OCP OAI Group Monthly Call

08142019
Agenda

- JDA Group updates
- OAM Spec v1.0
- UBB Status Update
- Liquid Cooling Proposal
- OAM Reference System Design proposals update
- UBB/Reference system Schedule
- OCP Regional Summit planning
- Next Steps
JDA Group Update

- JDA Amendment
OAM Spec v1.0 released

- https://www.opencompute.org/wiki/Server/OAI
Combined Topology (FC+HCM)

Notes: For HCM, interconnect links are on Conn1 only.
Add 8-link HCM Topology to spec
UBB Status Update

• Two UBB SKUs
  • 8 port HCM
  • FC with embedded 6 port HCM
• UBB Spec in progress, plan to submit v0.3 to Server group monthly review on 8/28
• Ultra Low loss material, 22L
• 12V up to 300w, 54V up to 500w
• Liquid Cool proposal
In Discussion

- Multi Host/Single Host support
- PHY retimer study
- Clock end to end topology
- Reset
- JTAG
- I2C Diagram
Liquid Cool Proposal
UBB with Cold Plate

① : MiniSAS-HD ×4
② : OAM with Cold Plate
③ : High Speed Conn
④ : 54V Conn
⑤ : 12V Conn
Cold Plate & OAM Mating
Reference System w/ Liquid Cool View
Reference System Design Update
Reference Systems Design Proposal 1 by Inspur

21” Rack, air cool/Liquid Cool, front I/O, 4*AICs

- 4* PCIe Gen4 switch
- 54V input
- 4* PCIe x16 slots
Reference Systems Design Proposal 2 by Hyve

19” Rack, air cool/liquid cool, front I/O, up to 12*AICs, flexible hosts

- 16* PCIe slot, flexible for host interface and IO(2+14, 4+12, 8+8...)
- Total 6RU
Reference Systems Design Proposal 3 by ZT/Inventec

19” Rack, air cool/liquid cool, front/rear I/O, 4/8 AICs, flexible hosts

- 2X16 or 4X16 from host
- Total 4RU
- Update the 4*nvme devices to additional two PCIe slots(to be updated)
UBB/Reference system Schedule

- UBB/system design on going
- System bring up beginning of Oct
- Reference Systems demo in OCP Amsterdam OCP summit
OCP Regional Summit Plan

• 10mins lightning talk about OAI update
• 3hr total 6 workshops

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<thead>
<tr>
<th>Workshop</th>
<th>Session Title</th>
<th>Duration</th>
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<tr>
<td>1</td>
<td>OAI Overview</td>
<td>15min</td>
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<td>2</td>
<td>OAI-UBB: Universal baseboard for OCP Accelerator Module</td>
<td>25mins</td>
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<td>3</td>
<td>OAM Reference Systems Joint Review(Inspur/Hyve/ZT)</td>
<td>45min</td>
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<td>4</td>
<td>System management, security on OAI</td>
<td>25mins</td>
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<td>5</td>
<td>Cooling solution for OAM Reference systems</td>
<td>25mins</td>
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<td>6</td>
<td>OAM Panel discussion(AMD/Habana/Intel/Nvidia)</td>
<td>45min</td>
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• Experiencing Lab sponsors
  • System: FB, Baidu, Inspur, Hyve, ZT, Intel, Habana
  • OAM: Intel, Habana, AMD(to be confirmed), Nvidia(to be confirmed)
Next Steps

• OAM test vehicle enablement
  • Provide reference systems to OAM suppliers for validation
  • Provide OAM samples to system providers for validation

• Lockdown UBB design spec