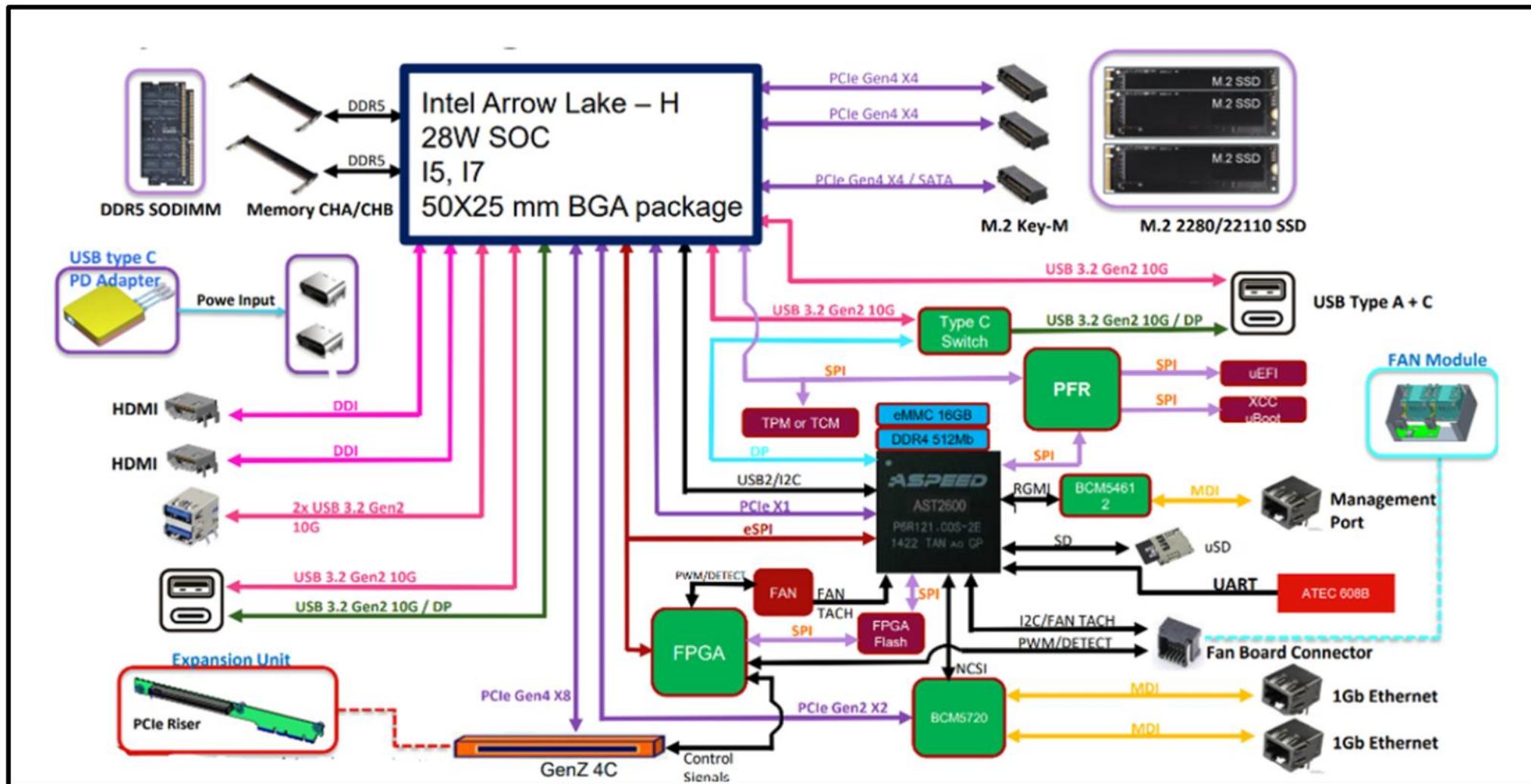# System configurations and diagrams

Block diagram, mounting options, parts installation
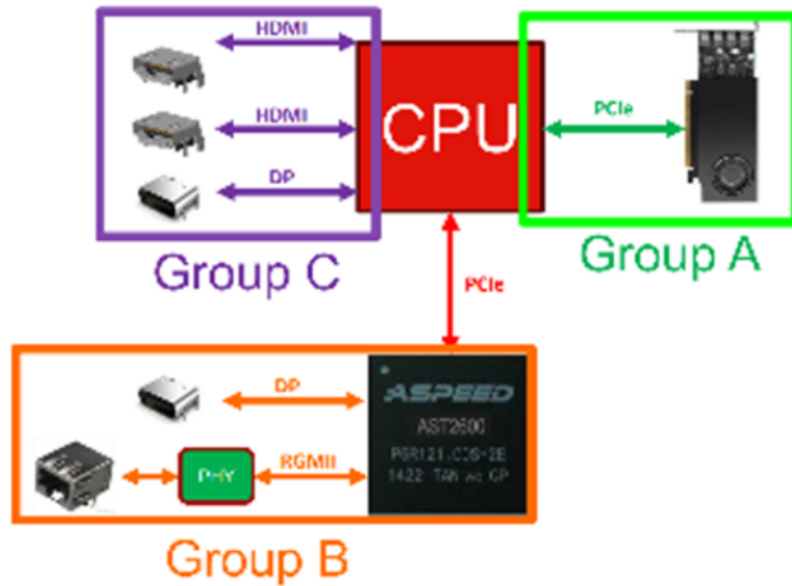
Lenovo

