

DPX[®]-S2445

High Performance Intel[®] Multi-Screen Gaming Platform



Features

- Rugged logic box design
- Security and access to meet the requirement of the gaming industry
- Dual and Quad Core Intel CPUs from Celeron to Core i7
- Full gaming features set
- High performance integrated Intel GPU or PCI-Express graphics
- Support for up to 150W ¾ length double-width graphics cards
- 12V_{DC} or ATX power supply compatible
- "Futureproof" removable I/O shield design allow upgrade to future DPX-S motherboards, Easy service SSD/HDD module



Introduction

The DPX-S2445 is a complete gaming system combining the unrivalled performance of Advantech-Innocode's DPX-S445 motherboard with the convenience of the new DPX-S2000 enclosure. The DPX-S2445 system has a card slot bay for a PCI-Express graphics card that is wide enough for today's high powered double-width graphics cards giving the customer the ability to upgrade from the integrated graphics or add more monitors (up to 7 or more). For mass storage the system includes a quick release carrier with shock mounting for solid state disk or hard drive.

Specifications

System	Intel [®] Embedded Dual and Quad Core CPUs – Celeron, Pentium, Core i3, i5, i7 up to 2.9GHz (3.8GHz)
	Long lifecycle 5+ years availability
Video (integrated)	DDR4-2400, 2 SODIMMs up to 32GB total RAM
	2 x Gigabit Ethernet LAN
Video (expansion)	2 x SATA/SATA DOM sockets (SATA 3.0, 6Gbps)
	Audio (on-board 3 channel amp)
Security	8192 kB SRAM (NVRAM), 32kB EEPROM
	Integrated performance chipset graphics system (Intel GT2-530)
Software	Direct X 12, Open GL 4.4, UVD v6, H.265
	Triple monitor support from APU
CPU/Chipset	3 x DisplayPort DP++ v1.2 with 5.4Gb/s link speed and daisy chaining
	Full speed PCI-Express X16 (full x16) Gen 3 slot
Memory	TPM security device on board
	Intrusion switch inputs (8 dedicated)
BIOS	BIOS customization
	iButton [®] interface (2 x 1-wire ports) support for external iButton reader
Asset Tag	Precision secure Real time clock device
	Protected I2C port
Watchdog Timer	Security ROM support
	Edge-to-edge drivers and API/SDK
EEPROM	Code portability through consistent API with other Advantech-Innocode boards
	Range of Innocode software products for Gaming
SRAM (NVRAM)	Intel 6th/7th Gen. Dual and Quad Core CPUs
	2 x SODIMM sockets
TPM	Up to 32GB DDR4 -2400 MT/s SDRAM
	AMI APTIO UEFI BIOS with support for legacy boot devices
Discrete I/O	BIOS can be write protected
	BIOS / Expansion ROM module – field removable /verifiable

LAN	2 x Ethernet Gigabit LAN
	Full duplex operation
Storage	Wake-On-LAN capability
	2 x SATA 3.0 for HDD, SSD or SATA DOM
Ports	5 x RS232 Serial, 16550 compatible
	2 x CcTalk/RS232
iButton/GPIO	1 x RS232/TTL
	1 x ID003/TTL/RS232
Discrete I/O	1 x RS232/485
	11 x USB (3 x USB 3.0/ 2.0)
Audio (line level)	2 x I2C on board header (one protected)
	Audio out - SPKR (left, right and LF), line out 5.1 channels
Audio (amplified)	Two Bi-Directional, programmable GPIO header for iButton, special purpose device or security module
	32 ESD protected inputs
SRAM (NVRAM)	32 OC Outputs (500mA, 50V)
	(of which 8 I/O ports can be configured as meter outputs with disconnect detect)
TPM	HD 5.1 Audio - Front I/O jack connectors for: FL, FR, CE, LFE, RL, RR
	On-board connector for Line in L&R, MIC In, SPDIF in, SPDIF Out, Jack detect
Watchdog Timer	Headphone connector
	On board 15W + 15W + 15W (FL, FR, LF) Class D audio amps with bass boost
EEPROM	8192 KB fast SRAM (2 banks) on PCI bus
	Battery state software readable
SRAM (NVRAM)	TCG/TPM 2.0/1.2 compliant security device on board
	Programmable time-out
Discrete I/O	32kB user EEPROM (option for larger)
	Unique API readable serial number

Specifications Cont.

Intrusion Detection	8x Intrusion detection input lines (one used for enclosure) 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	Measurement of CPU core temp. with thermal trip. Configurable smart fan control for CPU and System fan
Power Fail Detect	External sensor input for advanced warning of AC power fail
Expansion	2 x I2C, 2 x 1-Wire PCI-Express x 16 graphics card

Power	12VDC single input or ATX12VDC v2.3 or newer power supply Intelligent power control
Environment	Operating Temperature: 0 ~ 40 °C Storage Temperature: -20 ~ 85 °C
Approvals	EMC: CE, FCC Class A RoHS, WEEE
Dimensions	260 (W) x 214 (L) x 124 (H) mm (10.2" x 8.4" x 4.9")

All product specifications are subject to change without notice.

Optional Accessories

Range of PCI-E graphics cards
I/O connector breakout board (horizontal and vertical options)
Edge card connector set
SATA DOM, SSD storage devices
iButtons®, iButton carrier

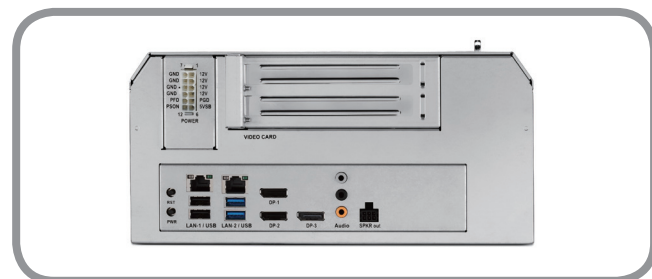
Benefits

High performance Intel CPU and Chipset
Single integrated solution
Designed for the Gaming Industry
Backwards compatible with DPX-S series boards
Open architecture expansion via PCI-E x16 slot
Long Lifecycle

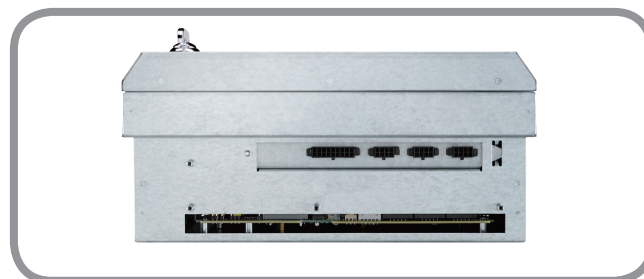
OEM Customization and Product Development

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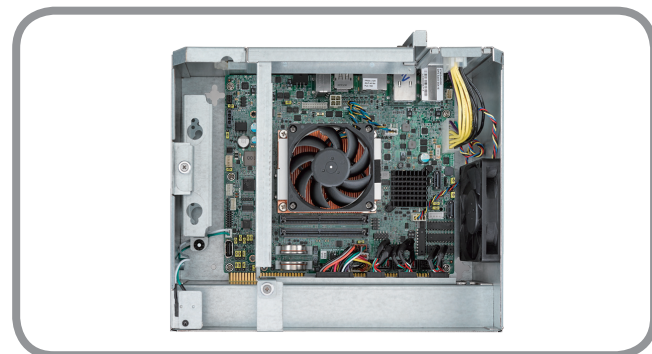
Front View



Rear View



Inside View



Rear View (optional vertical connector board installed)

