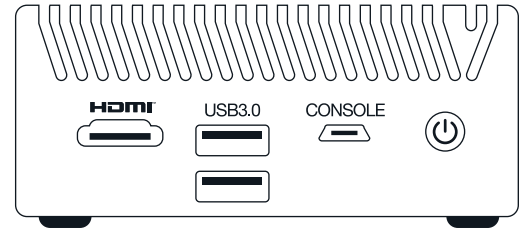


extremeEDGE Server™

1000 Series



The 1000 series brings powerful processing to the extreme edge, enabling remote system monitoring and management via the built-in NANO-BMC (Baseboard Management Controller). The fanless enclosure offers scalability with memory and storage configurations. These products can be powered using a standard DC Input or, on the EE-1000 system, via the optional PoE+ input.

The EE-1000 offers fixed memory and storage configurations, while the EE-1100 series offers memory, storage, WiFi, and LTE configurations. Common IO features include USB-A 3.2 and 2.0, as well as HDMI, Dual 2.5GbE, and Dedicated BMC GbE Ports.

Control at the extremeEDGE...

The first of its kind, offering NANO-BMC out-of-band management in a small form factor enables remote management of edge devices at the extremeEDGE. Functionality Overview: Monitor, control, and manage hardware health and performance.

NANO-BMC Features:

Features	Function	Notes
Remote Console Access:	Accessing the system console for diagnostics and troubleshooting	Serial over IP
Remote Power Management:	Power-on/off control, power cycling reset	Hard & soft
Virtual Drive:	Make a local file or directory appear as a Drive on the Remote System	This allows updating the BIOS, installing an OS, or loading files remotely onto the system
Firmware Updates	Updating firmware remotely	Helps keep systems patched and secure.

BMC Benefits:

- Remote access to hardware even when the main system is powered off (useful for troubleshooting).
- Increased system uptime and faster problem resolution.
- Improved power management and resource utilization.
- Remote Management reduces support cost.

Remote Access Methods:

- Dedicated BMC management interface.
- Integration with system management software.
- In-Band management through OS applications (SSH, Telnet, etc) *excludes Windows

Architecture

The 1000 series leverages a range of powerful AMD processors, including the N5105 and N100.

Features	EE-1000	EE-1110	EE-1130	EE-1170
Processor	Intel N5105	Intel N100	Intel N100	Intel N100
BMC	MOS-BMC	NANO-BMC	NANO-BMC	NANO-BMC
Console Port, Mini-USB	1x Micro-USB	1x Mini-USB	1x Mini-USB	1x Mini-USB
TPM (Discrete)	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0
Max Memory	32 GB	32 GB	32 GB	32 GB
Max Storage	2 TB (NVMe)	8 TB	8 TB	8 TB
Max Drives	1x 2242	1x 2280	1x 2280	1x 2280
USB	2x USB-A 3.0	2x USB-A 3.2 3x USB-C 2.0	2x USB-A 3.2 3x USB-C 2.0	2x USB-A 3.2 3x USB-C 2.0
Network	2x 2.5GbE, 1x 1GbE BMC	2x 2.5GbE, 1x 1GbE BMC	2x 2.5GbE, 1x 1GbE BMC	2x 2.5GbE, 1x 1GbE BMC
Wifi-AC + Bluetooth	N/A	N/A	Included	Included
4G / 5G Modem	N/A	N/A	N/A	Included
PoE+ PD	Optional	N/A	N/A	N/A
Display Out	1x HDMI	1x HDMI 1x mDP	1x HDMI 1x mDP	1x HDMI 1x mDP
Video Chipset	Intel UHD 24EUs 1x 4096x2160@60Hz Hardware Accelerators	Intel UHD 24EUs 1x 4096x2160@60Hz Hardware Accelerators	Intel UHD 24EUs 1x 4096x2160@60Hz Hardware Accelerators	Intel UHD 24EUs 1x 4096x2160@60Hz Hardware Accelerators
Operating Temperature Range	-40°C to 60°C (Optional)			
Mounting Options	DIN-Rail	DIN-Rail	DIN-Rail	DIN-Rail

Product Differentiating Features

Built for the Edge: Power and Efficiency in a Compact Design

The 1000 series thrives in edge computing applications where space is limited and on-site processing is crucial. Its ultra-compact size brings powerful computing to the edge of your network, while remote monitoring and management capabilities enhance security and simplify control.