SE100 system board block diagram
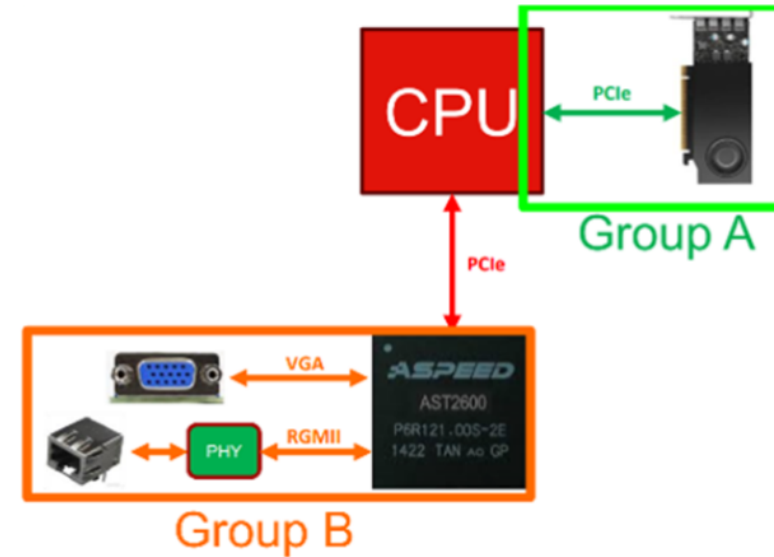
Display controller block diagram

SE100 display controller design

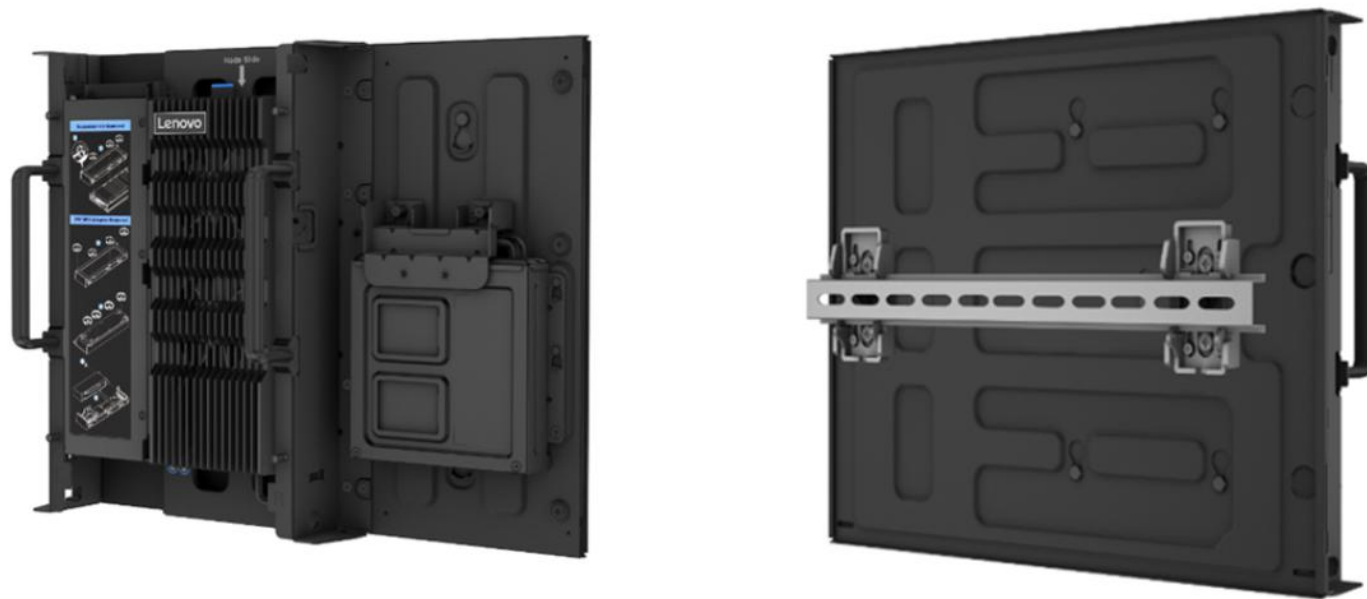**ISG common display controller design**

Note: Group A (add-in card output), Group B (BMC output), and Group C (CPU output) need different drivers, so the OS will treat them as different sources.

Mounting options

The SE100 has the following mounting options:
- Single node mounting (desktop, VESA, DIN)
- Standard rack (1U 2N or 1U 3N)

Note: For more information about installing a node, refer to the Configuration installation guide on Lenovo Docs.
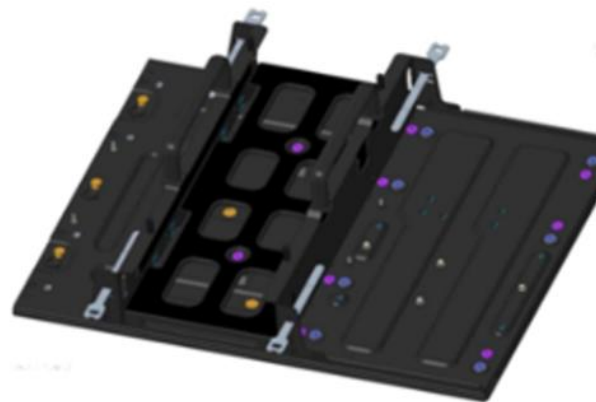
Lenovo

