MiTAC AMD ROME 1P OCP Computing Sled
Code Name: Capri (E8020)
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.

<table>
<thead>
<tr>
<th>Advanced (E8020-A)</th>
<th>Ultra (E8020-U)</th>
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</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td></td>
</tr>
<tr>
<td>(1) AMD EPYC™ 7002 (Rome) / 7003 (Milan) Series Processor, TDP 225W (Rome)</td>
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<tr>
<td><strong>Memory</strong></td>
<td></td>
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<tr>
<td>(8) DIMM slots, 8 channels</td>
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<tr>
<td>• Up to 1,024 GB RDIMM/LRDIMM, DDR4 3200 MT/s</td>
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<tr>
<td><strong>PCIe Extension</strong></td>
<td></td>
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<tr>
<td>(2) HHHL PCIe Gen4 x16</td>
<td>(1) FHHL PCIe Gen4 x16</td>
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<tr>
<td><strong>Boot Drive (for OS)</strong></td>
<td></td>
</tr>
<tr>
<td>80/110mm M.2 (SATA/PCIe Gen3 x4)</td>
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<tr>
<td><strong>Storage Extension - Front</strong></td>
<td></td>
</tr>
<tr>
<td>(6) 2.5&quot; 7mm SATA SSD</td>
<td>(4) 2.5&quot; U.2 SSD (Hot Plug)</td>
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<tr>
<td>(1) 2.5&quot; 7mm SATA SSD (optional)</td>
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<tr>
<td><strong>Rear PCIe Extension - Rear</strong></td>
<td></td>
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<tr>
<td>(6) 2.5&quot; U.2 SSD</td>
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<tr>
<td><strong>Mezzanine</strong></td>
<td></td>
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<tr>
<td>(1) OCP NIC 2.0</td>
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<tr>
<td><strong>Management Port</strong></td>
<td></td>
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<tr>
<td>(1) 1GbE RJ45, Intel i210, support NC-SI</td>
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<tr>
<td><strong>BMC</strong></td>
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<tr>
<td>ASPEED AST2500</td>
<td></td>
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<tr>
<td>• Support IPMI 2.0 and DMTF Redfish® 1.7 (DSP0266 1.7.0 Specification and Redfish Schema 2019.1)</td>
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<tr>
<td><strong>Dimension</strong></td>
<td></td>
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<tr>
<td>D28.5&quot; x W6.9&quot; x H3.5&quot; (724 x 175 x 89mm)</td>
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<tr>
<td><strong>Power Supply</strong></td>
<td></td>
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<tr>
<td>Centralized OCP power shelf (12V DC)</td>
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<tr>
<td><strong>OS Certification</strong></td>
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<tr>
<td>VMWare</td>
<td></td>
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<tr>
<td>• ESXi 6.7 U3</td>
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<tr>
<td>Red Hat®</td>
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<td>• RHEL 8.2.2</td>
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</tbody>
</table>
ME Proposal
MiTAC OCP ESA Kit Applied for 19” Rack

19” EIA Rack
1RU=44.45mm

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

21” Open Rack (v2)
1OU=48mm

Table 2: EIA Standard Dimensions

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<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
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<tbody>
<tr>
<td>450mm (17.72”) minimum</td>
<td>465mm (18.30”) nominal</td>
<td>483.4mm (19.03”) minimum</td>
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</tbody>
</table>

19” EIA Rack

ESA Kit

Empowering a Connected World of Infinite Possibilities
19” Shelf - Front / Rear View

Sled

Cable clip

Sled

Bus Bar cable

95.2mm
19”Shelf w/ Sled Photos
Sled Fit In 19” Shelf

Release the plunger can locked sled to the shelf
21” Shelf w/ Sled Front / Rear View

Sled x3

Bus Bar cable

95.2mm
Release the plunger can locked sled to the shelf.
21” Shelf w/ Sled Photos
MB Placement outline

- TPM
- PCIE x32
- DDR4 x 8
- PCIE x32
- Fan conn
- Ethernet For BMC
- Mini HDMI
- USB 3.0 Type C
- USB 3.0 Type A
- LEDx3
- 8pin power
- Mini SAS HD
- 7Pin SATA
- 4pin power
- Debug port
- M.2 2280/22110
- PCIE x32
- Fan conn
AMD 1P OCP (Ultra)

- FHHL Card
- U.2 NVMe SSD x4
- Ethernet
- Mini HDMI
- USB 3.0 Type C
- OCP Mezz Card
- USB3.0 Type A
- 8038 Fan
- Press-Fit cable
AMD 1P OCP (Advance)

- HHHL Card
- HHHL Card
- 2.5" SATA SSD x6
- Ethernet
- Mini HDMI
- USB 3.0 Type C
- USB3.0 Type A
- OCP Mezz Card
- 8038 Fan
- 8038 Fan
- Press-Fit cable
-Front U.2 x4 with Rear NVMe x6 Module
Front U.2x4 with Rear NVMe x6 _ ISO View
Top Cover Outline

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

Push the Top Cover to forward to un-lock it
-Front SSDx6 with Rear NVMex6 Module
Front SSD x6 with Rear NVMe x 6_ ISO View
Top Cover Outline

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

Push the Top Cover to frontward to un-lock
Thank You!
Backup slides
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**

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**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**