Innovations in Gaming Computing
The Widest Range of Solutions for the Gaming Industry

- Lottery / Casino Machines
- Sports Betting
- AWP
- VLTs / Class II
- Multiplayer Games
- Arcade
- Pachislot

Intel® & AMD Core Platforms

4K UltraHD

4k Monitors Supported

GLI, NVGCB, etc Regulatory compliance

PCI Express Graphics

www.advantech-innocore.com
About Advantech-Innocore

Advantech-Innocore is the leading global gaming supplier. The company specializes in designing and manufacturing industrial grade hardware and dedicated software tailored to the exact needs of the gaming industry. As the gaming-focused business unit of the $2Bn Advantech Group, Advantech-Innocore stands alone among hardware suppliers in its capabilities to support customers large and small in all regions of the world. Advantech is a premier member of Intel® Internet of Things (IoT) Solutions Alliance, bringing the first-to-the-market IoT solutions to the world. Advantech is also a member of AMD Elite Partner Program presenting a wide range of AMD-based high performance computing platforms. Advantech is an Elite Partner of Nvidia for high performance and long lifecycle graphics solutions.

Gaming team with 15+ years experience

• Experienced management and sales network with over 150 years of combined gaming experience
• Expert engineering, project management and design capabilities for efficient project execution
• Multi-discipline teams—hardware, firmware, FPGA, BIOS, OS, manufacturing and QC engineers
• Software drivers and libraries available to support the majority of gaming peripherals (including bill acceptors, etc)
• On-time design and build of custom hardware and software projects
• Comprehensive package—prototype validation, driver testing, manuals, drawings, design files, manufacturing test procedures, diagnostics
• Worldwide regulatory approvals for all products

International quality standard from design to delivery

The Group Quality system is audited and compliant with ISO 9001. The Quality system covers all aspects of product design, component selection, design verification, manufacturing, quality control and customer satisfaction. We also hold global certifications of ISO 13485, TL 9000, ISO 14001, OHSAS 18001 and IECQ QC 080000
Excellence in Design, Manufacture and Service

Advantech-Innocore’s products are designed and manufactured using high quality components, the most up-to-date design and production methodologies. In contrast to mass produced commercial grade motherboards, Advantech carefully choose components.

Key drivers when designing a DPX® motherboard and sourcing components are:

- Longevity
- Robust, reliable operation
- Usability
- Regulatory Constraints
- Power supply design
- Signal termination
- EMC
- Cabinet Integration
- Signal integrity
- Quality (UL, CE, FCC, ISO)
- Thermal Management and Reliability
- 24/7 365 Operational requirements.

Excellence in Manufacturing & Service

With a global footprint covering all the major regions, Advantech-Innocore’s organization is unique in its ability to put technical support, configuration and repair services close to its customers.

- Wholly owned manufacturing facilities (>130,000m²)
- State-of-the-art production equipment
- Highest yield rates
- Best quality
- BGA X-Ray inspection
- Automated test routines
- Elevated temperature burn-in
- Local support, service and repair/RMA
- Local inventory and fulfillment capabilities
- Advantech Care Service Packages: advanced replacements, extended warranty, guaranteed turnaround time
Advantech-Innocore offers the widest range of industrial grade computer products designed specifically for the regulated gaming industry. We provide our customers with excellent standard products, customized products and services, employing up-to-date technologies for gaming solutions to meet the requirements for Casino Machines, AWPs, VLTs, Multiplayer Games, Arcade Games, Pachislots, and Sports Betting.

**Complete Portfolio of Gaming Solutions**

**Graphic Cards**
- All sizes with touch 4-43” Curved touch with customizable radius
- C, J and other profiles available
- SD, HDD, CF, CFast, M.2
- DDR1-DDR4 SODIMM
- Custom provisioning
- Lifecycle controlled
- Power fail protection
- Comprehensive security features

**Industrial Storage**
- SSD, HDD, CF, CFast, M.2
- DDR1-DDR4 SODIMM
- Custom provisioning
- Lifecycle controlled
- Power fail protection
- Comprehensive security features

**Gaming Monitors**
- All sizes with touch 4-43” Curved touch with customizable radius
- C, J and other profiles available

**Gaming Platforms & Systems**
- Gaming I/O, Multiple COM
- Onboard NVRAM
- Security
- Worldwide regulatory approvals

**Software**
- Microsoft Embedded authorized distributor
- BSP for Windows, Linux and more
- Custom, lockable image development
- Custom BIOS

**DPX® LED Controller**
- Robust Metal Cover
- Industrial grade product
- Custom Vibrance FX application for easy detailed content creation

**Industrial Storage**
- SSD, HDD, CF, CFast, M.2
- DDR1-DDR4 SODIMM
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**Software**
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- BSP for Windows, Linux and more
- Custom, lockable image development
- Custom BIOS

**Embedded Platforms & Digital Signage**
- Mini-ITX, Single Board Computers, Computer on Modules, RISC computing platforms
- Full ranges of signage
The DPX®-S Series products provide highly integrated industrial single board computers and systems with an unrivaled performance range, scalability, long lifecycle and low power. Both AMD and Intel® platforms are offered and each one features a full set of I/O, COMs, and security, developed specifically to meet the requirements of the regulated gaming industry.

