DPX®-E105

Intel® ATOM™ Industrial Computer System

Features

- Comprehensive gaming features
- Low power and compact design
- Easy integration for gaming applications
- Dual monitor supported
- Fanless system

Introduction

The DPX®-E105 is a complete industrial computer system that offers good performance and very low power with the cost effective Intel® ATOM™ processor. A full feature set of I/O and COMs designed specifically for gaming devices is also included making the DPX®-E105 an ideal integrated platform for many gaming, amusement and kiosk applications. The overall system is fanless and the gaming functions share the same API as Advantech-Innocore's other DPX® Series boards.

Feature Summary

System (Standard model)	Intel® ATOM™ performance & low power
	Intel 945GSE chipset
	512MB DDR2 SDRAM
	1 x Gigabit Ethernet LAN
	2 x CompactFlash socket
	Audio
	1024kB SRAM (NVRAM)
I/O	5 x RS232 Serial, 16550 compatible
	1 x CCTalk
	5 x USB 2.0
	32 inputs and 32 outputs
	Meter outputs with disconnect detect
Video	Integrated Intel GMA 950 (Gen. 3.5)
	Dual monitor support
Security	Intrusion switch inputs
	BIOS customization
	1 x iButton® sockets
	1 x Security ROM socket
Enclosure	Aluminium extruded with status LEDs.
	Passive cooling system
Software	Edge-to-edge drivers and API/SDK.
	Code portability through consistent API with other Advantech-Innocore boards.
	Range of Advantech-Innocore software products for Gaming
CPU/Chipset	Intel® ATOM™ N270 1.6GHz (1.6/533 2.5W)
	Intel® 945GSE + ICH7M

Memory	1 x SO-DIMM socket
	512MB DDR2 533MHz
	Optional* :-
	Up to 2GB
BIOS	AMI PCI/PnP/ACPI BIOS
Video	Integrated - Intel GMA 950
	Video Ports:
	Primary:- Analog VGA
	Secondary:- DVI
LAN	1 x Ethernet Gigabit LAN
	Full duplex operation
	Wake-On-LAN capability
	Optional* :-
	LAN 2 Gigabit LAN
Storage	2 x CompactFlash Type I/II (Flash/MicroDrive)**
	Optional* :-
	1 x CF socket configured for SD card**
	1 x HDD/SSD 2.5″**
Ports	5 x RS232 Serial, 16550 compatible (2 x available as TTL)
	1 x CCTalk
	4 x USB 2.0
	1 x USB 2.0**
	Optional* :-
	1 x CCTalk
	2 x RS232
	1 x RS485
	2 x USB**

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See overleaf for continued specification

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)
	Optional* :-
	4 Opto-Isolated outputs
	4 high current outputs (3A)
Power Fail Detect	External sensor input for advanced warning of AC power fail
	Sound:
	HD Audio
	2 channel line level outputs
SRAM	1024kB fast SRAM (1 bank) on PCI bus
	Battery state software readable
	Optional* :-
	Up to 4096kB
EEPROM	Optional* :-
	32kB user EEPROM
iButton	1 x iButton® socket for special purpose device or security modules**
	Optional* :-
	1 x iButton®**
Security ROM	1 x Socket for 1MB EPROM/OTPROM PLCC32 (PCI, Bootable)
	Optional* :-
	1 x Socket for 1MB EPROM/OTPROM PLCC32 (PCI, Bootable)

Watchdog Timer	Programmable time-out of 1-255 seconds
	"Always on" design (default 255 seconds)
Intrusion Detection	Six Intrusion detection input lines (2 used for 'case open')
	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.
Power	ATX or AT mode
	External PSU.
Environment	Operating Temperature: 0 ~ 40° C TBC
	Storage Temperature: -20 ~ 85° C
Approvals	EMC: CE, FCC Class A
	RoHS, WEEE
Dimensions	229 x 180 x 77 mm (9.0 x 7.1 x 3.0")

Notes:

* Optional items are subject to an MOQ, price change and are factory configured at time of order.

** User Accessible (Internally mounted behind rear cover plate under battery backed intrusion detection)

Optional Hardware

Edge card connector set
Compact Flash cards
USB sticks
External power supply
iButtons®

Benefits

Low Power (CPU power 2.5W)
Single integrated solution
Small size: 229 x 180 x 77mm (9.0 x 7.1 x 3.0")
Designed for the Gaming Industry
Low Cost

OEM Customization and Product Development

- 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.

- Advantech-Innocore is part of the Advantech Co., Ltd. Group of Companies.

- Specifications subject to change. E&OE.

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Front I/O

Rear I/O

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