



inspur



OCP
CHINA DAY

June 25th
2019
Beijing

Baidu Scorpio Rack

Fast evolution of open rack in China

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25th June, 2019

Baidu Scorpio – The first open rack in China

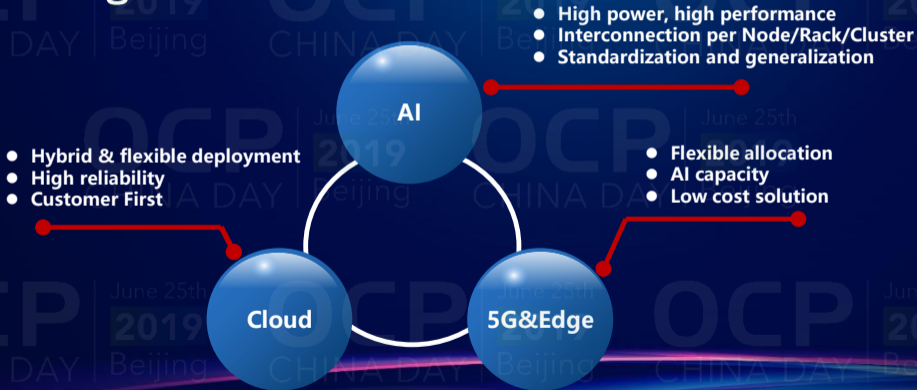


Story & Future



Deployment scale: 20,000+ Racks of Scorpio

New Challenge & New Chance



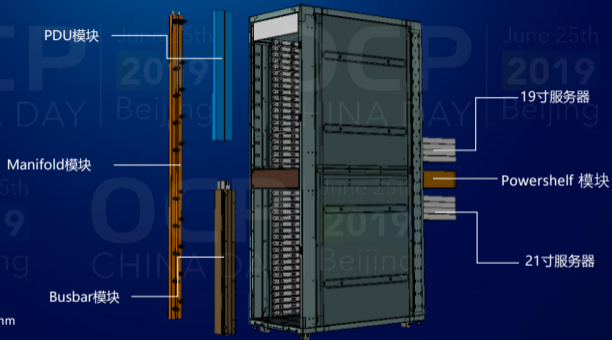
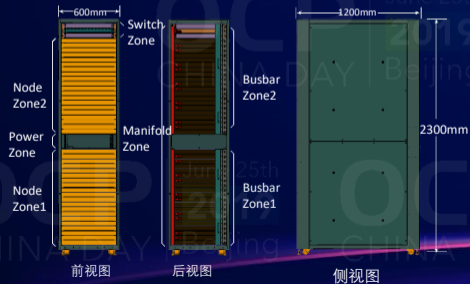
Evolution of key feature



| | Scorpio V1 | Scorpio V2 | Scorpio V3 |
|---------|-------------------------------|--|---|
| Key | Modularization | Standardization | Elasticity & normalization |
| Feature | 1. Centralized PSU | 1. Standard module | 1. Higher power density |
| | 2. Centralized fan wall | 2. Unified interfaces, specifications, protocols | 2. Advanced Thermal & Power supply |
| | 3. RMC centralized management | 3. Built eco-system | 3. High compatibility, hybrid & flexible deployment |

Structure on V3

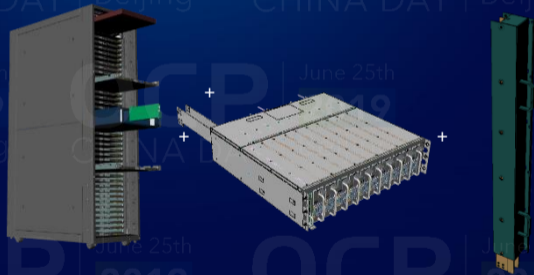
- 1SU=46.5mm
- Compatibility 21' and 19' Node
- Rapid disassembly of Busbar and PDU
- Mixture deployment
- Cost down



Power solution on V3

Centralized power supply

- 48V PSU+BBU (3SU+3SU)
- 20~30kw/Rack
- Busbar: quick removal and installation
- Cornerstone of AI system development

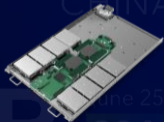


Thermal solution on V3

- Built-in fan
- Air & Liquid cooling (Thermosiphon & Manifold)



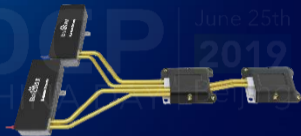
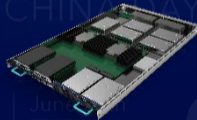
V2 Fan Wall



VS.



V3 Built-in Fan



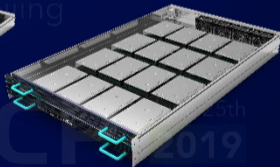
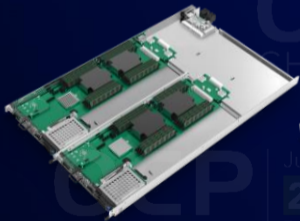
Thermosiphon



Manifold

Node system solution

- Computing & storage node, excellent TCO benefit
- Multiple CPU platform, Intel/AMD/ARM



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Thank you

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