Feature Highlights

- **Chassis options available**
- **Scalability of CPU and graphics**
- **Full feature set of I/Os COMs, security**
- **Intel® & AMD CPU based**
DPX®-S451
AMD R2000 Gaming Platform

- High-performance AMD Embedded R2000 SOC APUs
- Quad and dual core APUs up to 3.35 (3.7) GHz
- Radeon™ VEGA GPU with up to 8 x compute units
- Four independent 4k monitors supported
- Comprehensive gaming features
- 12V DC single input or ATX power
- Full featured driver API for I/O and security

Features

- Digital I/O: 32/32
- Expansion I2C, PCI3 x 16 and Golden Fingers
- Battery Backed SRAM 8MB
- 8 x USB2.0
  3 x USB3.0
- Displays 4 x DP++ 1.2
- 10 x COMs: ccTalk, RS232, ID003, RS485, TTL, & 3 x DP++ 1.2
- Graphics Cards PCIe x 16 Format
- M.2, SATA DOM, HDD, SSD, Cfast, & USB
- Graphics Cards PCIe x 16 Format
- DPX Security suite: Media Validation Toolkit, TPM Chip Support. DPX security features & BIOS customization
- DPX Software: Embedded OS, DPX Diagnostics, DPX-Connector, DPX-SAS
- Enclosure S2000
- On-board Micro Controller PuC

05 DPX®-S451

Scan me for more information!
DPX®-S450
AMD Ryzen™ Embedded V1000/R1000 Gaming Platform

- Very high performance AMD Embedded V1000/R1000 SOC APUs
- Quad and dual core APUs up to 3.35 (3.8) GHz
- Radeon™ VEGA GPU with up to 11 compute units
- Four independent 4k monitors supported
- Comprehensive gaming features
- 12V DC single input or ATX power
- Full featured driver API for I/O and security

Features

- Digital I/O: 32/32
- Battery Backed SRAM: 8MB
- Displays: 4 x DP++ 1.2 (4 simultaneous)
- Graphics Cards: PCIe x 16 Format
- Expansion: I²C, PCIe x 16 and Golden Fingers
- 8 x USB 2.0
- 10 x COMs: ccTalk, RS232, ID003, RS485, TTL
- M.2, SATA DOM, HDD, SSD, CFast, USB
- DPX® Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization
- DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS
- On-board Micro Controller PuC
- Enclosure: S2000
DPX®-S445
6/7th Generation Intel® Core™ Gaming Platform

- Very high performance Intel® platform
- Dual and Quad Core CPUs from Celeron to Core i7
- Comprehensive gaming features
- High performance integrated or PCI-Express graphics
- Easy integration for gaming applications
- Full featured Driver API for I/O and security

Features

- Digital I/O 32/32
- Battery Backed SRAM 8MB
- 3 x DP++ 1.2
- Graphics Cards PCIe x 16 Format
- Expansion I²C, PCIe x 16 and Golden Fingers
- 8 x USB 2.0
- 3 x USB 3.0
- 10 x Coms: ccTalk, RS232, ID003, RS485, TTL
- SATA DOM, HDD, SSD, USB
- DPX®-Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization
- DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS
- Enclosure S2000
- On-board Micro Controller PuC
DPX®-S2000

The DPX®-S2000 series products are gaming system logic boxes designed to accommodate any of Advantech’s DPX®-S series motherboards in style and with excellent access to the interior behind a casino grade key-locked lid. The system has a card slot bay for a PCIe graphics card that is wide enough for today’s high powered double-width graphics cards.

