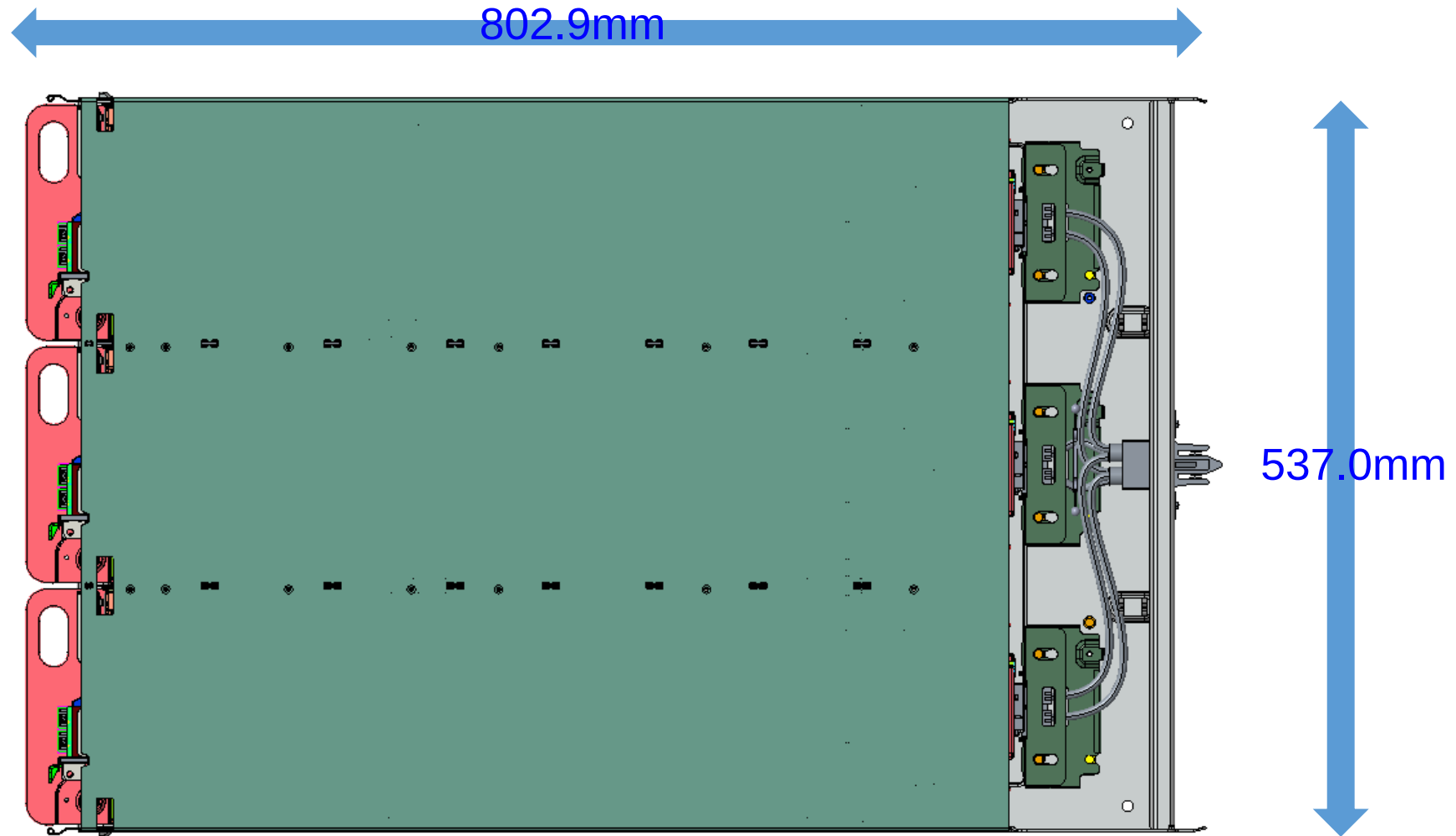
Sled Fit In 19" Shelf



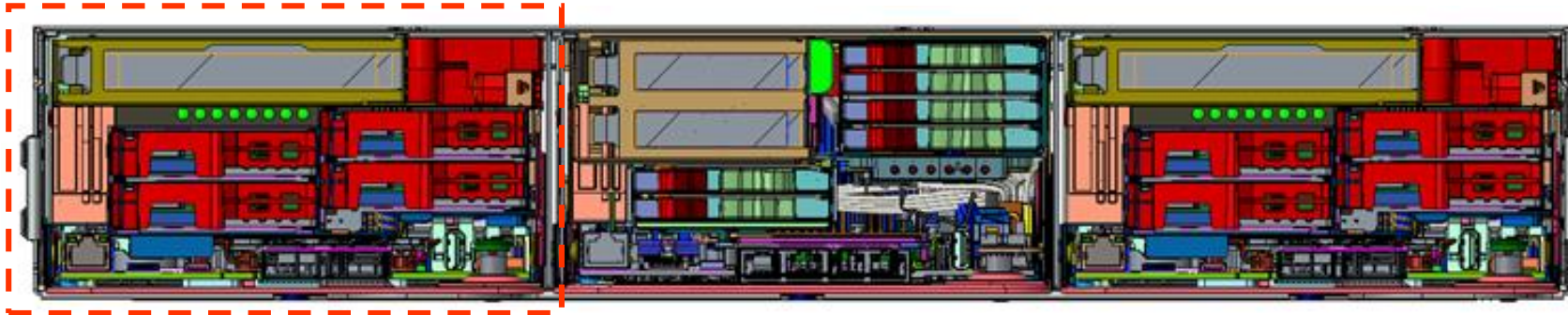
Release the plunger can
locked sled to the shelf