Quiet Operation, Lower Costs

This fanless system operates silently and consumes minimal power – up to 16 watts under load, significantly less than a traditional server with a single CPU. This translates to lower energy costs and a reduced environmental footprint.

Flexible Mounting, Scalable Performance

The 1000 series adapts to diverse environments with its DIN rail compatibility, making installation a breeze. Additionally, it supports memory and storage configurations, allowing you to tailor the system to your specific data storage and management requirements.

NANO-BMC (Baseboard Management Controller)

The 1100 series and above products incorporate a Patent Pending technology, which redefines remote management with its built-in NANO-BMC module. This module enables secure out-of-band access for monitoring, control, and power management, including remote power cycling, reboots, virtual drive and critical BIOS updates.

Display Support

The EE-1000 system supports Intel UHD Graphics and drives a single monitor up to 4096x2160@60Hz using an HDMI 2.1 connector.

The EE-1110, EE-1130, and EE-1170 systems support Intel UHD Graphics and drive three monitors up to 4096x2160@60Hz each using an HDMI 2.1, Mini DisplayPort (mDP) 2.1.

Expandable Memory

The 1000 Series offers fixed memory and storage configurations, while the 1100 Series provides full customization.

Memory

Model	Maximum Configurations	Supported Types
EE-1000	8 GB, 16 GB, or 32 GB	Soldered down LPDDR4-2933 4x DRAM
EE-1110	8 GB, 16 GB, or 32 GB	DDR5-4800 1x SODIMM
EE-1130	8 GB, 16 GB, or 32 GB	DDR5-4800 1x SODIMM
EE-1170	8 GB, 16 GB, or 32 GB	DDR5-4800 1x SODIMM

Optional Product Protection

The 1000 series of products can be treated with a “Conformal Coating” at the PCBA level allowing for a higher level of protection against dust, moisture, and harsh chemical intrusion.

System Power Consumption

Model	Watts
EE-1000	Up to 21 Watts
EE-1110	Up to 20 Watts
EE-1130	Up to 20 Watts
EE-1170	Up to 20 Watts

Power Supply

Specification	Specification Limits	Notes
AC Input Range	100 - 240 VAc	50 Hz to 60 Hz
DC Voltage Out	12.0 VDc	+/- 5%
Amperage	4.0 Amps (EE-1000) 2.5 Amps (EE-1100 Series)	Maximum
Wattage Out	48 Watts (EE-1000) 30 Watts (EE-1100 Series)	Maximum
System Connection	5.5 x 2.1 mm	Lockable Barrel (5.5 mm)

System Dimensions & Weight

Dimensions	Weight
88.9 mm (W) x 88.9 mm (L) x 38 mm (H) 3.5" (W) x 3.5" (L) x 1.5" (H)	1Lb / 0.45 Kg, dependent on configuration

Certifications

Certifications	Notes
FCC	Federal Communication Commission
CE	Consumer Electronics
ROHS	Restriction Of Hazardous Substances
REACH	Registration / Evaluation / Authorization / Restriction Of Chemicals

Service & Support

Global Support	
Integration Services	Custom Configuration Service - BIOS Settings, Imaging, System Configuration & Labeling
Deployment Services	Field Deployment Management
Support	Local support in multiple geos.

Illustrated I/O Port Overview EE-1000

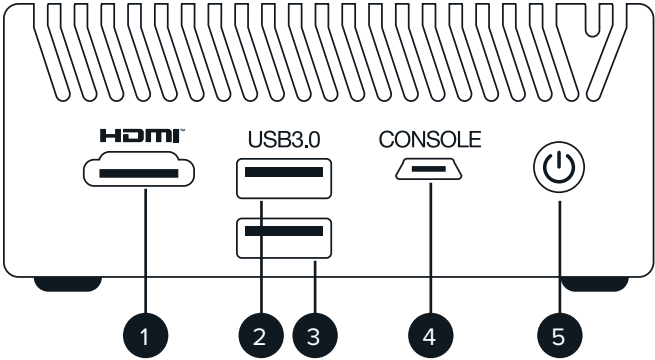


Diagram of the front I/O panel of the EE-1000. It features an HDMI port (1), two USB 3.0 ports (2 and 3), a console port (4), and a power button (5).