• Full height, double width graphics card
• Compact design
• Tool free SSD/HDD access

• System fan
• Complete solution

Dimensions of Chassis

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
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</thead>
<tbody>
<tr>
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<td>214mm</td>
<td>260mm</td>
<td>124mm</td>
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<tr>
<td>DPX®-S2445</td>
<td>214mm</td>
<td>260mm</td>
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</tr>
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</table>

- Dual PCIe slot for full height, double width graphics cards
- Casino Style lock and intrusion switch
- Customizable off board expansion
- 12V DC or ATX power supply compatible
- Easy Access I/O Panel
- Easy access to golden fingers and COMs
- System fan
- Complete solution
Regulated Gaming • Slot Machines • VLT • GLI Compliant

- Performance at a very cost-effective price point
- Full feature set of I/Os and COMs
- Ideal integrated platforms for many gaming, amusement, and kiosk applications
- Gaming functions share the same API as the other DPX® series boards
- Easy to port application code and leverage the different price and performance points across Advantech-Innocore’s full range of products

Feature Highlights

- Full feature set of I/Os and COMs
- Industry standard connectors for easy cabinet integration
- Very cost-effective price point
- Best in class integrated graphics performance
DPX®-E145
Intel 11th Generation Gaming Platform

- 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

Features

- Digital I/O
  - 32/32

- Battery Backed SRAM
  - 8MB

- 4 x DP++ 1.2

- Expansion I/O

- 7 x USB 2.0
  - 2 x USB 3.0

- 9 x COMs:
  - ccTalk, RS232, ID003, RS485, TTL

- M.2, SATA DOM, HDD, SSD, CFast, USB

- DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS

- Enclosure Metalwork Optional

- On-board Micro Controller PuC

- DPX® Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization

Scan ME for more information!
DPX®-E140
AMD Embedded Gaming System with V1000 Platform

- AMD Ryzen™ Embedded V1000 Processors
- High performance Radeon™ VEGA series graphics
- Four 4K monitor support
- Comprehensive gaming features
- Passive cooled system up to 25W, 54W with fan cooler
- 12V DC single input or ATX power
- AMD Ryzen™ Embedded V1000 Processors

Features

- Digital I/O 32/32
- 7 x USB 2.0
- 2 x USB 3.0
- Battery Backed SRAM 8MB
- 9 x COMs: ccTalk, RS232, ID003, RS485, TTL
- 4 x DP++ 1.2
- M.2, SATA DOM, HDD, SSD, CFast, USB
- Expansion PCIe
- DPX®-Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization

DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS

Enclosure Metalwork Optional

On-board Micro Controller PuC
DPX®-M Series

- Sports betting
- Kiosk
- Arcade
- Gaming

- Based on Intel® 8th and 9th generation Core i processors and AMD Ryzen V1000 series
- These products provide a high performance multi-media engine to the needs of gaming OEMs
- The modular expansion bus allows modules to be added such as I/O, COMs, security, and specialized interfaces

Feature Highlights

1. AMD and Intel® CPUs available, Mini ITX mounting holes, up to 4 x 4K screens and development kits.

2. M1000 (half height) and M2000 chassis options available, M-Series PSU units are available.

3. Modular Side expansion bus, Advantech has a range of standard “add-on cards” for Sports Betting or Gaming Sub System.
DPX®-M270

Intel® 8th & 9th Generation Core™ i7/i5/i3
Embedded Multi-media Gaming Board

- Intel® 8th/9th Generation Core™ i7/i5/i3 CPUs 8,6,4,2 core
- Two 260-pin SO-DIMM up to 32GB DDR4 2666 MHz SDRAM
- Supports 3 display outputs (2x DP++, HDMI)
- PCIe x16 Gen 3.0 graphics card slot
- Storage 2 x SATA with 1 x M.2
- Media Validation Toolkit support
- RS232, ccTalk, TTL, ID003, I2C, intrusion and Digital Inputs
- Modular Expansion Port - Edge connector

Displays
2 x DP++ v1.2
1 x HDMI 1.4b
(3 simultaneous for Q370, 2 simultaneous for H310)

Onboard:
8 x USB 2.0
4 x USB 3.1
Via Golden Fingers:
2 x USB 2.0

Graphics Cards
PCle x 16 Format

6 x COMs:
ccTalk, RS232, ID003, TTL

Expansion I²C, PCle x 16 and Sidebus modular expansion

M.2, SATA DOM, HDD, SSD, USB

DPX® Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization

DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS

Enclosure
M1000/M2000

On-board Micro Controller
PucLite
DPX®-E265
AMD Ryzen™ Embedded V1000 mITX with Four DP++, ECC, PCIe expansion

- Supports 4 x DP++ 1.2
- Supports PCIe x8 (PCIe x16 connector, Gen 3.0)
- Two 260-pin SO-DIMM up to 32 GB DDR4 3200 MHz ECC/Non-ECC SDRAM
- Removable gaming BIOS module for field verification
- Side expansion port for application specific expansion modules
- Supports 2 x SATA / 2 x CFast / 1 x M.2
- AMD Ryzen™ Embedded V1000 processors
- Media Validation Toolkit support