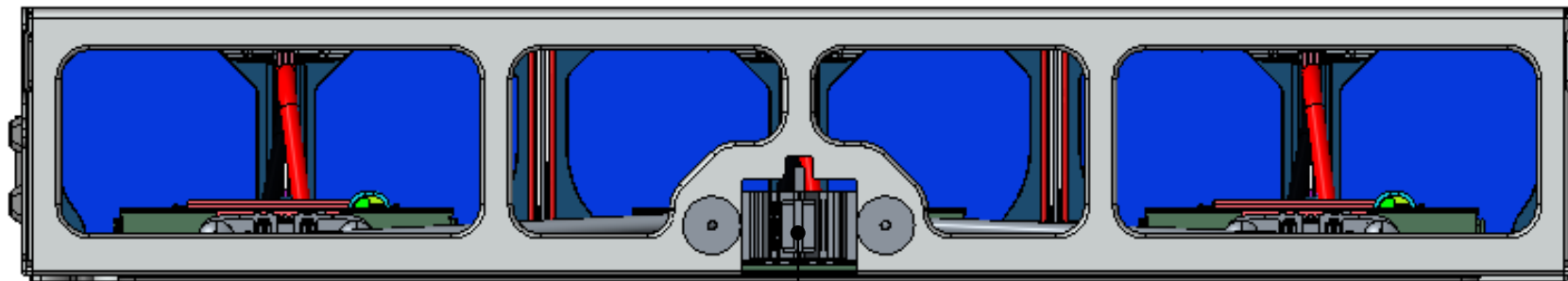
21" Shelf - Top View



21" Shelf w/ Sled Front / Rear View



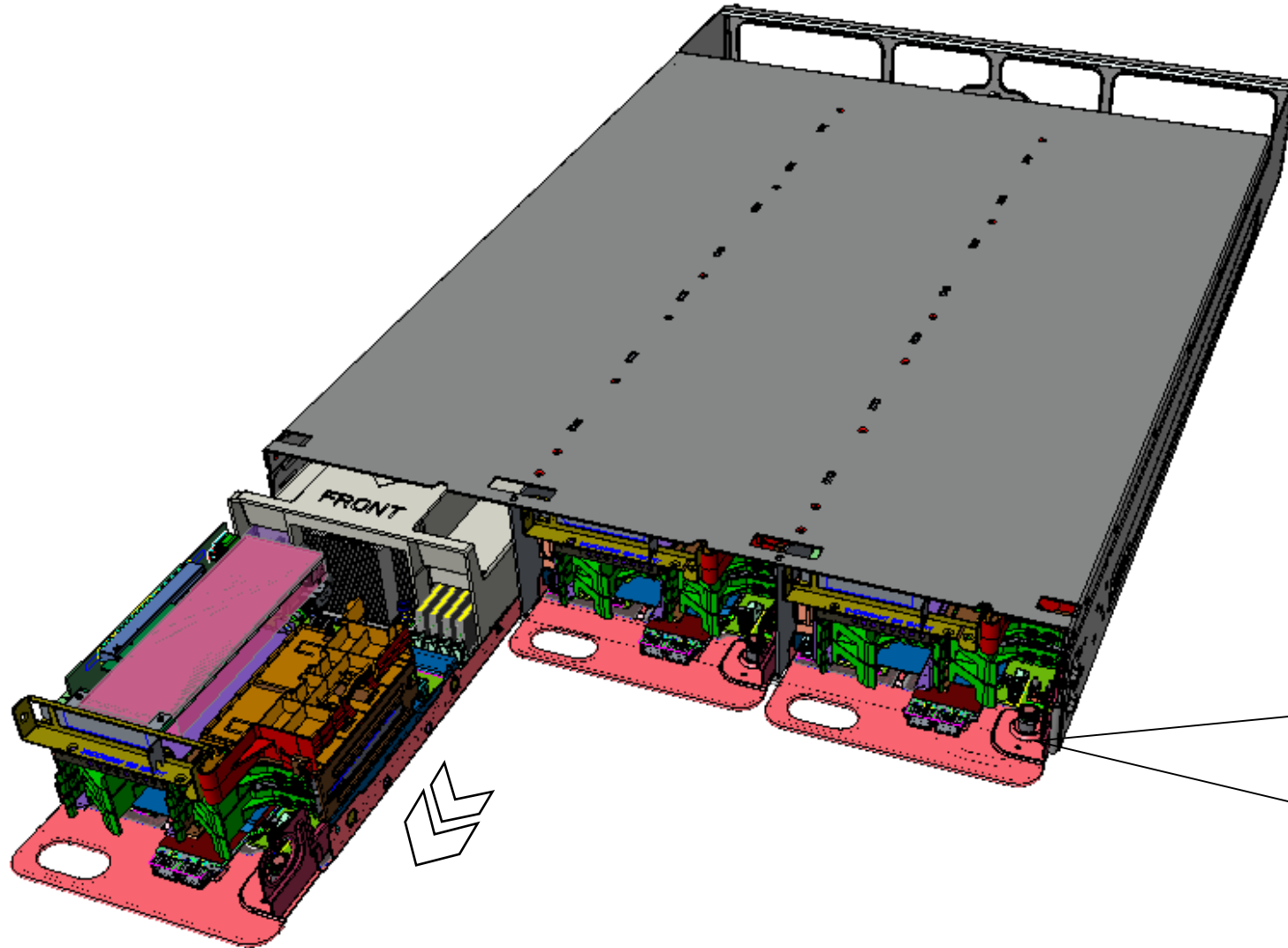
Sled x3



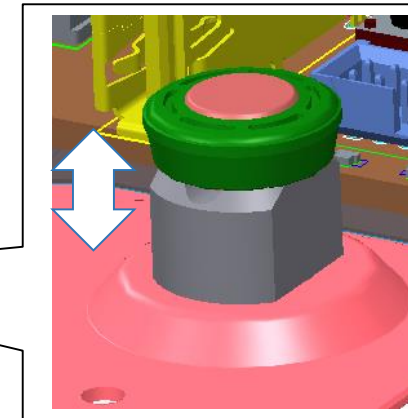
Bus Bar cable

95.2mm

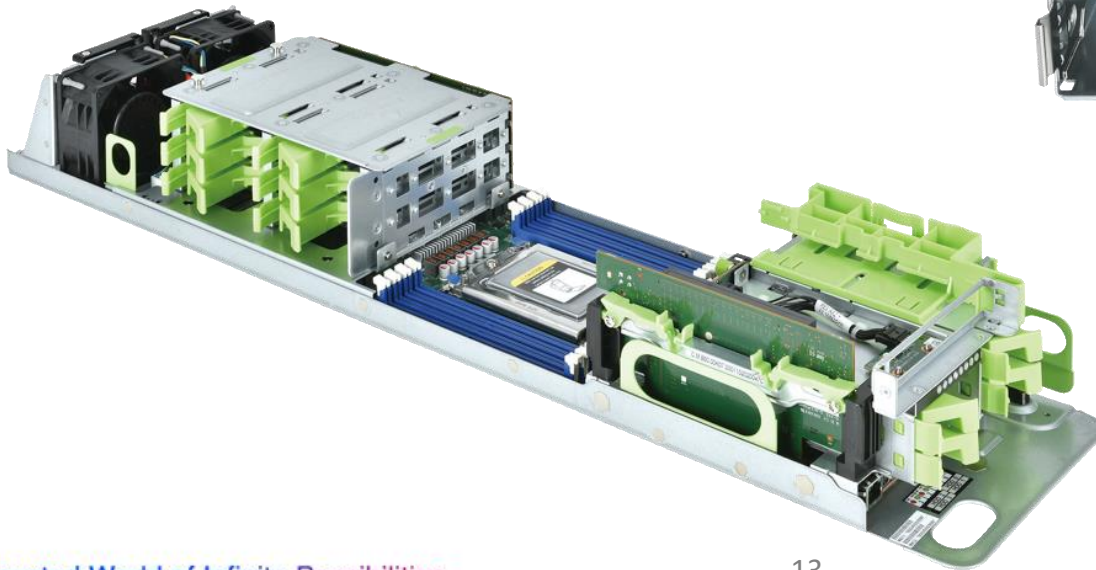
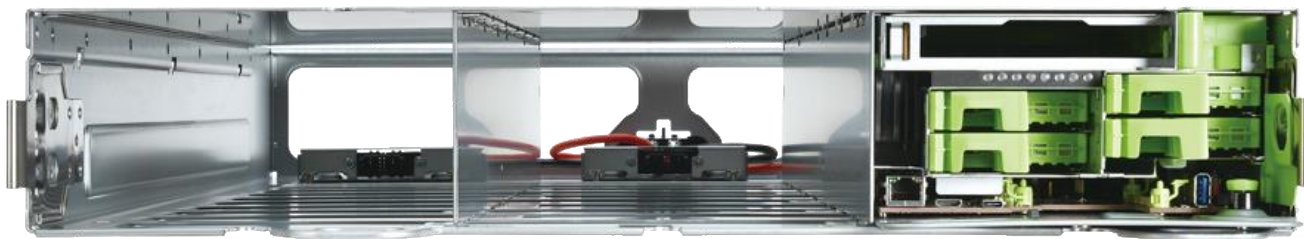
Sled Fit In 21" Shelf ISO View



