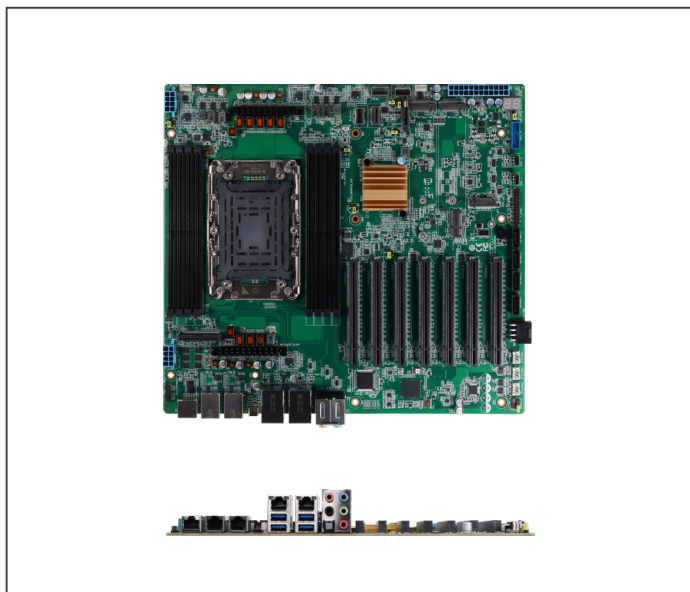


# EATX-W890A PRELIMINARY

Workstation Motherboard with Intel® Xeon® 600 processors for Workstation with Intel® W890 Chipset



## Features

- Intel® Xeon® 600 processors for Workstation
- DDR5 6400MT/s R-DIMM, up to 8 Slots, Max. 2TB
- Up to PCIe Gen 5 [x16] x 7
- M.2 M-Key x 3, M.2 E-Key x 1
- MCIO x 4
- Rear: USB 3.2 (Type-A) x 4, USB 3.2 (Type-C) x 1
- Internal: USB 3.2 (Vertical Type-C) x 2, USB 3.2 (Gen1) x 2
- SATA 6Gb/s x 4 with RAID 0, 1, 5, 10 support
- 10GbE LAN x 2, 2.5GbE LAN x 2, BMC MLAN x 1 (optional)
- Remote Management: BMC Module (optional)



Rear Panel I/O Ports	
USB	USB 3.2 Gen 2x1 (Type-C) x 1 (USB only; 5W/3A) USB3.2 Gen 2x1 (Type-A) x 4
Audio I/O	Audio Jack x 3: Line-in, Mic-in, Line-out (5.1 CH HD Audio)
LAN I/O	RJ-45 (10GbE) x 2, RJ-45 (2.5GbE) x 2
Management Port	Management LAN x 1 (BMC, Optional)
Display Port	Via VGA(DB-15) output (from BMC module, optional)
Console Port	SIO COM Port (via RJ-45) x 1
Serial Port	—
PS/2 Port	—
Others	UID Button x 1
Internal I/O Connectors	
Storage	SATA 6Gb/s x 4, RAID 0, 1, 5, 10 supported MCIO x 4 (PCIe Gen 4 [x4], Gen 5 [x4]), RAID 0,1 supported M.2 2280 M-Key x 1 (PCIe Gen 4 [x4]) M.2 2280 M-Key x 2 (PCIe Gen 5 [x4]), RAID 0, 1, 10 supported; Intel® VROC supported *With Mainstream CPU, optional by BOM: SATA 6Gb/s x 4, RAID 0, 1, 5, 10 supported MCIO x 2 (PCIe Gen 4 [x4]), RAID 0,1 supported M.2 2280 M-Key x 1 (PCIe Gen 4 [x4])
USB	USB 3.2 Gen 2x1 (Vertical Type-C) x 2 (USB only; 5W/3A) USB 3.2 Gen 1 x 2 via 2x10-Pin Header x 1
Display I/O	—
Audio I/O	—
Serial Port	—
PS/2 Port	—
Parallel Port	—
Front panel	1 x 24 pin FPC: Power Switch, HDD Activity, LAN Activity LED, Watchdog, Temperature Alarm LED, Fan Failure LED, Chassis Intrusion, System Fault LED, SMBus 1 x ATX compatible Front panel Connector (pin headers 2,54 mm pitch, 2x12 pin)
BMC_SMB Header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1
FAN	CPU Fan Header x 1 System Fan Header x 4
Others	Buzzer onboard x 1, BMC Module socket x 1, BMC COM header x 1
LED Indicators	
Standby PWR LED 5vsb	1
PWR LED 5v	1
Port 80 LED	1
Fan Fail LED	5
Management	
BMC	BMC Module socket x 1
Security	
Security	TPM 2.0 Secure Boot Silicon Root of Trust
OS	
OS Support	Windows 11 25H2 Ubuntu Linux (version: TBD) RHEL 9.6 (Kernel 5.14.0-570.12.1.el9_6)

## Specifications

System	
Processor	Intel® Xeon® 600 processors for Workstation, Socket E2, LGA 4710-2 Intel® Xeon® 690/670 Series Processors, TDP up to 350W
Chipset	Intel® W890 Chipset
Memory	DDR5 R-DIMM, ECC, 1DPC, 128GB per DIMM, 1.1V DDR5 6400MT/s x 8, Max. 2TB *With Mainstream CPU, optional by BOM: DDR5 6400MT/s x 4, Max. 1TB
Ethernet	Intel® Ethernet Controller E610-XAT2, 10GbE x 2 Intel® Ethernet Controller I226-LM, 2.5GbE x 2
Audio	Realtek® ALC897
TPM	TPM 2.0 onboard
Expansion Slots	PCIe Gen 5 [x16] x 7 Note: Slots 2 & 6 are non-functional when used with Mainstream CPU SKUs M.2 2230 E-Key x 1 (PCIe Gen 4 [x1]/USB 2.0/CNVi)
BIOS	AMI 512Mb SPI Flash ROM, supports BIOS recovery, BIOS Backup
WatchDog Timer	Yes
H/W Monitor	
Temperature	CPU, CPU Power MOSFET, Memory, PCH, PCIe Slot, MB
Fan	Fan Tachometer via IPMI, CPU Quiet Fan (enables automatic chassis fan speed adjustment based on CPU temperature) Multi-Speed Fan Control
Voltage	CPU: VCCIN, VCCFA_EHV, VNN_MAIN, VCCFA_EHV_FIVR, VCCINF, VCCD_HVO, VCCD_HV1, V3P3_CPU_VR_OUT, V12S_CPU PCH: V3P3A, VOP82A, VRTC DIMM: 12V_DIMM System: V5DSW, V3P3DSW, V1P8A, V12S, V5S, V3P3S
Smart Fan Control	CPU Fan/System Fan
Wake On LAN/ PXE	—
Power State	TBD
Graphics	
Controller	—
Graphics Multi Display	—
VGA	—
DVI	—
HDMI	—
Display Port	Via USB-C output (BMC, Optional)
Backlight Control	—
Environment & Power & ME	
Battery	Lithium Battery
Power Requirement	1x24-pin ATX Main Power Connector 2x8-pin ATX 12V Power Connectors
Operation Temperature	32°F ~ 140°F (0 ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operation Humidity	20 ~ 90% relative humidity, non-condensing
Certificate	CE & FCC Class A
Form Factor	EATX: 12" x 13" (305mm x 330mm)
Weight	TBD
MTBF (Hours)	TBD

Note: All specifications are subject to change without notice.

