Next-Gen and Breakout Data Center Technologies for the Cloud & Edge

Ethan Yang, Deputy Manager, Wiwynn
OCP Ecosystem Breaks Out Into Year of Edge

DEMANDS
Fundamental Demands For Various Applications

APPLICATIONS
Various Evolving Applications

INFRASTRUCTURES
Building Blocks and IT Gears on Advanced Technologies
Wiwynn Updates 3 Next-Gen Cloud Infrastructures

- OCP Rack Infrastructure
- 19” & Edge Infrastructure
- AI Computing

INFRASTRUCTURES
Building Blocks and IT Gears on Advanced Technologies
Updated Building Blocks of OCP Rack Infrastructure

- Tioga Pass (SV7220G3)
- Yosemite V2 (SV7100G2)
- Bryce Canyon (ST7000G2)
- Lightning (ST7200)
- Citrine (SV7400G3)
Updated Building Blocks of 19” & Edge Infrastructure

1U2N Computing Server (SV302G3)
1U Multipurpose Server (Open19)
1U Multi-purpose Server (SV5100G3)
1U16 NVMe JBOF (ST5100)
Updated Building Blocks of AI Computing

- 4U8G GPU Server (SV500G3)
- 4U16 JBOG (XC200)
- 4U16 JBOx (XC200G2)
- HPC Accelerator (HGX-2)
Wiwynn Updates Next-Gen Cloud Demands

48V Converter Board  2-Phase Immersion Cooling  OCP 3.0 Test Fixture  Resource Pooling

Fundamental Demands For Various Applications
Existing 12V Server Utilizes Wiwynn 48V Power Converter Board

48V PSU

48V to 12V SWC Converter (Regulated)

12V VR for CPU Core Power
12V VRs for DDR VDDQ rail
12V VR for other CPU VRs
12V VRs for other DDR VRs
12V POLs for Chipset (PCH, BMC,....)
12V POLs for system Power (5V/3V3)
12V Direct power Device (Fans, PCIe, Hard drive,...)
2-Phase Immersion Cooling with 48V Tioga Pass Servers
Software Defined Data Center

Disaggregated and Composable Rack Solution

Physical Infrastructure

Open. Together.
RSD Enabled Building Blocks

- OCP 12V
- OCP 48V
- EIA 19"
- RSD Enabled
- Interoperability

Tioga Pass (SV7220G3)
Bryce Canyon (ST7000G2)
Lightning (ST7200)
Multi-purpose Server (SV300G3)
NVMe Storage (ST300)
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<tr>
<th>Date</th>
<th>Time</th>
<th>Project</th>
<th>Topic</th>
<th>Speaker</th>
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<td>2:40pm</td>
<td>Executive Track</td>
<td>Common Building Blocks Product Architecture and Technology for Workload Optimization</td>
<td>Steven Lu</td>
<td>210 BF</td>
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<td>Modeling Immersion Cooling Compatible with OCP Profile</td>
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<td>Gregory Liu</td>
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