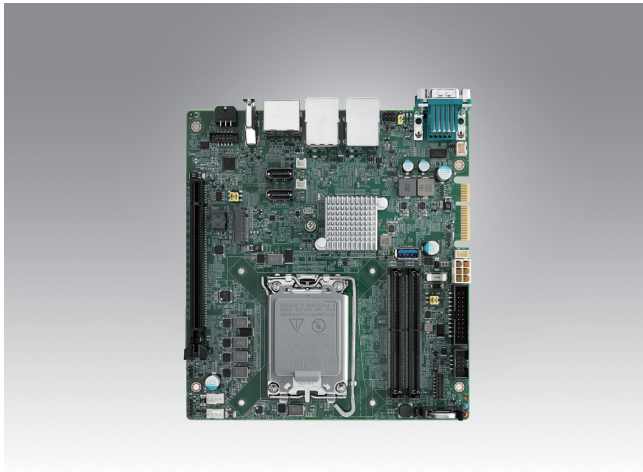


DPX[®]-M275

Intel[®] 12/13/14th Generation Core™ Multi-media Gaming Platform



Features

- Very high-performance Intel Hybrid Multi-core CPU's
- Two SoDIMM DDR5-4800/5600MT/s up to 96GB
- CPU's up to Intel[®] Core™ i9 24 core
- Three independent monitors (2x DisplayPort, 1x HDMI)
- PCIe x16 graphics card slot
- Modular Expansion Port – Edge connector
- Fully featured driver API for IO and security
- Intrusion detection, hardware monitoring, precision RTC
- Hardware & Software backwards and forwards compatible



Introduction

The DPX[®]-M275 is the latest addition to the proven DPX-M series multi-media gaming platform range. Based on the Intel scalable desktop platform, the DPX-M275 uses latest high-performance CPU's with Hybrid core technology up to Core i9. Three independent monitors are supported via two DisplayPort 1.4 DP++ ports and an HDMI 2.0b port. For higher performance and stunning games the standard PCI-Express x16 graphics card slot allows the M275 to support today's latest graphics cards. The modular expansion architecture allows cost effective modules to be added for the specific application, adding features such as I/O, COMs, NVRAM, security and specialized interfaces. The DPX-M275 is also available in two enclosure styles.

Specifications

System	Intel 12/13/14th Generation Core CPU's Long life cycle 7 years availability RAM up to DDR5-4800/5600 MT/s, Non-ECC, 2 SODIMM up to 96GB
Video (Integrated)	Integrated UHD 770 graphics, Xe architecture Three monitor support from CPU Two DP++ v1.4a interfaces, Single HDMI 2.0b Direct X12, OpenGL 4.6, Open CL 2.2 support
Video (Expansion)	PCIe x16 Gen.5 graphics expansion slot (x16 lanes). Simultaneous operation of integrated and PCIe card graphics
Security	TPM2.0 security device on board Intrusion switch inputs (up to 6) BIOS customization Protected I ² C port Secure Precision Real Time Clock (Optional)
Software	Range of Advantech software products for gaming Edge-to-edge drivers and Software API/SDK. Code portability through consistent API with other Advantech gaming boards.
Expansion	I ² C, PCIe, USB, PCI-Express x16
Power	12V DC single input
Memory	2 x SoDIMM socket up to 94GB total DDR5-4800/5600 MT/s, Non-ECC
BIOS	AMI APTIO UEFI BIOS BIOS can be fully write protected BIOS module with expansion ROM support
LAN	2 x Ethernet Gigabit LAN Full duplex operation Wake-On-LAN capability
Storage	2 x SATA 3.0 ports 2 x SATA power headers M.2 'M-Key' form factor (2242 size only), 4 lane PCIe interface. NVME support.

Ports	Audio: Line out 2.1 channels, SPDIF In, SPDIF Out, MIC, Line In 6 x RS232 (2 x fully featured, 4 x Tx/Rx) Includes 1x ccTalk/RS232, 1x ID003/TTL/RS232 9 x USB (6 x USB 2.0, 3 x USB 3.2/2.0) 2 x I ² C ports (one protected) PORT80 Debug
Discrete Inputs	5 ESD protected inputs (also individually configurable as logged intrusion inputs)
Audio	Front I/O panel connector for: Line level FL, FR, LFE and SPDIF_Out. Onboard connector for: Line level FL/FR/LFE, Line In L & R, MIC In, SPDIF Out, SPDIF In
Watchdog Timer	Programmable time-out
Battery	CR2032 with solder terminals Battery state software readable
Software (OS)	Windows, Linux
Asset Tag	Unique ID, API readable serial number
Intrusion Detection	6x Intrusion detection input lines Operates with and without system active Logs date/time of last 254 events Logs system resets/brownouts as events EEPROM backup for 10 years retention
System Health Monitoring	Run-time accessible voltage and temperature measurements. PWM fan control for CPU and system fan. Configurable thermal response.
BIOS Hardware	WSOIC Clamshell (option to solder IC) Write protectable, fully customizable
Environment	Operating Temperature: 0 ~ 60 °C Storage Temperature: -20 ~ 85 °C
Approvals	EMC: UKCA, CE, FCC Class A RoHS, WEEE

Specifications Cont.

Dimensions.	Extended Mini-ITX 170 mm (W) x 185mm (L) (6.69" x 7.28")
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Embedded Controller	Uptime counters for licensing, event logging, hardware monitoring (system voltages, fans & battery), intrusion detection and logging, secure iPC, RTC, Precision RTC.
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Benefits

Intel UHD Graphics 770 driven by Xe architecture and PCIe x16 for discrete graphics cards
Single board integrated solution
Wide expansion capabilities
Backwards compatible with DPX-M series boards
Small size
Low power
Long Lifecycle

Optional Accessories

M.2 modules, SATA DoM, SSD storage devices, M.2 -> SATA adapter
Expansion port breakout boards (standard or custom)
Full system Chassis
Range of PCIe graphics cards

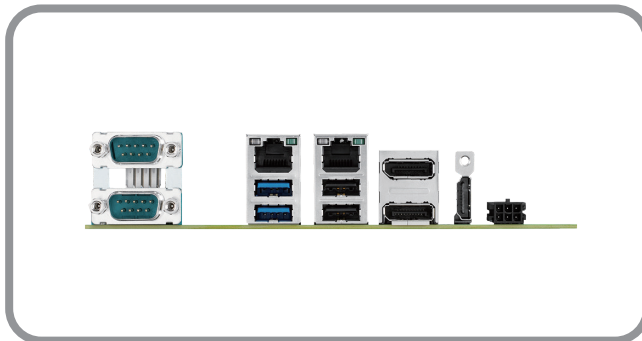
Software Products

Media Validation SDK
DPX Connector SDK
DPX Diagnostics
DPX SAS Connector
MS Windows Embedded licenses

OEM Customization and Product Development

- Advantech Gaming Solutions specialize in the fields of PC-based hardware design and software development. Our in-depth knowledge and global resources make us your ideal partner.
- Specifications subject to change. E&OE.
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Front I/O



System Products



Modular Expansion