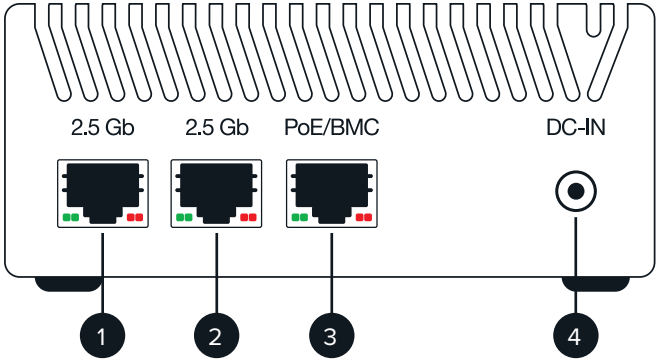


Diagram of the rear I/O panel of the EE-1000. It features two 2.5 Gb Ethernet ports (1 and 2), a PoE/BMC port (3), and a DC-IN port (4).

FRONT			
1	HDMI™	4	BMC CONSOLE
2	USB-A 3.0	5	POWER BUTTON
3	USB-A 3.0		

REAR			
1	2.5 GbE	3	POE/BMC
2	2.5 GbE	4	DC-IN

Illustrated I/O Port Overview EE-1110

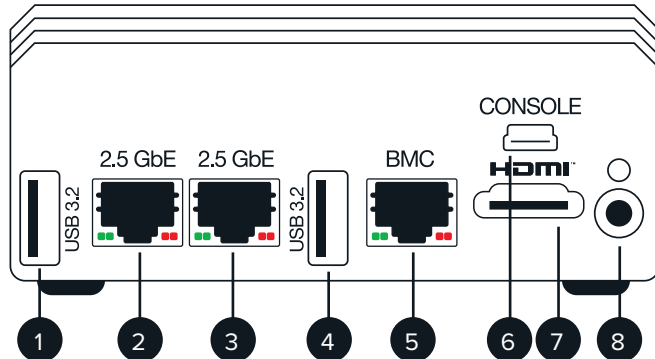


Diagram of the front I/O panel of the EE-1110. It features a USB 3.2 port (1), two 2.5 GbE ports (2 and 3), another USB 3.2 port (4), a BMC port (5), a console port (6), an HDMI port (7), and a power button (8).

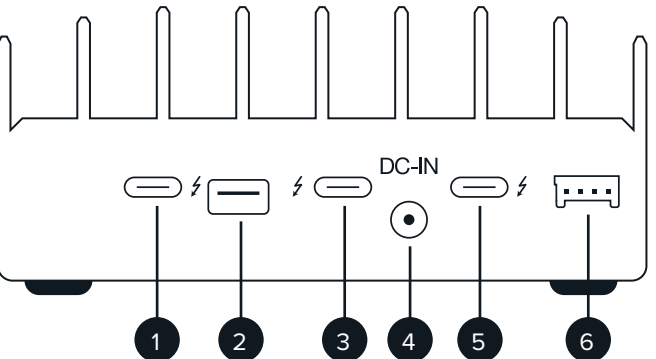
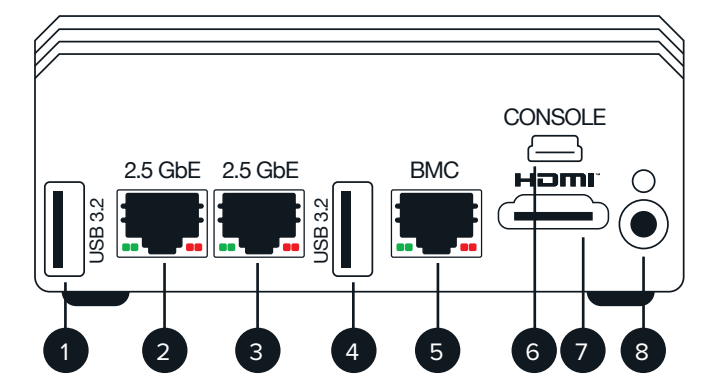


Diagram of the right I/O panel of the EE-1110. It features a USB-C 2.0 port (1), a mini-DP port (2), another USB-C 2.0 port (3), a DC-IN port (4), another USB-C 2.0 port (5), and a remote power port (6).