VESA mount

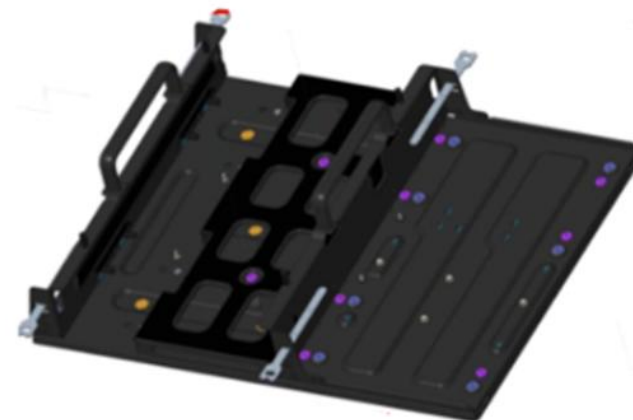The SE100 supports a VESA mount with a 140 W VESA PD cage and a VESA bracket.

140 W PD cage   **140 W PD**
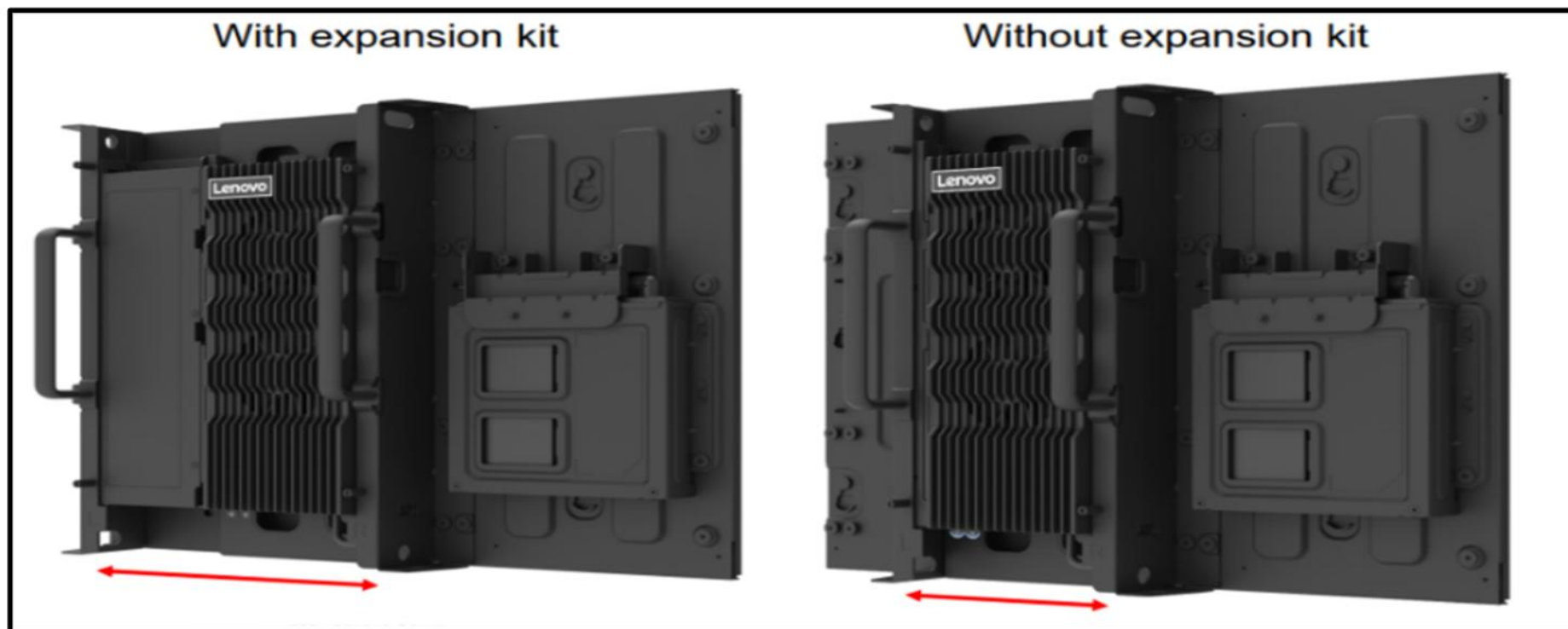
Node bracket   **Node + expansion kit bracket**

Description	kg	Width (mm)	Length (mm)	Height (mm)
140 W VESA PD cage	0.29	161.6	162	36.8
VESA bracket	5.26	439.4	345.7	111.6

Wall, ceiling, and DIN mount

The SE100 supports a wall, ceiling, and DIN rail mount that can be used both with or without an expansion kit.

Note: For more information, refer to *Wall, ceiling or DIN mount* section of the SE100 product guide on Lenovo Press.

Rack mount

The SE100 supports a standard rack mount.

- 1U2N – two nodes with expansion kits
- 1U3N – three nodes without expansion kits

Click the buttons for more information.

