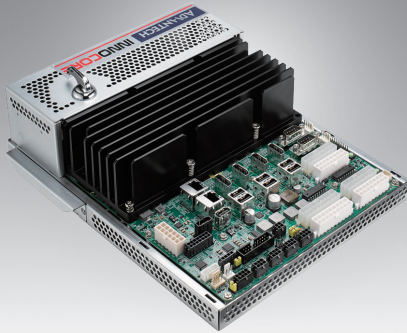


DPX®-E145

11th Generation Intel® Core™ Gaming Platform

Preliminary



Features

- 11th Generation Intel® Core™ SOC CPUs
- CPUs up to Dual 3.0 (3.9) GHz, Quad core 2.8GHz (4.4) GHz
- Intel Iris Xe integrated graphics
- Four 4k monitor support
- Comprehensive gaming features
- Passive cooled system up to 28W
- 12V DC single input or ATX power



Introduction

The DPX®-E145 is a completely integrated system for gaming applications. Based on the newest 11th generation Intel Core embedded platform, the DPX-E145 provides a complete PC platform with a passive cooling system. The system uses Intel's revolutionary high performance dual and quad core SOC devices with "Discrete-level Graphics" from the integrated Intel Iris Xe graphics core. Four independent monitors are supported via DisplayPort 1.2 DP++ ports. A full feature set of I/O and COMs designed specifically for gaming devices is also included making the DPX-E145 an ideal integrated platform for gaming, amusement and kiosk applications.

Specifications

System	11th Gen. Intel® Core™ Dual and Quad Core CPUs Long life cycle 7 years availability Dual channel RAM up to DDR4 3200 MT/s Non-ECC, 2 SODIMMs up to 64GB total
Video (Integrated)	Integrated Intel Iris Xe series graphics engine (i5, i7) Intel UHD graphics (i3, Celeron) Quad monitor support from CPU Four DP++ interfaces support DisplayPort 1.2 Direct X 12, OpenGL 4.5, OpenCL 2.2 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 Advantech-Innocore boards Range of Advantech-Innocore software products for Gaming
CPU/Chipset	11th Gen. Intel® Core™. Dual Core CPUs up to 3.0GHz (turbo to 3.9GHz), Quad core up to 2.8 (4.4) GHz up to 12 MB Intel Smart Cache 28W Max. CPUs
Memory	2 x SODIMM sockets Up to 64GB DDR4 3200 MT/s SDRAM system RAM non-ECC support (BIOS selectable)
BIOS	AMI APTIO UEFI BIOS BIOS can be write protected BIOS expansion ROM (OPTOM) support
LAN	2 x Ethernet Gigabit LAN Full duplex operation Wake-On-LAN capability PXE boot option

Storage	2 x C-Fast™ sockets 2 x SATA 3 (up to 6Gb/s) headers for HDD, SSD or SATA DOM Secure, easy access tray for 2.5" SSD drive 1x M.2 form factor up to 2280 size modules, 4 lane PCI-e Gen 4 interface. NVME support
Ports	4 x RS232 (2 x fully featured, 2 x Tx/Rx/RTS/CTS) 2 x CCTalk 1 x TTL 1 x ID003/TTL 1 x RS485 9 x USB (2 x USB 3.0) 2 x iC port
iButton/GPIO	Bi-Directional GPIO header for two iButton devices, 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 presence detect
Audio	HD 5.1 audio with stereo amplified outputs 20W/ch
SRAM (NVRAM)	8MB battery backed fast SRAM Battery state software readable
TPM	TCPA/TPM 2.0 compliant security device on board.
Watchdog Timer	Programmable time-out
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

Specifications Cont.

Power Fail Detect	External sensor input for advanced warning of AC power fail
Expansion	I ² C, 1-wire, M.2
Power	12V DC single input or ATX power supply Intelligent power control, scheduled power up, event log, system health monitoring

Environment	Operating Temperature: 0 ~ 50 °C, airflow TBC
	Storage Temperature: -20 ~ 85 °C
Approvals	EMC: CE, FCC Class A
	RoHS, WEEE
Dimensions	200mm (W) x 270mm (L)

Optional Accessories

CFast™, M.2 cards, SATA DOM, SSD storage devices
 iButtons®
 Short Cover - logic area secure cover

Software Products

SecureBoot SDK
 DPX Connector SDK
 DPX Diagnostics
 DPX SAS Engine

Benefits

Performance integrated graphics- Four 4K monitors
 Single integrated solution
 Designed for the Gaming Industry
 "Cabinet-ready" connectors
 Small size
 Long Lifecycle

OEM Customization and Product Development

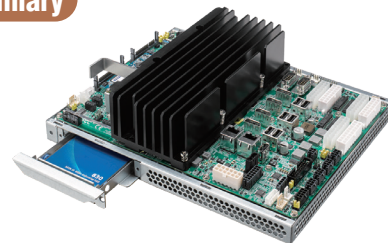
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Preliminary



DPX-E140 shown for reference

Preliminary



DPX-E140 shown without logic area cover (passive cooled version)