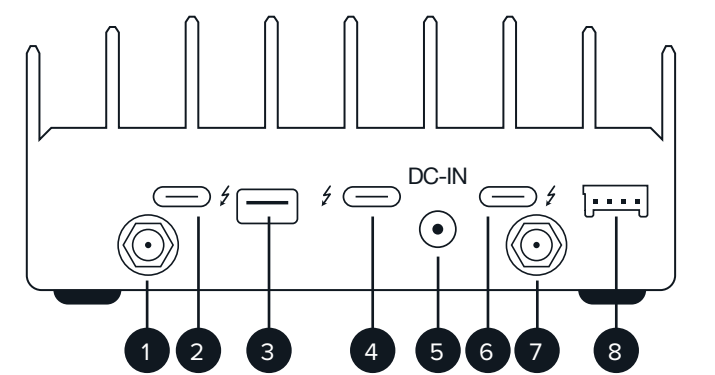
FRONT			
1	USB-A 3.2	5	BMC
2	2.5 GbE	6	BMC CONSOLE
3	2.5 GbE	7	HDMI™
4	USB-A 3.2	8	POWER BUTTON

RIGHT			
1	USB-C 2.0	4	DC-IN
2	MINI-DP	5	USB-C 2.0
3	USB-C 2.0	6	REMOTE POWER

Illustrated I/O Port Overview EE-1130

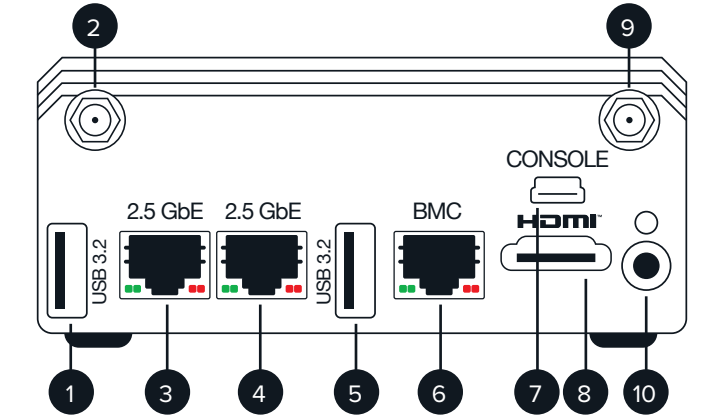


FRONT			
1	USB-A 3.2	5	BMC
2	2.5 GbE	6	BMC CONSOLE
3	2.5 GbE	7	HDMI™
4	USB-A 3.2	8	POWER BUTTON

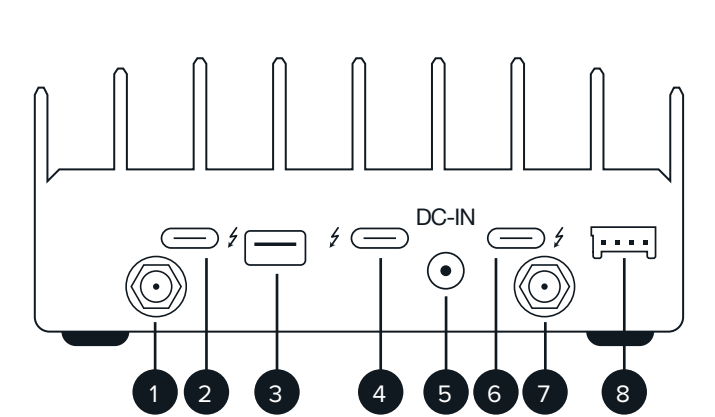


RIGHT			
1	ANTENNA	5	DC-IN
2	USB-C 2.0	6	USB-C 2.0
3	MINI-DP	7	ANTENNA
4	USB-C 2.0	8	REMOTE POWER

Illustrated I/O Port Overview EE-1170



FRONT			
1	USB-A 3.2	6	BMC
2	LTE ANTENNA	7	BMC CONSOLE
3	2.5 GbE	8	HDMI™
4	2.5 GbE	9	LTE ANTENNA
5	USB-A 3.2	10	POWER BUTTON



RIGHT			
1	WIFI ANTENNA	5	DC-IN
2	USB C 2.0	6	USB-C 2.0
3	MINI-DP	7	WIFI ANTENNA
4	USB-C 2.0	8	REMOTE POWER



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