1U2N

1U3N

Lenovo

Dimensions

- Height: 43 mm
- Width: 434.4 mm
- Depth: 734.3 mm

Weight

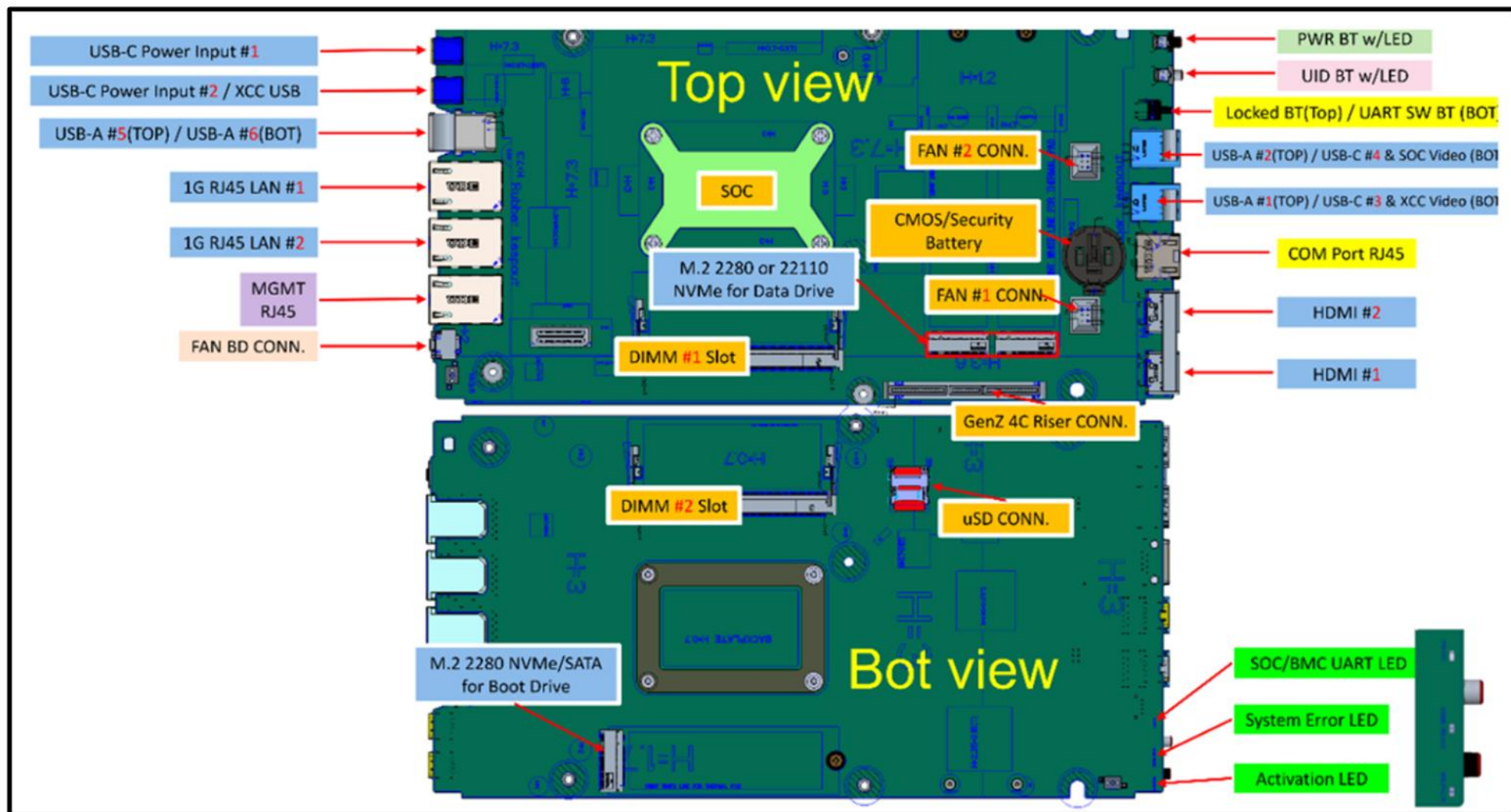With two nodes, two expansion kits, and two power adapters: 13.9 kg