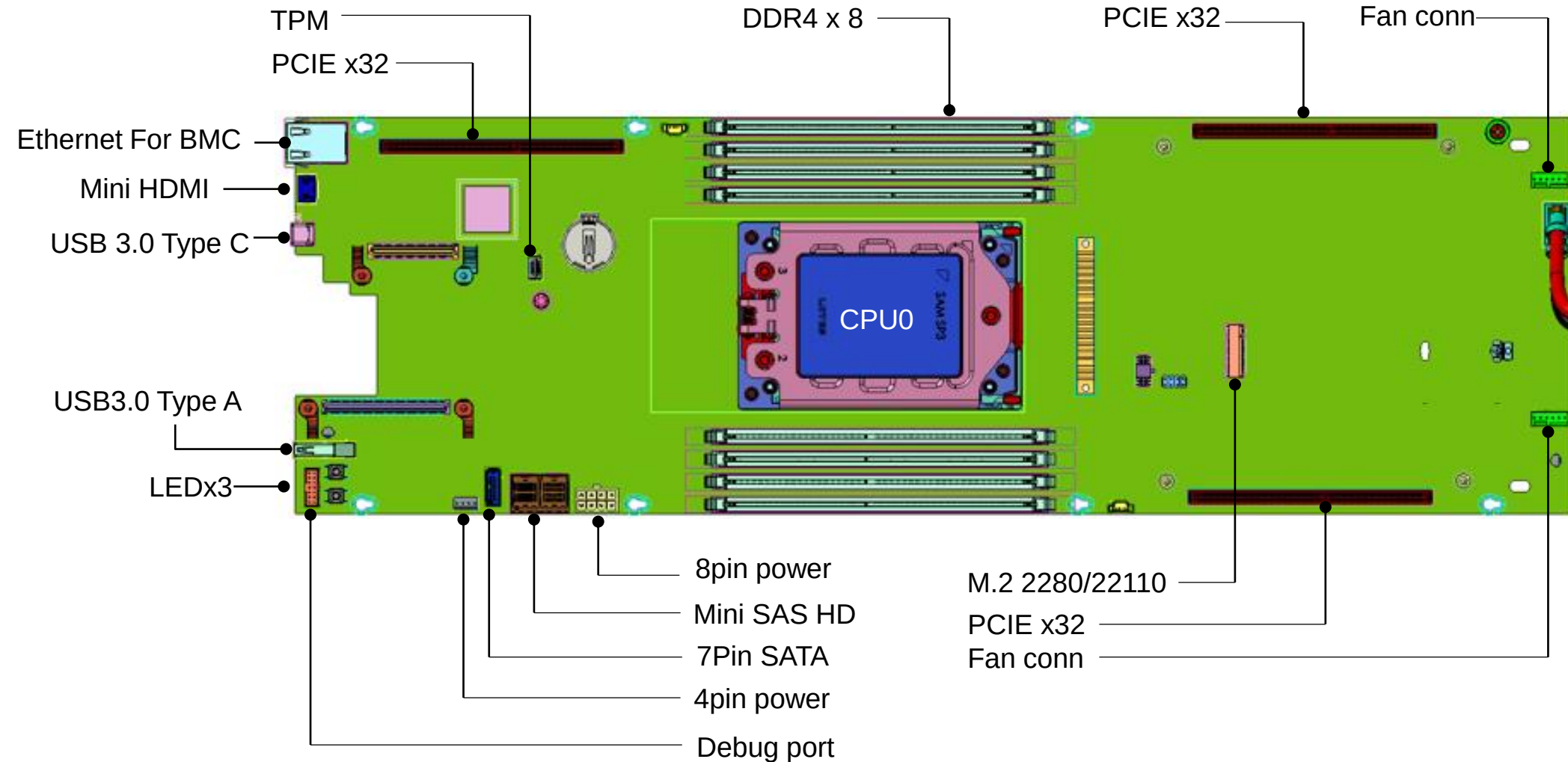
Release the plunger can
locked sled to the shelf