Features

Digital I/O
2 x DI

Displays
4x DP++ v1.2
(4 simultaneous)

Onboard:
4 x USB 2.0
3 x USB 3.1

Via Golden Fingers:
2 x USB 2.0

6 x COMs:
ccTalk, RS232, ID003, RS485, TTL

Enclosure
M1000/M2000

DPX® Security suite: Media Validation Toolkit, TPM support, DPX® security features, BIOS customization

DPX®-Software: Embedded OS, DPX® Diagnostics, DPX®-Connector

DPX®-SAS

On-board Micro Controller
PucLite

Graphics Cards
PCIe x 16 Format

Expansion I²C, PCIe x 16 and Sidebus modular expansion

M.2, SATA DOM, HDD, SSD, CFast, USB

DPX®-E265
Scan for more information!
DPX®-M1000 & DPX®-M2000

The DPX®-M Series of chassis are available in half height and full height options, to accommodate both standard height graphics cards and other 3rd party PCIe expansion cards.

- Up to 200W power supply
- Compact design
- Tool Free SSD/HDD access
- System fan
- Complete solution

Dimensions of Chassis

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
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</thead>
<tbody>
<tr>
<td>DPX®-M1000</td>
<td>232mm</td>
<td>295mm</td>
<td>104mm</td>
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<tr>
<td>DPX®-M2000</td>
<td>242mm</td>
<td>295mm</td>
<td>134mm</td>
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</table>

- Casino lock
- Intrusion switch
- Customizable PCIe slots for off board expansion
- PCIe slot for graphics cards
- 12V DC and ATX power supplies available
- Easy access front I/O panel
- 12V and IEC AC and DC power options
The DPX®-J100 is the latest addition to the DPX® family of integrated gaming platforms. Based on the revolutionary AMD R1000/V1000 Series embedded platform, the DPX®-J100 uses AMD’s latest cost effective dual and quad core SOC devices with “Discrete-level Graphics” from the best-in-class integrated VEGA graphics core. Three independent monitors are supported. A full set of I/O, COMs and security features designed specifically for gaming devices is also included, making the DPX®-J100 an ideal platform at an economical price point for many gaming, amusement and kiosk applications. Passive cooling for the lower APUs allows for robust, maintenance free operation in the harshest gaming environments.

Feature Highlights

- JAMMA Connectors
- Passively Cooled (some APUs)
- Chassis Available
- Full set of I/O’s, COMs and Security
DPX®-J100
AMD Ryzen™ Embedded V & R Series Gaming Platform

- High performance AMD Embedded V&R SOC APUs
- Quad and dual core APUs
- Radeon™ VEGA GPU with up to 8 compute units
- Up to 3 independent monitors supported
- Comprehensive Gaming Features
- 72 + 20 Pin JAMMA harness connectors
- Optional Enclosure

Features

- Digital I/O 24/29
- Expansion I2C, Mini PCI
- DPX® Security suite (as below) +Button
- Up to 2MB of battery backed FRAM
- 6 USB 4 x 2.0 - 2 x 3.1/2.0
- DPX® Software: Embedded OS, DPX® Diagnostics, DPX®-Connector DPX®-SAS
- 1 x DP++, 1 x HDMI and 1 x VGA
- 6 Coms – RS232/485 Tx/Rx
- Optional Enclosure
- Onboard audio amplifier, line out, digital SPDIF out
- SATA DOM, SSD, HDD, M.2, USB, CFast
- On board Micro Controller.
The DPX®-J100 systems are gaming system logic boxes designed around Advantech's DPX®-J series motherboards. Easy access to a full set of I/O, COMs and tamper proof switch, security features designed specifically for gaming devices makes the J100 system ideal for many gaming, amusement and kiosk applications. Optimised cooling with fanless options for certain models, allows for robust, maintenance free operation in the harshest gaming environments.

**Dimensions of Chassis**

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<th>Length</th>
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<tr>
<td>DPX®-J100 system</td>
<td>200mm</td>
<td>200mm</td>
<td>65mm</td>
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</table>
DPX®-Development Kits

All inclusive packages for quick development

With development times becoming shorter in the gaming industry, the range of DPX® Developer’s kits provides a fast, simple way to get up and running with any of the DPX® Series products. It also provides the best possible out of the box experience, everything you need to begin developing on the DPX®-Hardware platforms, delivered to you, fully tested, up to date drivers etc in one handy box.

