

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

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|----------------------------|---|
| System (Standard model) | Intel [®] ATOM [™] performance & low power |
| | Intel 945GSE chipset |
| | 512MB DDR2 SDRAM |
| | 1 x Gigabit Ethernet LAN |
| I/O | 2 x CompactFlash socket |
| | Audio |
| | 1024kB SRAM (NVRAM) |
| | 5 x RS232 Serial, 16550 compatible |
| Video | 1 x CCTalk |
| | 5 x USB 2.0 |
| | 32 inputs and 32 outputs |
| | Meter outputs with disconnect detect |
| Security | Integrated Intel GMA 950 (Gen. 3.5) |
| | Dual monitor support |
| | Intrusion switch inputs |
| | BIOS customization |
| Enclosure | 1 x iButton [®] sockets |
| | 1 x Security ROM socket |
| | Aluminium extruded with status LEDs. |
| Software | Passive cooling system |
| | 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 |

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|-----------|---|
| Memory | 1 x SO-DIMM socket |
| | 512MB DDR2 533MHz |
| BIOS | Optional* :- |
| | Up to 2GB |
| Video | AMI PCI/PnP/ACPI BIOS |
| | Integrated - Intel GMA 950 |
| | Video Ports: |
| LAN | Primary:- Analog VGA |
| | Secondary:- DVI |
| | 1 x Ethernet Gigabit LAN |
| Storage | Full duplex operation |
| | Wake-On-LAN capability |
| | Optional* :- |
| | LAN 2 Gigabit LAN |
| Ports | 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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|-------------------|---|
| 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) |

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|--------------------------|--|
| 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

Front I/O



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.
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Rear I/O