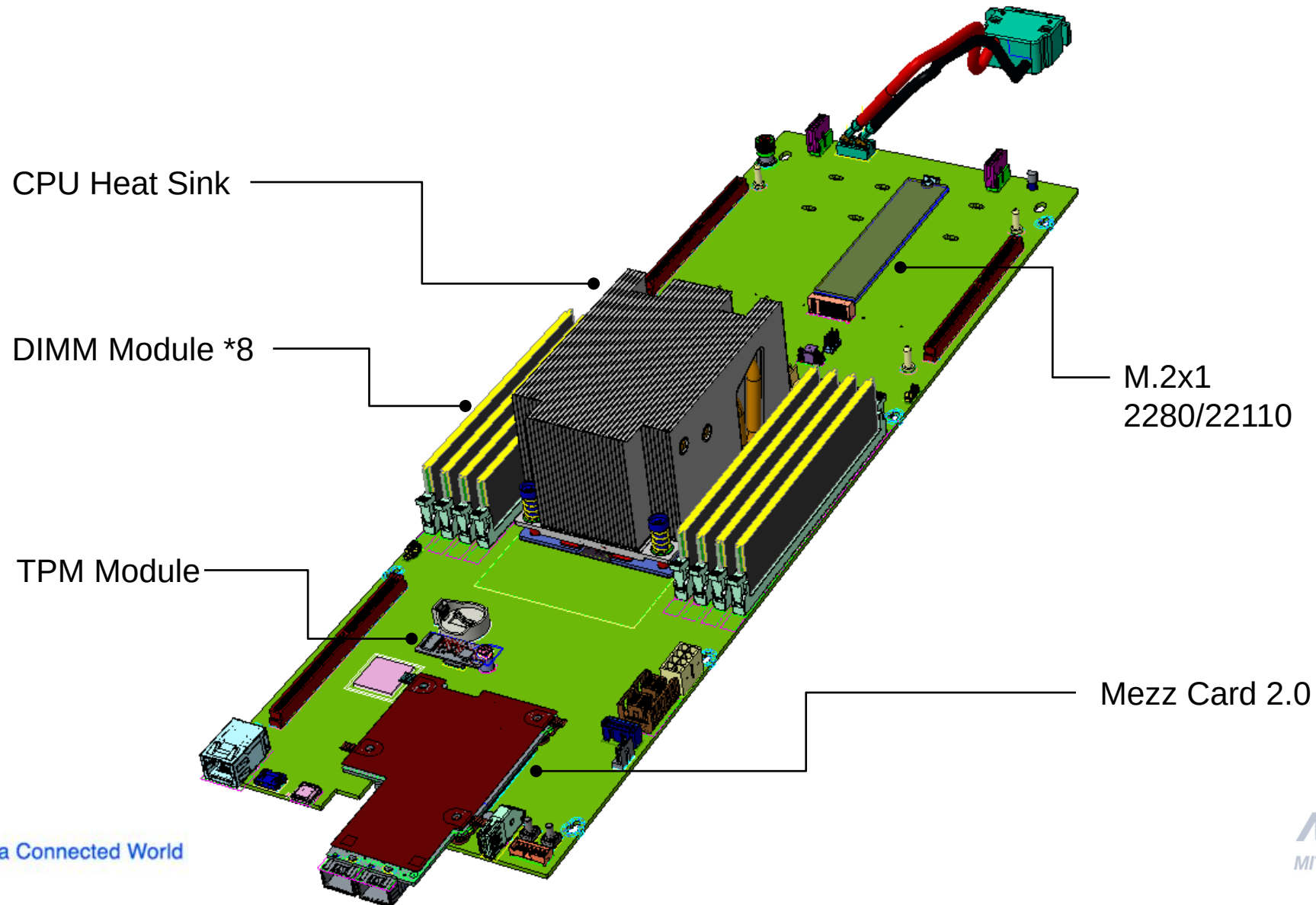
21" Shelf w/ Sled Photos



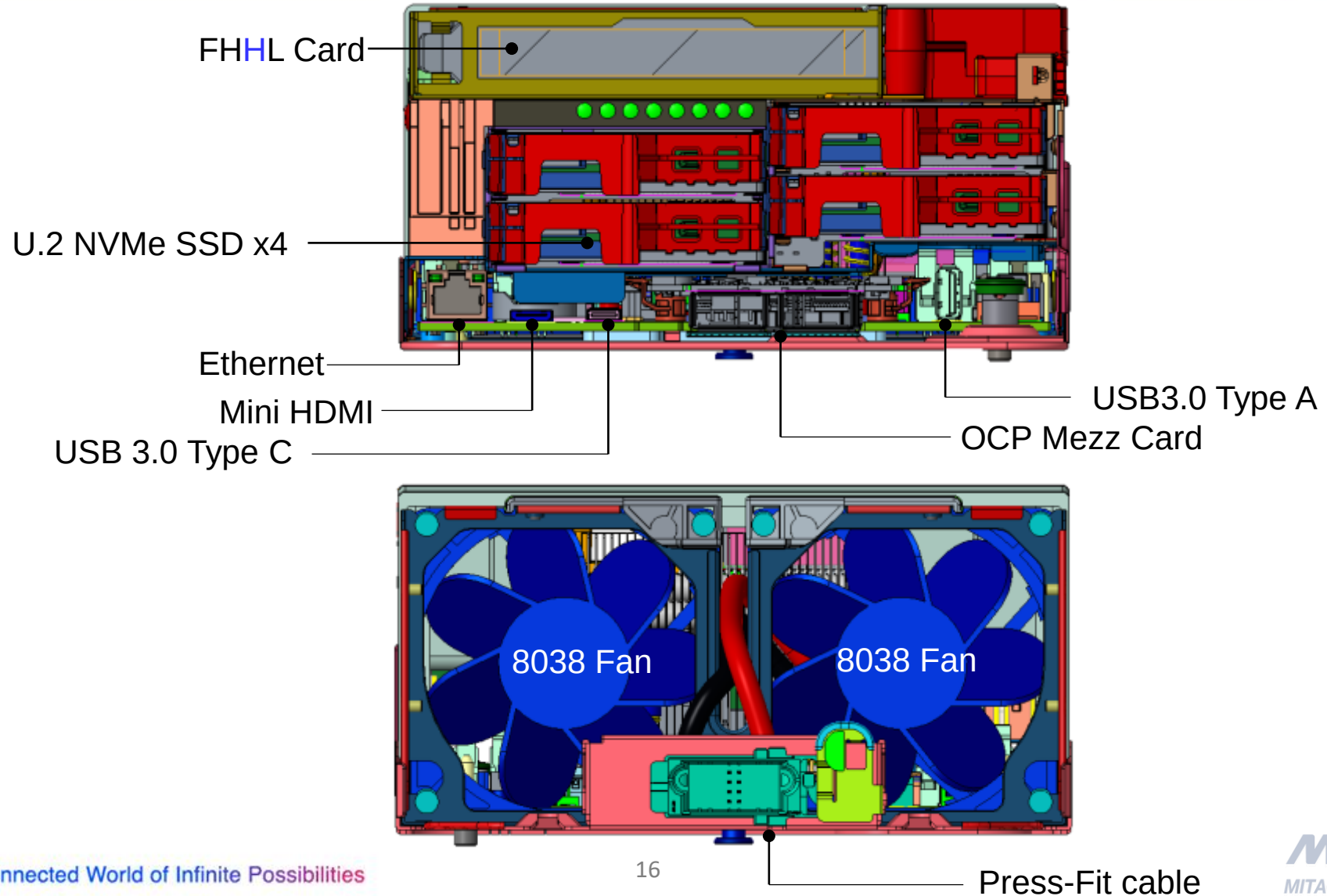
MB Placement outline



AMD 1P OCP_MB ISO View

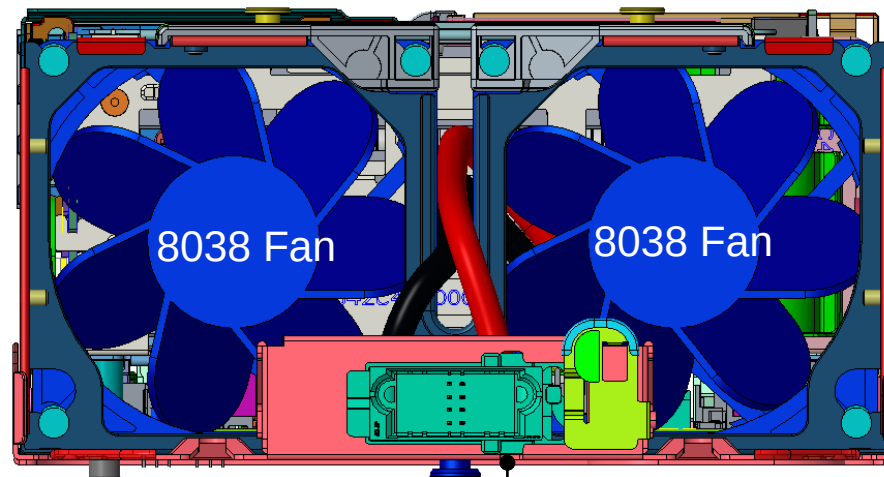
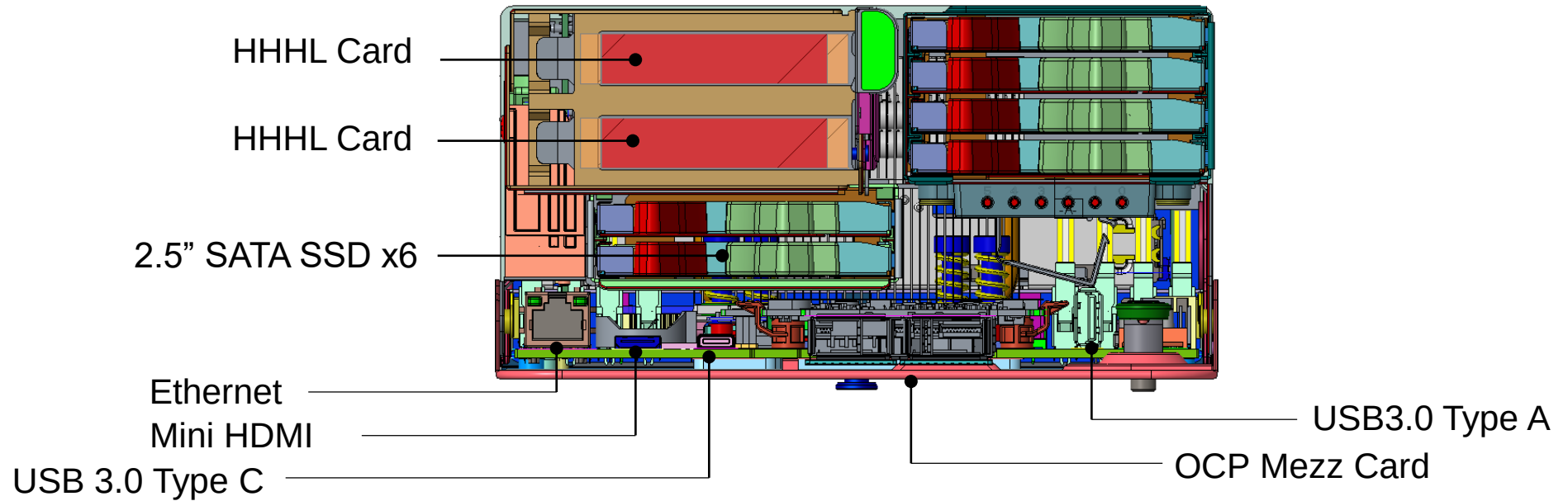