Front view

Lenovo

Dimensions

- Height: 43 mm
- Width: 434.4 mm
- Depth: 734.3 mm

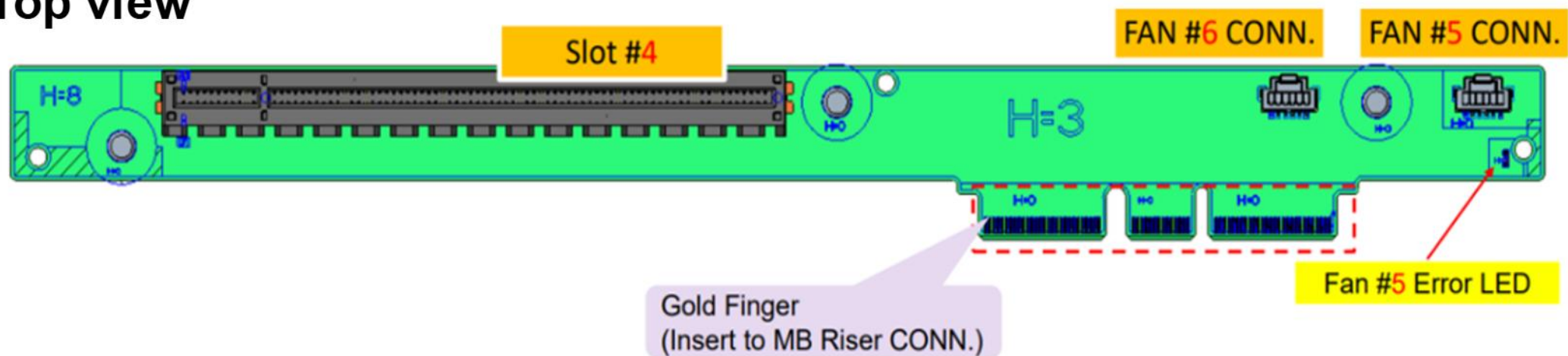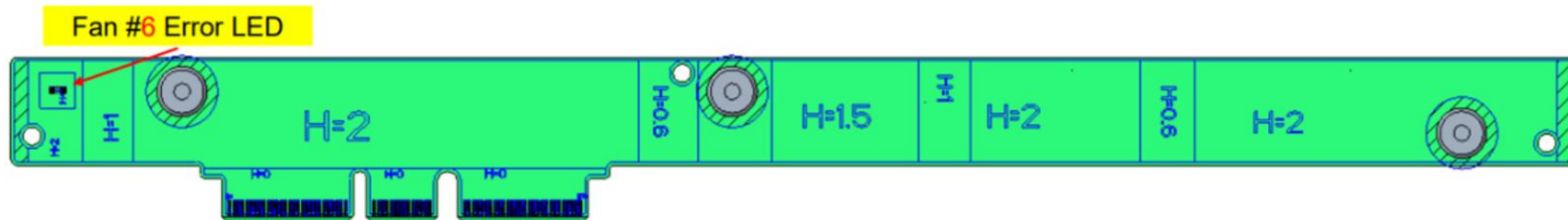## Weight

With three nodes and two power adapters: 15 kg

Front view

Planar placement

Riser card placement

Top view

Slot #4

FAN #6 CONN.

FAN #5 CONN.

H=8

H=3

Gold Finger
(Insert to MB Riser CONN.)

