ADi-SA3X-PTL

Gaming Platform Powered by Intel® Core™ Ultra Series 3 Processors, supporting up to Four Independent 4K UHD Displays



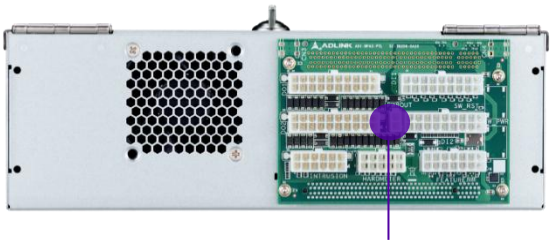
Features

- **Intel Core™ Ultra Series 3 (Panther Lake-H) Processors** – Featuring integrated Intel® Arc™ graphics
  3 SKUs:
  - Intel® Core™ Ultra 7 358H 12Xe
  - Intel® Core™ Ultra 5 338H 10Xe
  - Intel® Core™ Ultra 5 336H 4Xe
- **Flexible Dual-Option Gaming BIOS Design** – Supports either a BIOS socket or a BIOS module board
- **Enhanced Cabinet Harness Interface** – Supports the new vertical connector backplane (ADi-BPA3-PTL)
- **PEG Card Expansion** – 1x dual-slot PEG card support (up to PCIe 4.0 x8)
- **Expandable MRAM** – 8 MB MRAM, expandable to 64 MB
- **Comprehensive USB Connectivity** – 8x USB 3.2 Gen 1 and 9x USB 2.0 ports, with MEMCLEAN function support via the new rear I/O panel and internal USB 2.0 cable
- 2x GbE
- 6x COM port, including ccTalk, 9-bit support
- TPM 2.0
- 12V single rail and 24V single rail support (optional)
- 4x DP 1.4a output (HBR2)
- 2ch Audio
- 2x M.2 and 2x SATA DOM/CFast Support
- New Gaming solution design (More powerful FPGA and Log-in processor solution)
- Compatible with iDLL and iAPI SW platform and next-gen gaming platforms

Highlights



Dual-slot PEG Card Support
(*Exclusive to Intel® Core™ Ultra 5 336H 4Xe SKU)



Vertical connector backplane
(ADi-BPA3-PTL, Optional Accessory)

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



Specifications

Model Name	ADi-SA3X-PTL
Core System	
Processor	Intel® Core™ Ultra Series 3
Chipset	N/A
BIOS	AMI uEFI on 32 MB SPI BIOS flash via onboard BIOS socket and SPI header
Expansion Slot	1x PCIe x16 Gen4 slot (up to x8) 2x M.2 2280 (2-lane PCIe)/1x M.2 2280 (4-lane PCIe)
DIMM Type/ Frequency	2x DDR5 SO-DIMMs, up to 7200MHz
SRAM/ MRAM	8MB (Up to 64MB) MRAM
Storage	2x M.2(2242/2280) and 2x SATA DOM/CFast
Security	Key Lock, Intrusion detection switch, Power-off monitoring, Eyelet for seal, Security dongle options, TPM, Bit Lock, Software Chain of Trust, BIOS Customization, GLI cable and connector covers (optional)
I/O Interface	
Serial ATA	2x SATA CONN or CFAST CONN
Ethernet (GLAN)	2
COM	1x RS-232/422/485 1x RS-232 2x RS-232/TTL 1x RS-232/ccTalk x2 on internal header (9-bit protocol support) (6x)
Audio Interface	2 channel audio signal (FRONT, LINE-IN, MIC) via 3 jacks on rear I/O 2 channel audio signals output (LINE-OUT) on internal header
USB	4x USB 3.2 Gen 1 & 8x USB 2.0 (rear I/O) 4x USB 3.2 Gen 1 internal vertical connectors 1x USB 2.0 internal vertical connector (17x)
Digital I/O (Gaming)	32x GPI & 32x GPO
Display	
Display Port	4
Power Supply	
DC Power	12V or 24V DC
Mechanicals	
Dimensions	265mm (W) x 242mm (D) x 91mm (H)
Environmental	
Operating Temperature	0˚C – 50˚C (32˚F – 122˚F)
Storage Temperature	-20˚C – 70˚C (-4˚F to 158˚F) (excl. SSD/CFast)
Humidity	~85% @ 50°C (144˚F) (non-condensing)
Vibration	Operating, 1 Grms, 5-500 Hz, 3 axes (w/ CFast or SSD)
Shock	Operating, 20 G, half sine 11 ms duration (w/ CFast or SSD)
EMC	CE and FCC Class A
ECD	Contact +/-4 KV and Air +/-8 KV
Safety	UL/cUL, CB
SW Support	
Operating System	Windows 11 LTS (Main OS) & Linux Ubuntu 22.04 LTS (by request)

