

# DPX<sup>®</sup>-S1435

High performance Intel<sup>®</sup> multi-screen gaming platform

Preliminary



## Features

- Rugged logic box design
- Security and access to meet the requirement of the gaming industry
- Dual and Quad Core CPUs from Celeron to Xeon<sup>®</sup>
- Full gaming features set
- High performance integrated or PCI-Express graphics
- Easy service SSD/HDD module
- Casino grade lock and intrusion monitoring (Battery backed and logged)
- "Futureproof" removable I/O shield design allow upgrade to future DPX-S motherboards



## Introduction

The DPX-S1435 is a complete gaming system combining the unrivalled performance of Advantech-Innocode's DPX-S435 motherboard with the convenience of the new DPX-S1000 enclosure. The DPX-S1435 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	4th Generation Intel <sup>®</sup> Core <sup>™</sup> Low Power Dual and Quad Core CPUs High performance chipset graphics system (HD4600) DDR3-1600, 2 SODIMMs up to 16GB total RAM 2 x Gigabit Ethernet LAN 2 x CFast <sup>™</sup> sockets (CFast 1.0 and 2.0 support), 3 x SATA DOM sockets (SATA 3.0, 6Gbps) Audio (on-board 3 channel amp) 8192 kB SRAM (NVRAM), 1MB ROM, EEPROM
I/O	10 x Serial Ports (RS232/TTL/CCTalk/RS485 ) 4 x USB 3.0, 8 x USB 2.0 GPIO/iButton 32 inputs and 32 outputs (6 Meter outputs with disconnect detect)
Video	Integrated – Intel next generation HD4600 Direct X 11.1 Graphics core Dual, triple monitor support from integrated CPU graphics Full speed PCI-Express X16 v3.0 slot (Optional)
Security	TPM security device on board Intrusion switch inputs (8 dedicated) BIOS customization 1 x Security ROM socket
Software	Edge-to-edge drivers and API/SDK Code portability through consistent API with other Advantech-Innocode boards. Range of Innocode software products for Gaming
CPU/Chipset	Intel 4th Generation Core Dual and Quad Core CPUs: Core i5, i7 up to 2.7 (3.3) GHz Xeon, Core i3, Pentium and Celeron options Intel Q87
Memory	2 x SODIMM sockets Up to 16GB DDR3 -1600 MT/s SDRAM
BIOS	AMI APTIO UEFI BIOS BIOS can be write protected, support for legacy ROM extensions

Video	Integrated – Intel next generation HD4600 Direct X 11, Open GL 3.2, OCL 1.2 Graphics core 1 GB VRAM maximum shared memory (with 2 GB or more system memory installed) Video Ports: 2 x DVI-D (MicroCross <sup>™</sup> ) 1 x Analog VGA (15 pin D-Sub) 1 x DisplayPort v1.2 with 5.4Gb/s link speed and daisy chaining
LAN	2 x Ethernet Gigabit LAN Full duplex operation Wake-On-LAN capability
Storage	2 x C-Fast <sup>™</sup> socket 3 x SATA 3.0 for HDD, SSD or SATA DOM
Ports	5 x RS232 Serial, 16550 compatible 2 x CCTalk/RS232 2 x RS232/TTL 1 x RS232/485 12 x USB (2 x USB 3.0, 2 x USB 2.0 on front panel, 6 x USB 2.0, 2 x USB 3.0 on board headers) 2 x I2C on board header Audio out - SPKR (left, right and LF), line out 5.1 channels
iButton/GPIO	Bi-Directional, programmable GPIO header for iButton, special purpose device or security module
Discrete I/O	32 ESD protected inputs 32 OC Outputs (500mA, 50V) (of which 6 I/O ports can be configured as meter outputs with disconnect detect)
Sound	HD Audio On board 13W + 13W + 13W Class D audio amps with FL, FR, LF speaker connections
Security ROM	1 x Socket for 1MB EPROM/OTPROM PLCC32 (PCI, Bootable)
SRAM	8192 KB fast SRAM (2 banks) on PCI bus Battery state software readable

## Specifications Cont.

TPM	TCPA/TPM 1.2 compliant security device on board.
Watchdog Timer	Programmable time-out of 1-255 seconds "Always on" design (default 255 seconds)
EEPROM	32kB user EEPROM (option for larger)
Intrusion Detection	8 Intrusion detection input lines
	Operates with and without system active
	Logs date/time of last 254 events
	Logs system resets/brownouts as events
System Health Monitoring	EEPROM backup for 10 years retention
	Measurement of CPU core temp. with thermal trip.
	Configurable smart fan control for CPU and 2x System fans

Power Fail Detect	External sensor input for advanced warning of AC power fail
Expansion	1) Up to 240 Bytes of PCI-based I/O expansion available through DirectPCI+ interface on board header
	2) PCI-Express x16 graphics card
Power	ATX or AT mode
Environment	Operating Temperature: 0 – 40° C
	Storage Temperature: -20 – 85° C
Approvals	EMC: CE, FCC Class A RoHS, WEEE
Dimensions	260 (W) x 203 (L) x 124 (H) mm (10.2" x 8" 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  
Edge card connector set  
CFast cards, SATA DOM, SSD storage devices  
iButtons®, iButton carrier

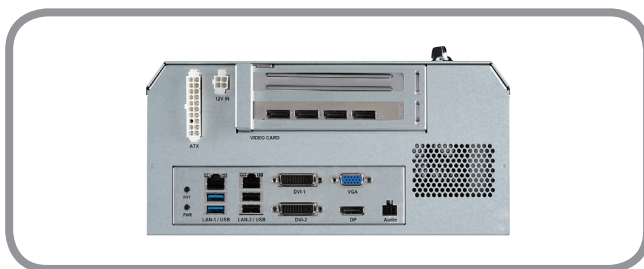
## Benefits

Best in class CPU performance  
Single integrated solution  
Designed for the Gaming Industry  
Backwards compatible with DPX-S series boards  
Compact size  
Low power  
Long Lifecycle

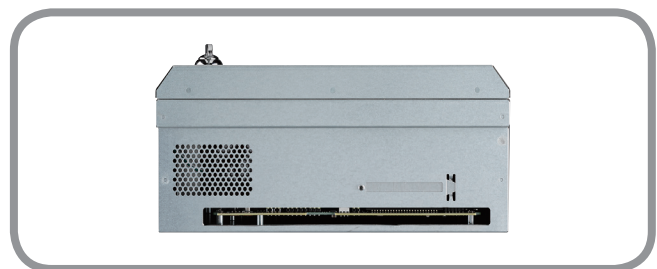
## OEM Customization and Product Development

- Advantech-Innocore is part of the Advantech Co., Ltd. Group of Companies.
- Advantech-Innocore specializes 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.
- Copyright © 2014 Advantech Co., Ltd.
- All rights reserved. Advantech-Innocore, the Advantech-Innocore Logo, DPX, ConnectBus are trademarks of Advantech Co., Ltd. in the UK, US and other countries.
- All other trademarks are acknowledged and respected.

## Front View



## Rear View



## Inside View

