# **DPX®-E120**

## AMD G-Series (Fusion) Industrial Computer System



### **Features**

- Comprehensive gaming features
- Low power and compact design
- Easy integration for gaming applications
- Dual monitor support









### Introduction

The DPX®-E120 is a complete industrial computer system that offers good performance and very low power with the AMD G-Series embedded platform. A full feature set of I/O, COMs and security designed specifically for gaming devices is also included, making the DPX®-E120 an ideal integrated platform for many gaming, amusement and kiosk applications. The overall system is housed in an attractive extruded case and the gaming functions share the same API as Advantech-Innocore's other DPX® Series boards.

## **Specifications**

Complete system solution, enclosure, field proven API and drivers  AMD G series APU performance & low power  1.65 GHz Dual core, 1.5 GHz Single core and 1.2 GHz Single core options  Gaming hardware, security and I/O  Audio amplifier for 2.1 channels.  Attractive Aluminum enclosure  AMD G-Series embedded BGA APUs. T56N 1.65 GHz 18W Dual core and T52R 1.5 GHz 18W Single core T44R 1.2 GHz 9W Single Core APU options  AMD 55E Fusion controller hub  2 x SODIMM sockets  Memory  Up tp 8GB DDR3 PC3-10600 (1333MT/s) – T56N, T52R Up to 8GB DDR3 PC3-8500 (1066MT/s) – T44R  BIOS  AMI PCI/PnP/ACPI BIOS  Integrated – AMD Radeon HD 6320/6310/6250 Direct X 11, Open GL 4.1  Video  Video Ports: Primary:- Analog VGA Secondary:- DVI-D  Intrusion switch inputs (4 external, 2 internal) BIOS customization  1 x iButton® socket 1 x Security ROM socket  TPM 1.2 (trusted platform module)  High definition audio codec  Amplified outputs for 2.1 channels, 13W per channel. Audio line out (SL, SR, LFE), audio line in (stereo)		
System  1.65 GHz Dual core, 1.5 GHz Single core and 1.2 GHz Single core options Gaming hardware, security and I/O Audio amplifier for 2.1 channels. Attractive Aluminum enclosure  AMD G-Series embedded BGA APUS. T56N 1.65 GHz 18W Single core and T52R 1.5 GHz 18W Single core T44R 1.2 GHz 9W Single Core APU options AMD 55E Fusion controller hub  2 x SODIMM sockets  Up tp 8GB DDR3 PC3-10600 (1333MT/s) – T56N, T52R Up to 8GB DDR3 PC3-8500 (1066MT/s) – T44R  BIOS  AMI PCI/PnP/ACPI BIOS  Integrated – AMD Radeon HD 6320/6310/6250 Direct X 11, Open GL 4.1  Video  Video Ports: Primary:- Analog VGA Secondary:- DVI-D  Intrusion switch inputs (4 external, 2 internal) BIOS customization  Security  1 x iButton® socket 1 x Security ROM socket TPM 1.2 (trusted platform module) High definition audio codec  Audio  Amplified outputs for 2.1 channels, 13W per channel.	System	
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	Audio	High definition audio codec
Audio line out (SL, SR, LFE), audio line in (stereo)		
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LAN	2 x Ethernet Gigabit LAN
	Full duplex operation
	Wake-On-LAN capability
Storage	2 x CompactFlash Type I/II (Flash/MicroDrive)**
	Optional* :-
	1 x SD card**
	1 x SSD 2.5"**
Ports	5 x RS232 Serial, 16550 compatible (2 x available as TTL)
	1 x CCTalk
	4 x USB 2.0
	4 x USB 2.0**
	Optional* :-
	1 x CCTalk
	2 x RS232
	1 x RS485
	32 ESD protected inputs
1/0	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 failure
SRAM	1024kB fast SRAM (1 bank) on PCI bus
	Battery state software readable
	Optional* :- Up to 4096kB
EEPROM	Optional* :-
	32kB user EEPROM

# **Specifications Cont.**

iButton	1 x iButton® socket for special purpose device or security modules**
	Optional* :- 1 x iButton®** (range of devices available)
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 (1 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.

Enclosure	Aluminum extruded with status LEDs.
	Passive or active cooling system
	Compact size
	Optional:- rear access door for compact flash
Approvals	EMC: CE, FCC Class A
	RoHS, WEEE
Dimensions	229 x 180 x 77 mm (9.0 x 7.1 x 3.0")
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

All product specifications are subject to change without notice .

#### Notes:

- \* Minimum order quantities may apply for options
- \*\* Internal access with intrusion access control

## **Benefits**

Low Cost

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

# **Optional Accessories**

Edge card connector set

Compact Flash cards other SSD

Microsoft operating system licenses

External power supply
iButtons®

# **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.
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## Front I/O



## Rear I/O