AMD 1P OCP (Ultra)



Empowering a Connected World of Infinite Possibilities

AMD 1P OCP (Advance)



Empowering a Connected World of Infinite Possibilities

1 /

Press-Fit cable

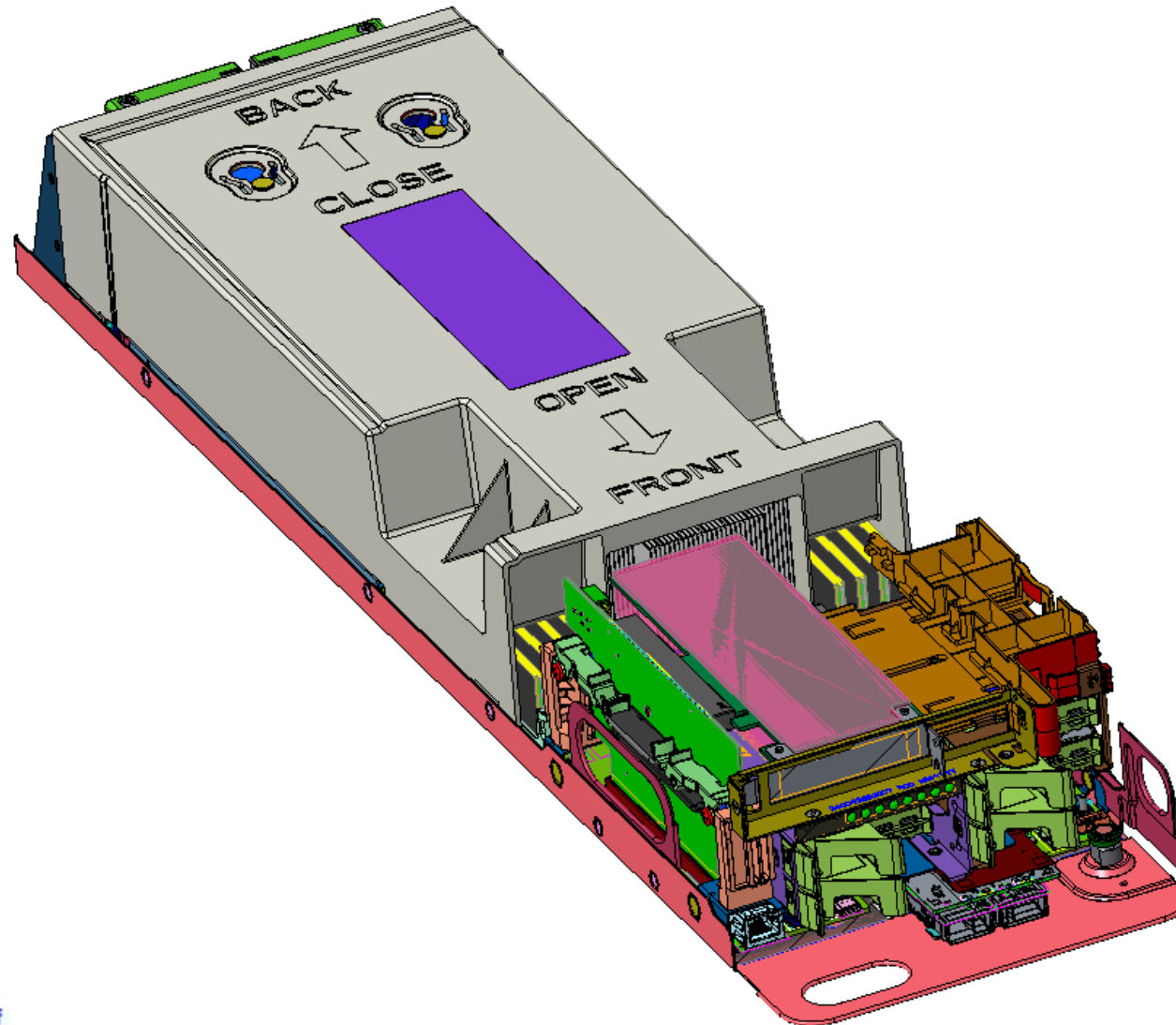


MITAC COMPUTING TECHNOLOGY CORP.