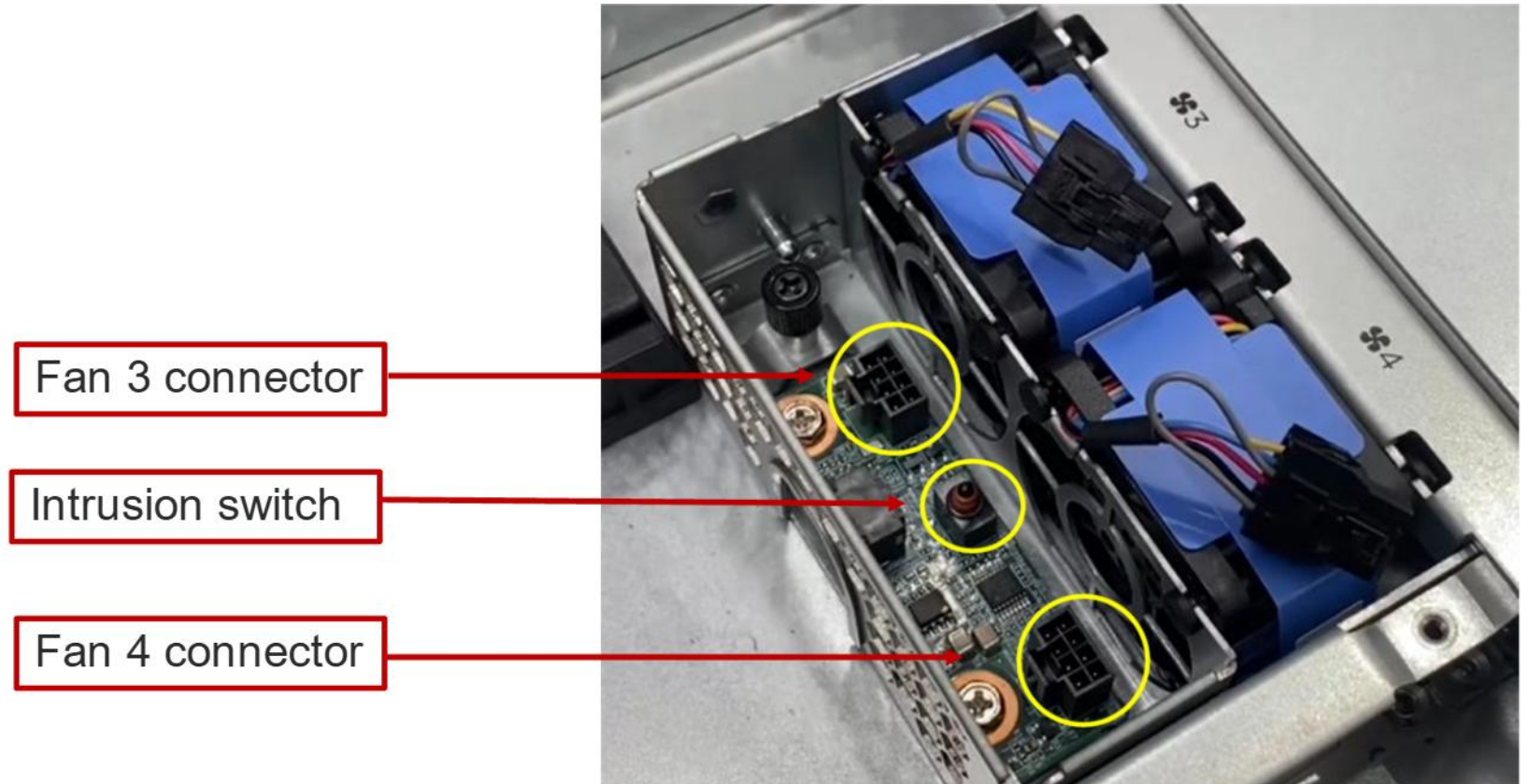Fan #5 Error LED

Bottom view

Fan #6 Error LED

H=2

H=1.5

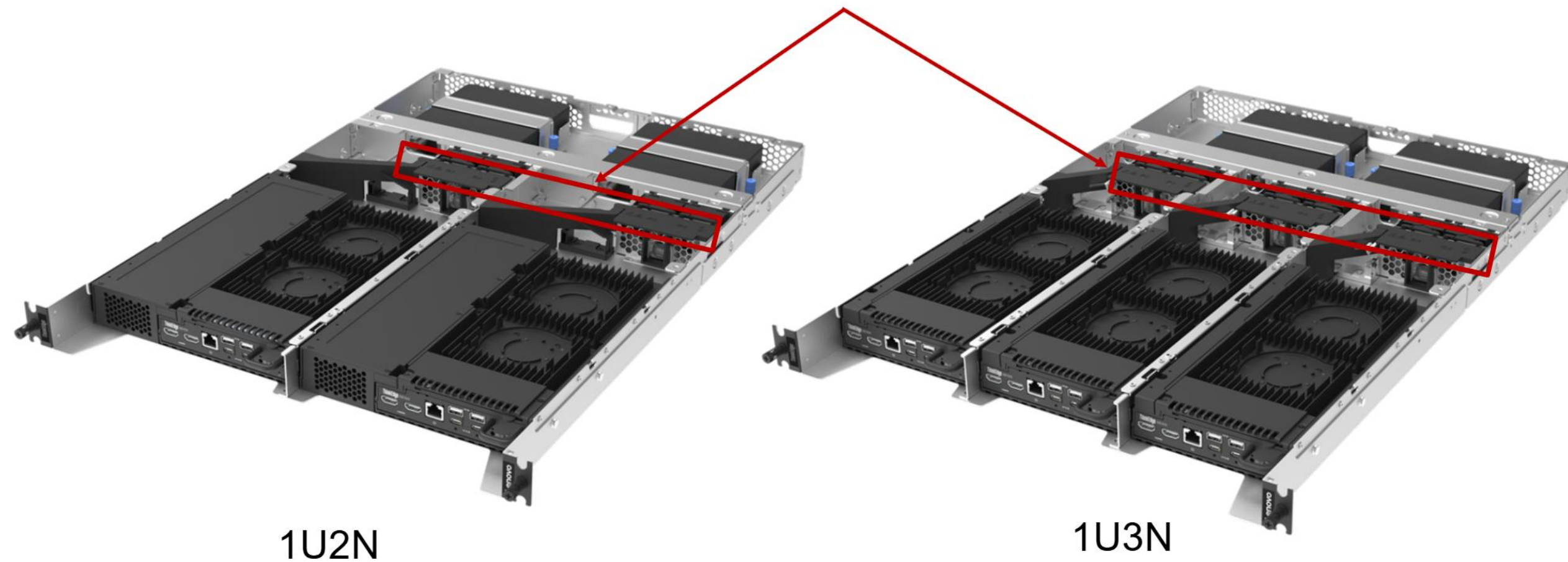H=2

H=2

Fan control board

The fan control board intrusion switch detects the middle top cover.
- When the cover is closed, fans 3 and 4 will run normally.
- When the cover is open, fans 3 and 4 will run faster to ensure proper system cooling.

Enclosure fan board

Fan board location

1U2N

1U3N

System fan matrix

Location	Fan 1	Fan 2	Fan 3	Fan 4	Fan 5	Fan 6
Numbering	Fan 1	Fan 2	Fan 3	Fan 4	Fan 5	Fan 6
Node with no expansion kit	✓	✓	X	X	X	X
Node with NIC expansion kit	✓	✓	X	X	✓	✓
1U2N / NIC kit	X	X	✓	✓	✓	✓
1U3N	X	X	✓	✓	X	X

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Drive ordering

Top view

M.2 slot 3 (Drive 2)

M.2 slot 2 (Drive 1)

