

# Micas Data Center Network Solution

## Solution Background

- As Internet businesses continue to grow, data centers are expanding faster than ever.
- The continuous evolution of switching chips drives rapid iterations in network bandwidth and speed.
- The diversity of business models raise higher requirements for data center networks in terms of latency, stability, and reliability.
- In large-scale data center operations, IT services prioritize rapid response to business needs, precise fault identification, and uninterrupted critical services.



### DATA CENTERS TODAY DEMAND:

**Network solutions supporting hyperscale clusters with continuous scalability.**

**Iterative solutions that prioritize compatibility for network from 25G to 400G.**

**Lower network latency with stability and reliability.**

**Visualized, automated, and refined network O&M.**

## Solution Highlights

- **Large-scale networking and flexible**  
The Clos three-tier architecture enables clustering of 10,000 to 200,000 servers and flexible Pod-based expansion.
- **High-speed access and iterative compatibility**  
The solution supports networking of ports at 10G, 25G, 100G, 200G and other rates, while also compatible with Pod-based hybrid networks
- **High reliability and stability**  
The BGP protocol is optimized, reducing fault recovery time and improving reliability. The de-stacking technology is used to improve network stability.
- **Low-latency lossless network**  
The PFC+ECN technology guarantees low-latency communication protocols and zero packet loss in RDMA networks.
- **Easy O&M and flexible development**  
The Telemetry technology enables monitoring of critical information within seconds, while providing APIs for flexible customization and development.

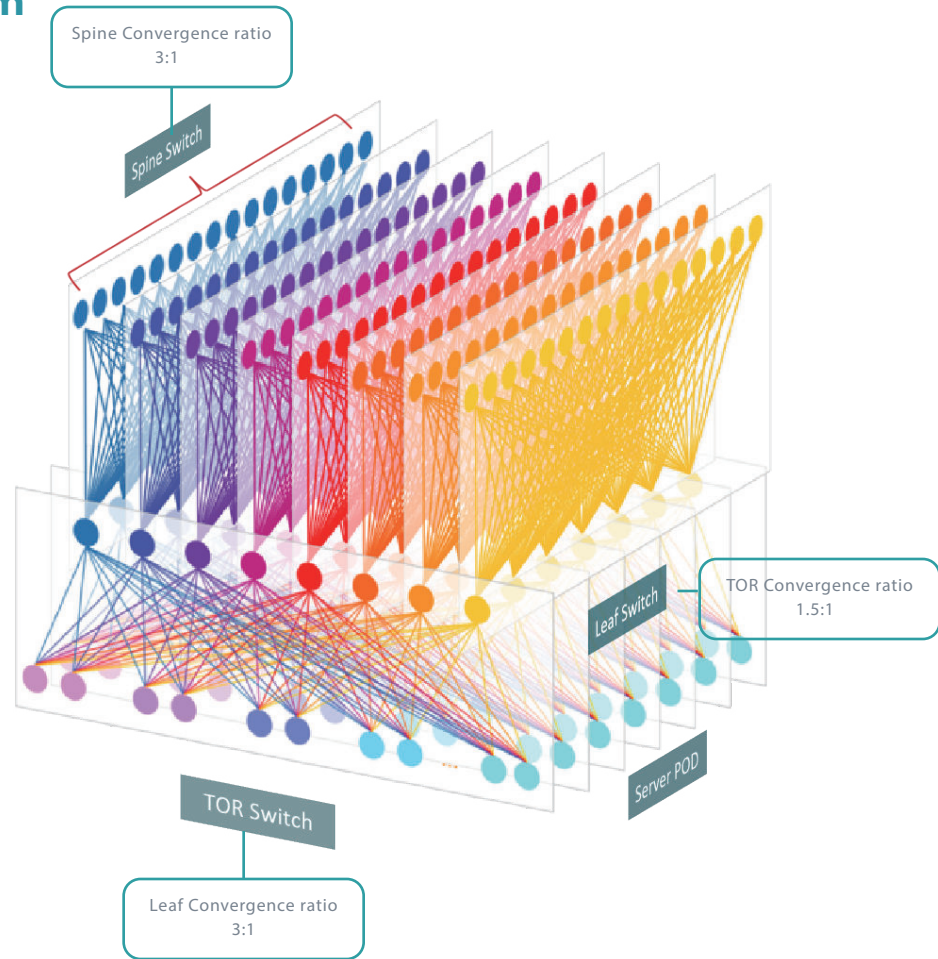
## Network Architecture Diagram

**200GE Port Access**  
Max port number: 27648  
Max Pod number: 24  
Max port per Pod: 1152

**100GE Port Access**  
Max port number: 82944  
Max Pod number: 48  
Max port per Pod: 1728

**25GE Port Access**  
Max port number: 221184  
Max Pod number: 48  
Max port per Pod: 4608

**10GE Port Access**  
Max port number: 221184  
Max Pod number: 48  
Max port per Pod: 221184



## Customer Benefits

### Worry-free business growth

Support flexible networking based on business requirements and support converged networking with various speed iterations.

### Gaining technological dividends

Provide more cloud computing resources through high-bandwidth, low-latency, and lossless network transmission.

### Ensuring business continuity

A stable and reliable network and visualized automated IT O&M that protects your good reputation for cloud services.

## Related Products

**200GE Port Access**  
Spine Switch: M2-S6930-64QC  
Leaf Switch: M2-S6930-64QC  
TOR Switch: M2-S6520-24DC8QC

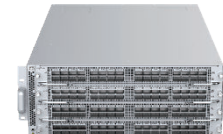
**100GE Port Access**  
Spine Switch: M2-S6920-4S  
Leaf Switch: M2-S6920-4S  
TOR Switch: M2-S6510-32C

**25GE Port Access**  
Spine Switch: M2-S6920-4S  
Leaf Switch: M2-S6920-4S  
TOR Switch: M2-S6510-48V8C

**10GE Port Access**  
Spine Switch: M2-S6920-4S  
Leaf Switch: M2-S6920-4S  
TOR Switch: M2-S6510-48X8C



M2-S6930-64QC  
Provides 64 x 400GbE  
QSFP-DD ports



M2-S6920-4S  
Provides 128 x 100GbE  
QSFP28 ports



M2-S6520-24DC8QC  
Provides 24 x 200GbE  
QSFP56 ports and 8 x  
400GbE QSFP-DD ports  
(Coming soon)



M2-S6510-32C  
Provides 32 x 100GbE  
QSFP28 ports



M2-S6510-48V8C  
Provides 48 x 25GbE SFP28  
ports and 8 x 100GbE QSFP28



M2-S6510-48X8C  
Provides 48 x 10GbE SFP  
ports and 8 x 100GbE  
QSFP28ports

## For more information

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