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Gaming-Specific Features and Security

Up to 2x 32MB dual independent high-speed MRAM
Crypto & Authentication Security Chip (SHA-256, RNG, UID, EEPROM, OTP)
External: 10x Intrusion detection and event logging (battery-buffered), 1x OPTO power supply Internal: 7x Intrusion detection and event logging (battery-buffered) for Door SW, 2x M.2 , 2x CFast card ,BIOS board, EEPROM board
EEPROM support (various; SATA connector and socket type jurisdiction EEPROM)
Removable BIOS chips and BIOS SPI header
1-Wire bus support (multiple UID S/Ns silicon numbers and EEPROM)
12V or 24V DC output for peripheral devices (2A Max.)
ccTalk, ID003, EBDS, SSP, TCL and MDB
32x digital inputs /32x digital outputs; protected (Include 8x 3A high-current driving support)
EPFail support (early power fail detection input)
4x User LEDs and function switches
4x DIP switch
16x independent current-sensed hard meter support (8x PCs by default; another 8x PCs by request)
SEC soft meter support (SPI)
Key lock, eyelet for sealing, TPM, dedicated security ICs, secure key storage
Fully customizable secure BIOS
2.1 channel 20W speaker output (By ADi-BAMP-G2 card)
Precise RTC

ADi-BPA3-PTL Features (Optional)

2x 2*10 mini-fit Connector for 32x digital outputs (DO1&DO2)
2x 2*9 mini-fit Connector for 32x digital inputs (DI1&DI2)
2*6 Mini-fit Connector for 10x Intrusion detection and event logging (battery-buffered), 1x OPTO power supply (INTRUSION)
2*5 mini-fit Connector for 8x hard meter outputs / COM3~6 by BOM optional (HARDMETER)
2*7 mini-fit Connector for EXT_SPI, EXT_I2C ,EP_FAIL,1_Wire,door intrusion monitor (FEATURE)
1*2 mini-fit Connector for power output (PWROUT)
1x Rest SW (Optional) ,1x Power SW (Optional)
PCIe x16 slot for connect with box pc (CN1)

Ordering Information

ADi-SA3X-PTL-EAAF	• 12V PWR IN • ADi-BA3G-PTL/ U5-338H/8MB • Intel® Core™ Ultra 5-338H and CPU Cooler • 2x 8GB DDR5 SO-DIMM • 2x SATA CONN / CFast CONN • 1x 128GB M.2 (M Key; 2280, PCIe) • Windows 11 LTE
ADi-SA3X-PTL-EABF	• 12V PWR IN • ADi-BA3G-PTL/ U5-336H /8MB • Intel® Core™ Ultra 5-336H and CPU Cooler • 2x 8GB DDR5 SO-DIMM • 2x SATA CONN / CFast CONN • 1x 128GB M.2 (M Key; 2280, PCIe) • Windows 11 LTE
ADi-SA3X-PTL-EACF	• 12V PWR IN • ADi-BA3G-PTL/ U7-358H /8MB • Intel® Core™ Ultra 7-358H and CPU Cooler • 2x 8GB DDR5 SO-DIMM • 2x SATA CONN / CFast CONN • 1x 128GB M.2 (M Key; 2280, PCIe) • Windows 11 LTE

Optional Accessories

ADi-BPA3-PTL	Vertical connector backplane
ADi-BAMP-G2	• Class-D audio amplifier • 2x 18 Watts for L or R Channel and 1x 20 Watts for woofer • 4Ω and 8 Ω speaker support • 12V PWR –IN
ADi-SA3X storage bracket	Supports to install 2x PCs 2.5" SSD (w/ SATA cable)

All products and company names listed are trademarks or trade names of their respective companies. Updated October 2026. ©2026 ADLINK Technology, Inc. All Rights Reserved. All pricing and specifications are subject to change without further notice.