SODIMM1
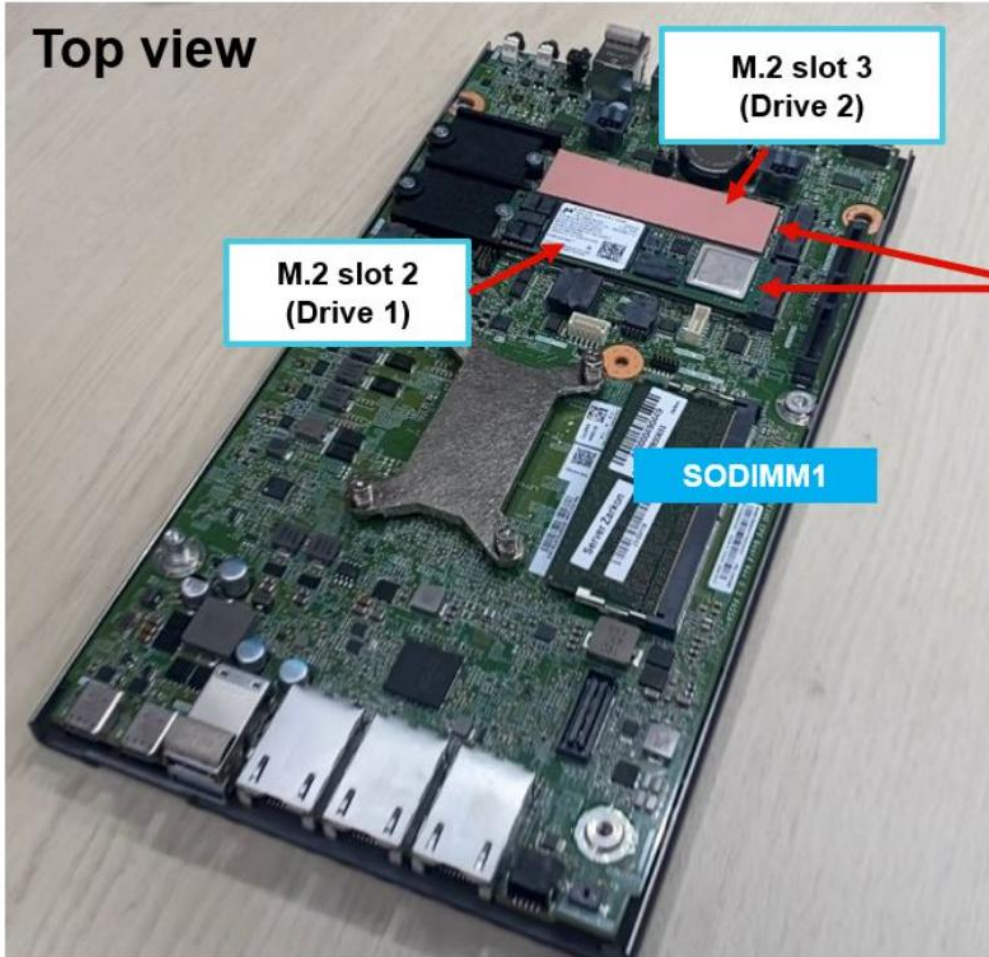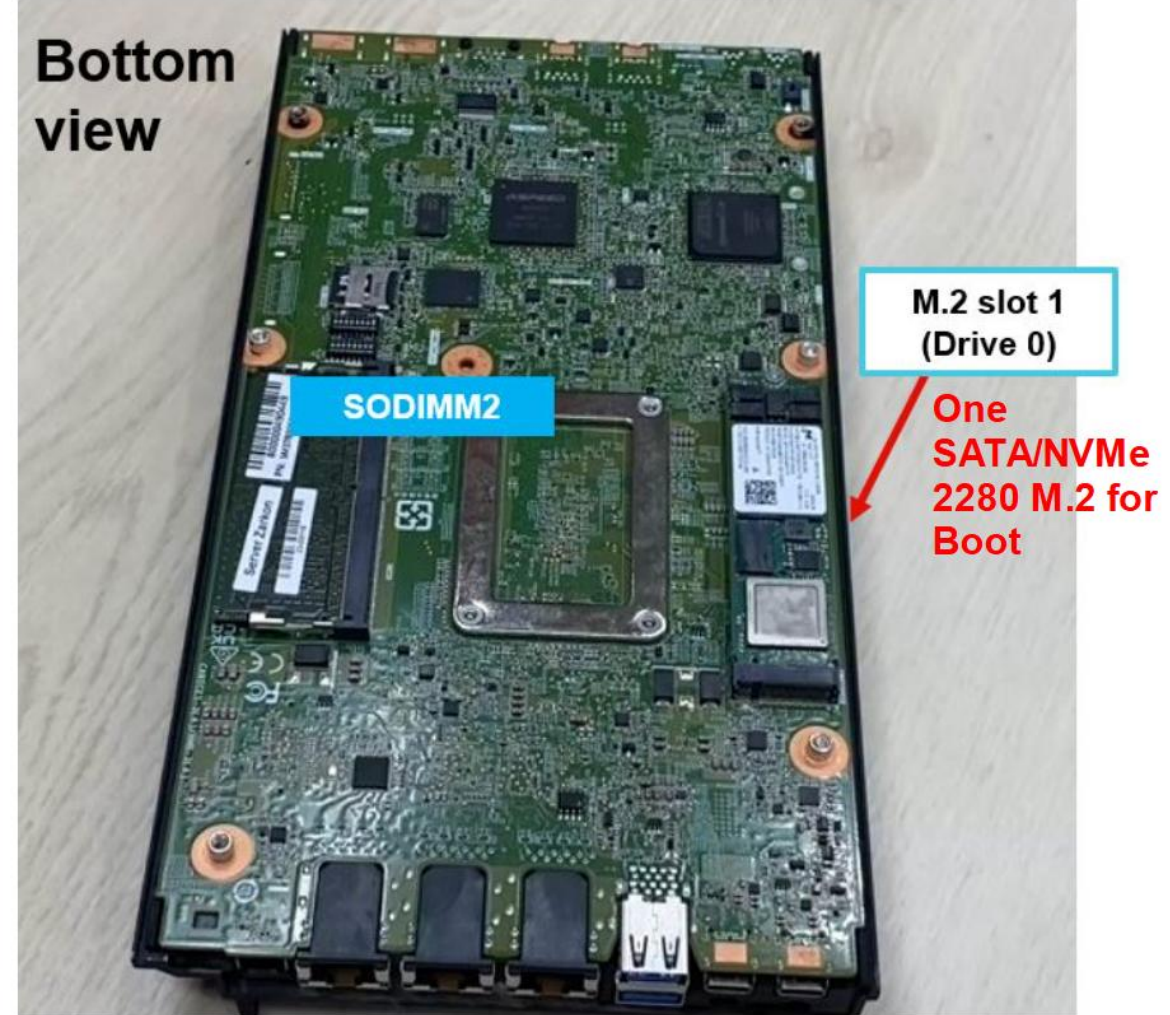
Two 2280 or 22110 M.2 for data, NVMe only