-Front U.2 x4 with Rear NVMe x6 Module

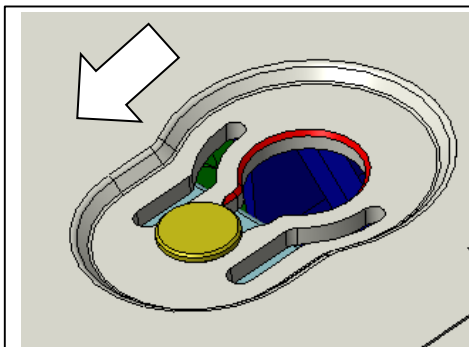


Front U.2x4 with Rear NVMe x6 _ ISO View

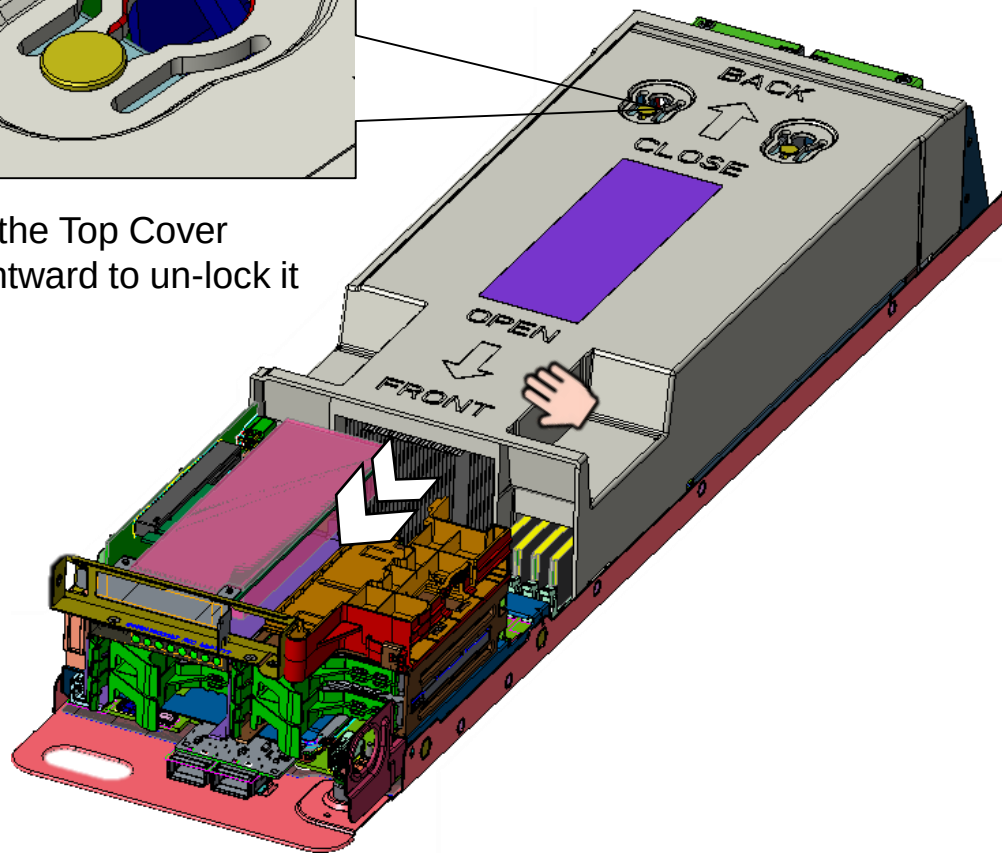


Empowering a Connected World of

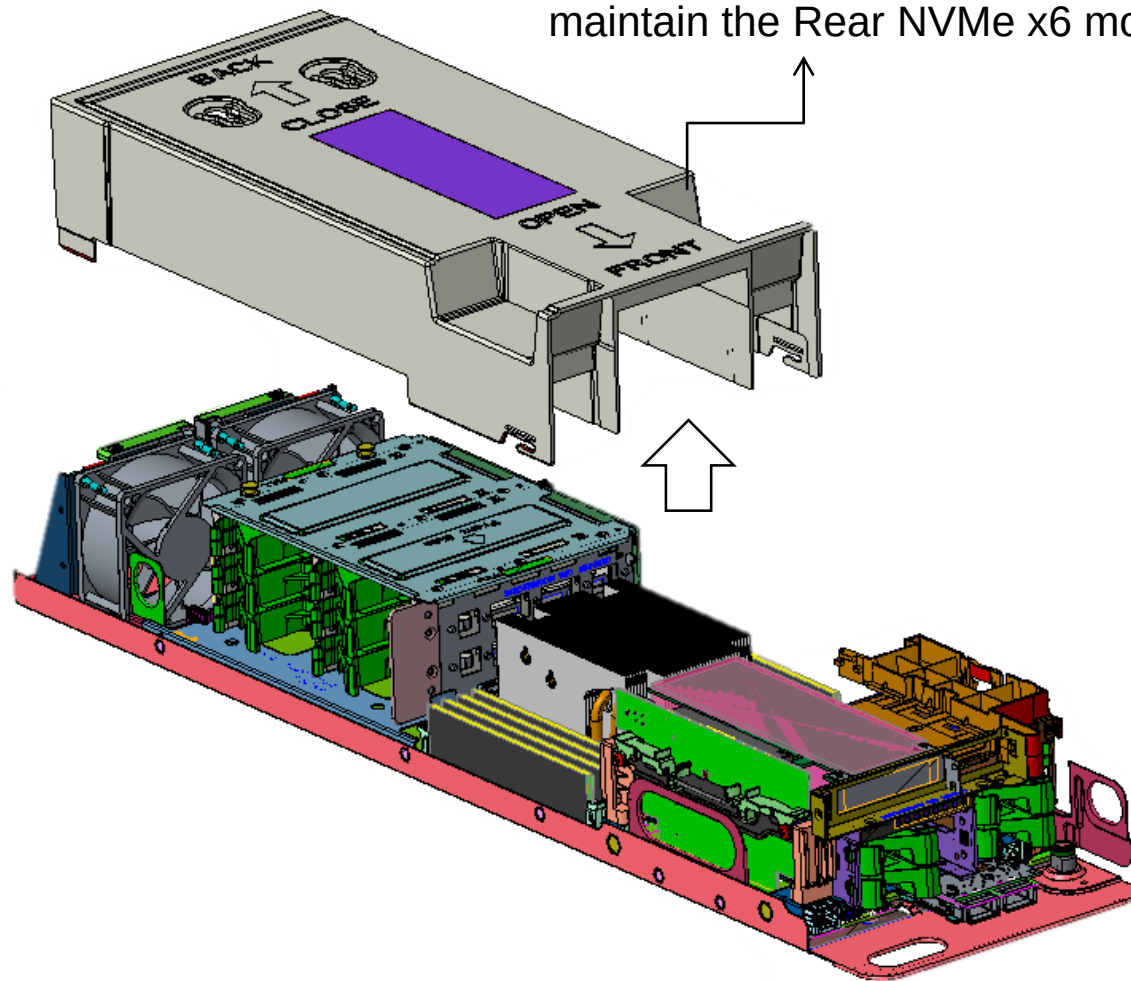
Top Cover Outline



Push the Top Cover to frontward to un-lock it



