# DPX®-E135

## **AMD® Embedded G-Series Gaming Platform**



#### **Features**

- Dual and Quad core AMD G Series SOC platform
- Comprehensive gaming features
- High performance Radeon HD8000 series graphics
- Passive cooled system
- 12V DC single input or ATX power
- "Cabinet-ready" I/O connectors on-board









#### Introduction

The DPX®-E135 is a completely integrated system for gaming applications. Based on the 3rd generation of AMD's G Series embedded platform, the DPX-E135 provides a complete PC platform with a passive cooling system. The system uses AMD's latest high performance dual and quad core SOC devices with "Discrete-level Graphics" from the integrated HD8000 series graphics core. Two independent monitors are supported via two DisplayPort 1.2 DP++ ports plus VGA. A full feature set of I/O and COMs designed specifically for gaming devices is also included making the DPX-E135 an ideal integrated platform for many gaming, amusement and kiosk applications.

### **Specifications**

	System	AMD Embedded G-Series Dual and Quad Core APUs
		Long life cycle 5 years availability
		DDR3-1866, 2 SODIMMs up to 16GB
	Video (Integrated)	Integrated – Radeon HD8000 series graphics engine
		Dual monitor support from APU
		Two DP++ interface support DisplayPort plus single VGA
		Direct X 11, OpenGL 4.2, OpenCL 1.2, DirectCompute support
	Security	TPM security device on board
		Intrusion switch inputs (8 dedicated)
		BIOS customization
		iButton® socket and external iButton reader support
		Precision secure Real time clock device
	Software	Edge-to-edge drivers and Software API/SDK
		Code portability through consistent API with other Innocore boards.
		Range of Advantech-Innocore software products for Gaming
	CPU/Chipset	AMD G Series SOC Processing Unit (APU) Dual and Quad Core APUs up to 2.4GHz, up to 2MB L2 cache Low power (25W Max) APUs
	Memory	2 x SODIMM sockets
		Up to 16GB DDR3 1866 MT/s SDRAM system RAM
	BIOS	AMI APTIO UEFI BIOS
		BIOS can be write protected
		BIOS expansion ROM module

LAN	2 x Ethernet Gigabit LAN
	Full duplex operation
	Wake-On-LAN capability
Storage	2 x C-Fast™ sockets
	$2\mathrm{x}$ SATA 3 (up to 6Gb/s) headers for HDD, SSD or SATA DOM
	1 x SD Card
Ports	4 x RS232 (2 x fully featured, 2 x Tx/Rx/RTS/CTS)
	2 x CCTalk
	1 x TTL
	1 x ID003
	1 x RS485
	9 x USB (2x USB 3.0)
	1 x I <sup>2</sup> C port
iButton/GPIO	Bi-Directional GPIO header for iButton, special purpose device, security module
Discrete I/O	32 ESD protected inputs
	32 OC Outputs (500mA, 50V)
	Of which 8 I/O ports can be configured as meter outputs with disconnect detect
LED drive	2 x 4 channel LED driver
Sound	HD 5.1 audio with stereo amplified outputs 20W/ch,
SRAM (NVRAM)	Up to 8MB battery backed fast SRAM
SHAM (MVHAM)	Battery state software readable
TPM	TCPA/TPM 2.0/1.2 compliant security device on board.
Watchdog Timer	Programmable time-out
EEPROM	128kB user EEPROM (option for larger)

# **Specifications Cont.**

Asset Tag	Unique API readable serial number
Intrusion Detection	8x 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	Measurement of CPU core temp. With thermal trip. PWM fan control for system fans.
Power Fail Detect	External sensor input for advanced warning of AC power fail

Expansion	I <sup>2</sup> C
Power	12V DC single input or ATX power supply Intelligent power control
Environment	Operating Temperature: 0 ~ 50° C TBC
	Storage Temperature: -20 ~ 85° C
Approvals	EMC: CE, FCC Class A
	RoHS, WEEE
Dimensions	200 mm (W) x 270 mm (L)

#### **Benefits**

Performance integrated graphics
Single integrated solution
Designed for the Gaming Industry
"Cabinet-ready" connectors
Small size
Low power
Long Lifecycle

# **Optional Accessories**

CFast™ cards, SATA DOM, SSD storage devices
iButtons®, iButton carrier
Base and Short Cover - logic area secure cover
Base and Long Cover – cable and logic area secure cover

#### **Software Products**

SecureBoot SDK
DPX Connector SDK
DPX Diagnostics
DPX SAS Engine
TPM Suite SDK

# **OEM Customization and Product Development**

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DPX-E135 shown with SSD tray extended