Bottom view

SODIMM2

M.2 slot 1 (Drive 0)

One SATA/NVMe 2280 M.2 for Boot

Note: You cannot mix 2280 and 22110 M.2 data drives.

Expansion riser kits

Riser card

GPU Kit

NIC Kit

No need for extra fan support

Requires two blower fans (fans 5 and 6)
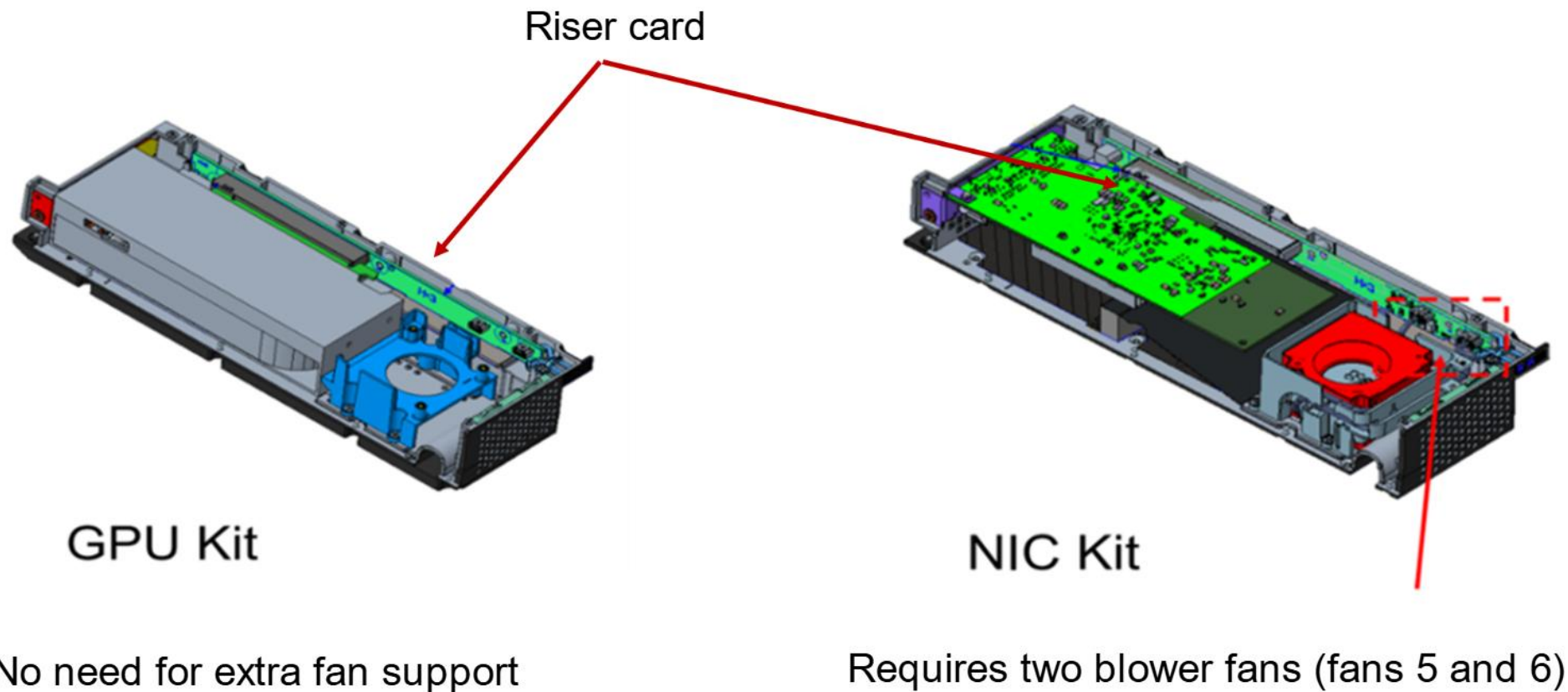
Parts installation and removal

For more information, refer to the installation and removal videos on the course landing page.
Also check the *Hardware replacement procedure* section of the SE100 user guide on Lenovo Docs for detailed installation steps, including:

- Installation guidelines
- Memory module installation rules and order
- Thermal pad replacement
- Powering the server on and off
- Configuration guide
- Rubber feet replacement
- Power adapter replacement
- Node component replacement
- PCIe expansion kit replacement

Lenovo