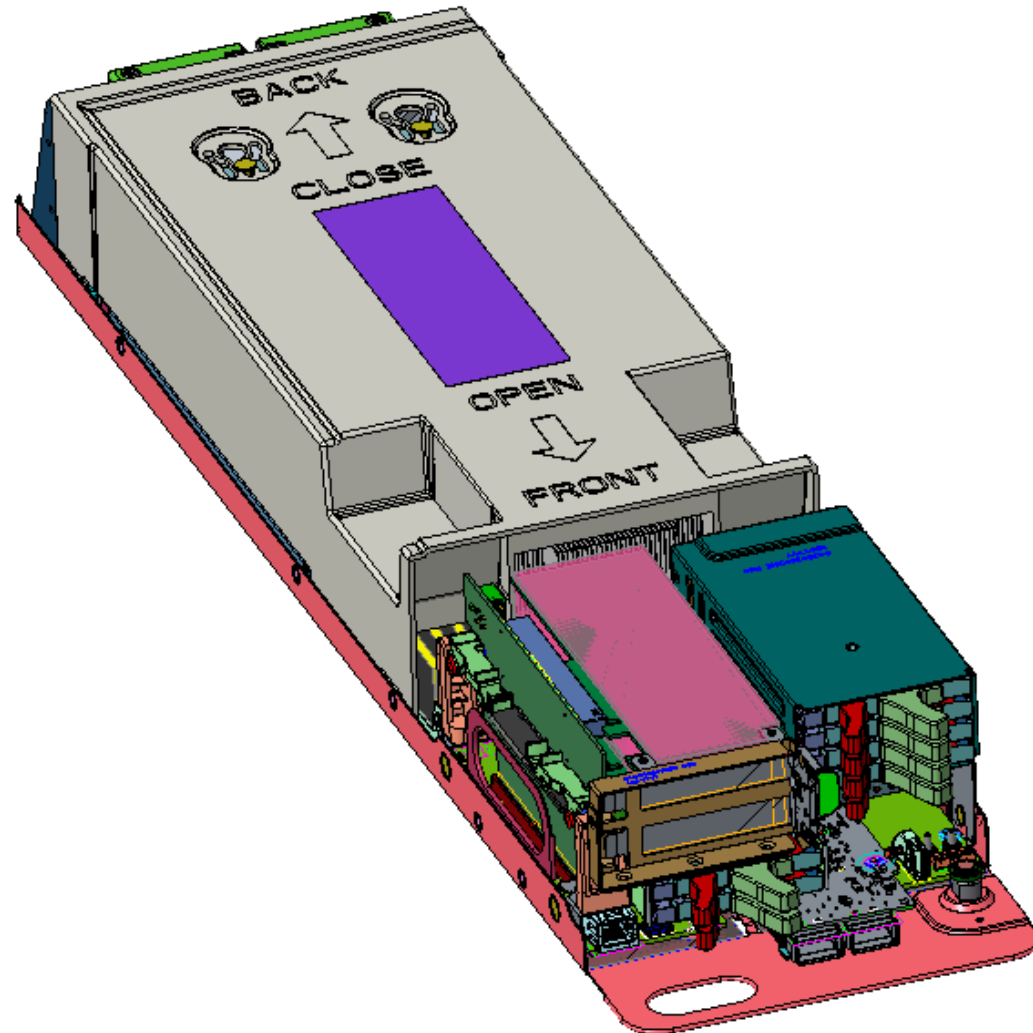
Need to remove the Top Cover for maintain the Rear NVMe x6 module



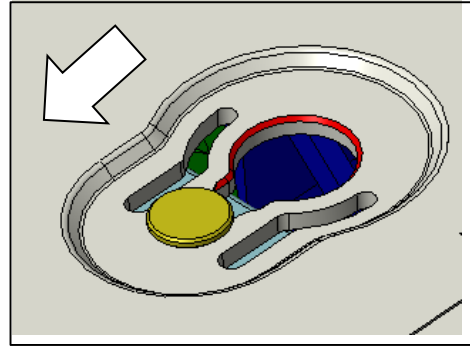
-Front SSDx6 with Rear NVMe6 Module



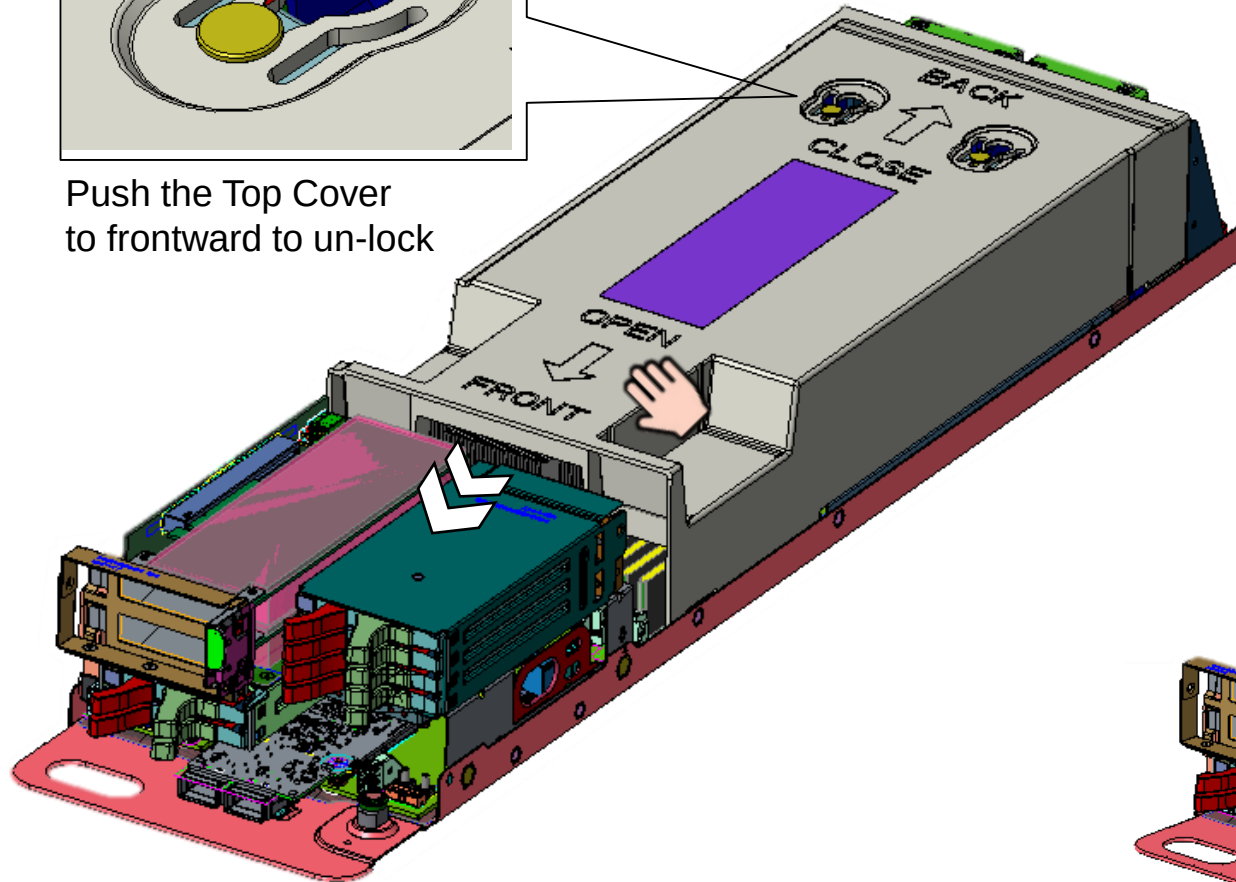
Front SSD x6 with Rear NVMe x 6_ ISO View



