

PANARO CL Motherboard Specifications

Physical Status	
Form Factor	ATX
Dimensions	12" x 9.6" (305 mm x 244 mm)
Processor System	
CPU	Supports Intel® Xeon® 6300-series, Xeon® E-2400 series, and Pentium® Gold G7400/G7400T processors
Socket	Single Socket LGA 1700
Thermal Design Power	95W
Chipset	Intel® C266
System Memory	
Supported DIMM Quantity	4 DIMM slots (2DPC)
Supported Type	Supports DDR5 288-pin ECC UDIMM
Max. Capacity per DIMM	32GB
Max. DIMM Frequency	4400MT/s (2DPC - 1DIMM) / 4000MT/s (2DPC - 2DIMM 1R) / 3600MT/s (2DPC - 2DIMM 2R)
Voltage	1.1V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	SLOT6: PCIe5.0 x16* [CPU] *SLOT6 share lanes with SLOT4. SLOT6 will switch to x8 when SLOT4 is populated
PCIe x 8	SLOT4: PCIe5.0 x8* [CPU]
PCIe x 4	SLOT7: PCIe4.0 x4 [CPU] SLOT2: PCIe4.0 x4 [PCH]
TPM	
TPM support	1 (13-pin, SPI)
Other PCIe Expansion Connectors	

M.2 slot	1 M-key (PCIe4.0 x4); support 2280/2260/2242/2230 form factor [PCH] 1 M-key (PCIe4.0 x4); support 2280/2260/2242/2230 form factor [PCH]
SATA/SAS Storage	
PCH Built-in Storage	Intel® C266 (8 SATA 6Gb/s; RAID 0/1/5/10): 8 SATA 7-pin
Additional SATA Controller	ASM1061 (6 SATA 6Gb/s): 6 SATA 7-pin
Ethernet	
Additional GbE Controller	4 RJ45 (1GbE) by Intel® i210
Server Management	
BMC Controller	ASPEED AST2600: iKVM, vMedia support
IPMI Dedicated GLAN	1 RJ45 Dedicated IPMI LAN port by Realtek RTL8211F
Graphics	
Controller	ASPEED AST2600: 1 DB15 (VGA)
Rear I/O	
UID Button/LED	1 UID button w/ LED
Video Port	1 DB15 (VGA)
Serial Port	1 DB9 (COM)
USB 3.2 Gen1 Port	2 Type A (USB3.2 Gen1)
RJ45	4 RJ45(1GbE), 1 dedicated IPMI
Internal Connector/Headers	
Power Connector	1 (24-pin, ATX main power), 3 (8-pin, ATX 12V)
Auxiliary Panel Header	1 (18-pin): chassis intrusion, system fault LED, LAN1/LAN2 activity LED, locate, SMBus
System Panel	1 (9-pin): power switch, reset switch, system power LED, HDD activity LED
VGA header	1
Speaker Header	1 (4-pin)

Buzzer	1
Fan Header	7 (4-pin)
Thermal Sensor Header	1
TPM Header	1 (13-pin, SPI)
SGPIO Header	1
SMBus header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1 (contact pads)
Front Lan LED Connector	1
USB 3.2 (Gen1) Header	2 header (19-pin, 4 USB3.2 Gen1)
USB 2.0 Header	1 header (9-pin, 2 USB2.0)
NMI Header	1
LED Indicators	
Standby PWR LED	1 (5VSB)
80 Debug Port LED	1
Fan Fail LED	7
BMC heartbeat LED	1
System BIOS	
BIOS Type	AMI 256Mb SPI Flash ROM
BIOS Features	Plug and Play, ACPI 6.4 and above compliance wake up events, SMBIOS 2.8 and above, ASRock Rack Instant Flash
Hardware Monitor	
Temperature	CPU, Temp MB1~ MB4, M.2, TR1 Temperature sensing
Fan	Fan Tachometer CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) Fan Multi-Speed Control
Voltage	3VSB, 5VSB, CPU_VCORE, VCCIN_AUX,VDD2, 1.05V_PCH, 0V82SB_PCH, 1V8SB, VCCSA, BAT, 3V, 5V, 12V
Supported OS	

OS	<p>Microsoft® Windows®</p> <ul style="list-style-type: none"> - Server <u>2022</u> (64 bit) - Server <u>2025</u> (64 bit) <p>Linux</p> <ul style="list-style-type: none"> - Red Hat Enterprise Linux Server 8.5 (64 bit) / 9.2 (64 bit) - SUSE Enterprise Linux Server 15 SP3 (64 bit) / 15 SP5 (64 bit) - Ubuntu 21.04 (64 bit) / 22.04.2 (64 bit)
Environment	
Temperature	<p>Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C</p>
Humidity	<p>Non operation humidity: 20% ~ 90% (Non condensing)</p>