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
Ī	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
Ī	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
Ī	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

	2 x Ethernet Gigabit LAN
LAN	Full duplex operation
LAN	Wake-On-LAN capability
	PXE boot option
	2 x C-Fast™ sockets
Storage	2x SATA 3 (up to 6Gb/s) headers for HDD, SSD or SATA DOM
	1 x SD Card
	4 x RS232 (2 x fully featured, 2 x Tx/Rx/RTS/CTS)
	2 x CCTalk
	1 x TTL
Ports	1 x ID003
	1 x RS485
	9 x USB (2x USB 3.0)
	2 x I ² C port
iButton/GPIO	Bi-Directional GPIO header for iButton, special purpose device, security module
	32 ESD protected inputs
Discrete I/O	32 OC Outputs (500mA, 50V)
<i>5</i> 1301010 1/ 0	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
OHAM (MANAM)	Battery state software readable
TPM	TCPA/TPM 2.0/1.2 compliant security device on board.
Watchdog Timer	Programmable time-out

Specifications Cont.

EEPROM	32kB user EEPROM (option for larger)
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 ² C, 1-wire
Power	12V DC single input or ATX power supply, scheduled power up, event log, system health monitoring
Environment	Operating Temperature: 0 ~ 45 °C
	Storage Temperature: -20 ~ 85 °C
Approvals	EMC: CE, FCC Class A
	RoHS, WEEE
Dimensions	200 mm (W) x 270 mm (L)
	RoHS, WEEE

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®
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

- 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.
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