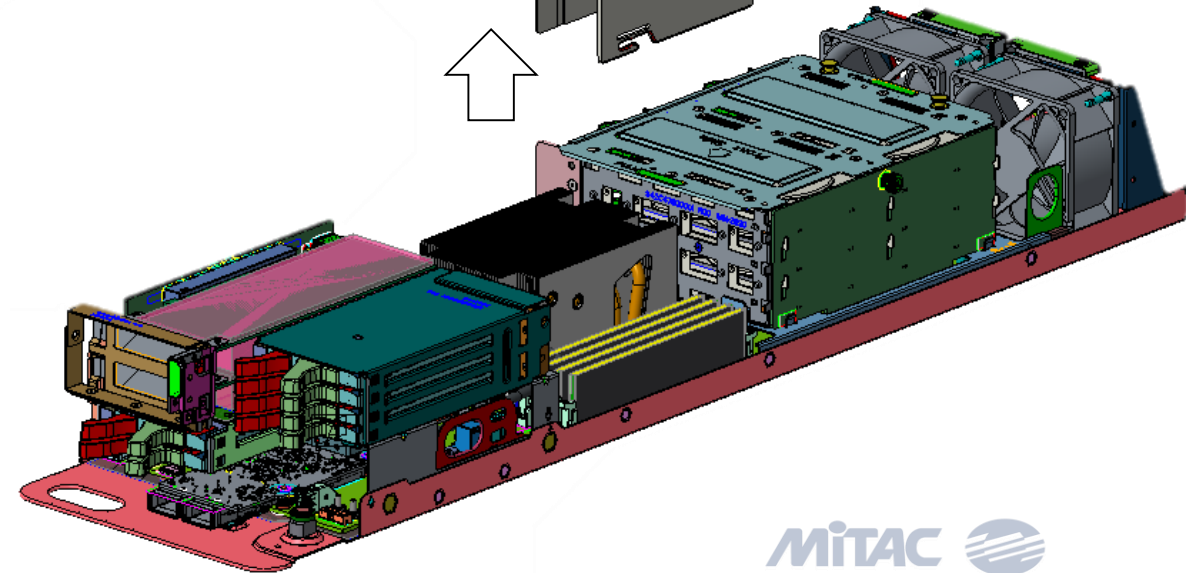
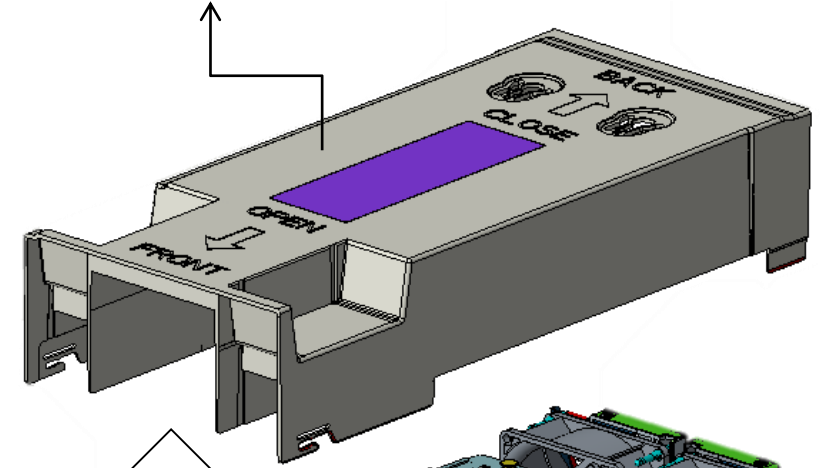
Top Cover Outline



Push the Top Cover to frontward to un-lock



Need to remove the Top Cover for maintain the Rear NVMe x 6 module



Thank You!

Backup slides

AMD 1P OCP Rome MB

■ **Form Factor: OCP**

■ **CPU:**

- Socket Type /Qty: AMD Socket SP3/ (1)
- Support CPU Series: (1) AMD Rome Series Processor
- TDP: up to 225W (SKU dependency)

■ **Memory**

- (8) DDR4 DIMM slots (w/ 8x memory channels)
- Supporting up to 1024GB RDIMM/LRDIMM
- Support ECC RDIMM/LRDIMM 3200

■ **PCI Expansion Slots**

- x32 PCIe 4.0 super slot at front side
- x32 PCIe 4.0 super slot at rear side -> for x6 PCIe Gen4 NVMe SSD
- x16 PCIe 4.0 OCP mezz 2.0 slot for NIC (small form factor)

■ **Network**

- (1) Dedicated BMC port

■ **Storage**

- (1) 22110/2280 M.2 conn to support SATA3/NVMe device

■ **I/O**

- Front I/O: (1) Type A USB 3.0 / (1) Mini HDMI conn for VGA / Type C USB3.0 with UART
- Front Button: (1) PW BTN / (1) RST BTN
- Front LED: (1) PW LED / (1) Error LED / (1) HDD ACT LED / (1) HDD Fault LED – (for rear U.2 NVMe/SATA SSD and M.2 SSD)
- Rear LED

■ **AST2500 ~~Open~~ BMC**

■ **Optional TPM 2.0 for BIOS, TPM 1.2 for BMC**

■ **(2) 6-pin fan connectors**

■ **Power:**

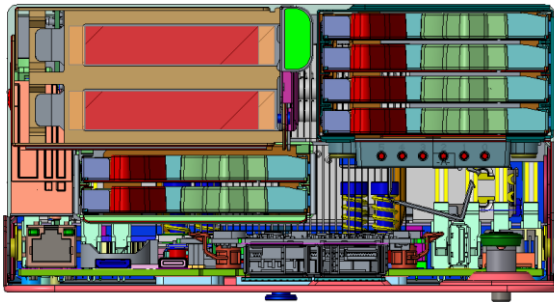
- (1) 4-pin floppy disk power connector for SATA power
- Input: 12VDC press- fit



Single Sled L6 spec.

Advance SKU

- **PCI Expansion Slots**
 - (2) x16 HHHL PCIE Gen 4.0 slot
- **Network**
 - (1) Support OCP v2 Type 1 Mezz card
- **Storage**
 - (1) M.2 (SATA/NVMe)
 - (6) SATA3 7mm SSD (cable link)
 - Rear (internal): (6) U.2 NVMe
- **(2) Cooling FAN**



Ultra SKU

- **PCI Expansion Slots**
 - 1 FHHL PCIE PCIE Gen 4.0 slot
- **Network**
 - (1) Support OCP v2 Type 1 Mezz card
- **Storage**
 - (1) M.2 (SATA/NVMe)
 - (4) External hot swappable 2.5" U.2 NVMe SSD
 - Rear (internal): (6) U.2 NVMe SSD
 - Option: (1) SATA3 7mm SSD (limited with Low profile PCIe card or NO PCIe card installed)
- **(2) Cooling FAN**