• All inclusive kits for each DPX® mainboard
• Fast and simple setup to evaluate and start development
• Includes pre-configured operating systems, drivers and utilities

• Demo and reference source code
• I/O development board, power supply, full documentation

The kits are based on a DPX® mainboard, and includes all the other necessary items to set up an evaluation and development station.

• Source code
• DPX®-Chassis
• Demo utilities
• PSU / Dongles
• 128GB Advantech Storage

• Demo OS / Linux Image
• Full cable sets
• Motherboard + CPU
• 8GB Advantech RAM
• Complete documentation
Gaming Software, Firmware, Integration and Security Support

Software Overview
Advantech-Innocore supplies a wide range of software packages and support to accelerate the customer’s development cycle. As well as board support packages with highly robust drivers and edge-to-edge coverage for the hardware platforms, we offer a variety of other software products including peripheral protocol libraries, security suites, and diagnostic and test software that help develop the best-balanced gaming solutions.

Board Support Package
Board support packages provide software support such as Microsoft Windows embedded OS and range of embedded Linux. A full set of drivers and APIs are provided to all standard PC functions as well as all gaming specific hardware features. Direct PCI Software Development Kit are integrated into the DPX®- Series motherboards and handles gaming critical functions such as SRAM, Digital Inputs Outputs (DIO) Watchdog, as well as Intrusion monitoring and other functions. The API is optimized for Embedded Windows and Linux distributions and is common across all DPX®- Gaming motherboards.

Security
Advantech-Innocore understand that the protection of gameplay data and machine state are critical considerations, software / hardware tampering detection, as well as media validation are key requirements by the gaming regulators. The aim is Players and Operators protection, and fair games and correct payouts. As such the DPX® range of gaming motherboards come as standard with the following security features:

- TPM Chip
- Random Number Generator (FIPS)
- Password protected i2c port
- 88 Bit Unique ID
- EWF/UWF support
- BitLocker support
- Software authentication
- TCG Opal 2.0 SQFlash products available
- Intrusion detection logging processor (IDLP)

OEM Intellectual Property
Encryption of data and applications, strong password and key storage, platform authentication are all key considerations when choosing a gaming platform, as well as prevention of copying / cloning of game data, stopping unauthorized content from being loaded in order to maintain competitive advantage and protect investment and IP. Our software solutions combined with hardware features give the developer multiple methods to protect their game content.
Featured Gaming Software

Media Validation Toolkit
Media Validation Toolkit provides a toolkit for the developer to produce low-cost, low-overhead security mechanisms for gaming machines. The mechanisms security features cover various aspects of security control and ensure:
1) Customers’ software applications can only run on designated hardware.
2) Designated systems only run designated software.
3) Compliance with U.S. and international gaming regulations for media validation.

- SDK for customizable pre boot BIOS media validation
- Meets GLI-11 and other regulatory requirements
- SHA-1 Hash and BIOS self-test
- Supports encrypted digest and multiple hash tables
- Comprehensive user manual

The Trusted Platform Module (TPM)
The trusted platform module (TPM) chip included on Advantech-Innocore DPX® Series main boards is an advanced security co-processor offering a high level of hardware-based security for application development and deployment.

- Unique per-board RSA key Generates, stores and protects RSA keys: keys never leave the TPM chip un-protected
- RSA asymmetric encryption and signing SHA-1 hashing
- Generates random numbers to 1-million bit random-ness (as tested by US NSA)
- Chip is physically secure from physical tampering

BIOS
Advantech provides gaming-specific firmware and software customization services including BIOS and TPM support that deliver superior performance, compatibility and functionality, and also provide information encryption, which is expected by manufacturers of gaming platforms.

- Secure AMI APTIO UEFI BIOS
- Customization
- Field verifiable BIOS
- Field and Laboratory approved
- Immutable BIOS and development versions
- Customization and write protection for security
- Support for security ROM extensions

DPX® -Connector SDK
DPX® -Connector SDK is a software package developed to address customers’ needs to connect third-party hardware peripherals to Advantech-Innocore computer boards. A unified event handler provides and efficient method to handle communications. The SDK supplies a range of hardware and protocol-oriented modules to allow connection of a range of peripherals including:

- Coin Hoppers
- Bill Validators
- Ticket Printers

The DPX®-Connector SDK supports ccTalk and JCM ID003 devices, as well as Windows and Linux.
Slot Accounting System (SAS)

The DPX®-SAS Engine is a complete, ready to use driver and API environment that enables implementation of the SAS protocol with the DPX® range of products. Field proven and laboratory-certified the SAS Engine handles all SAS messaging, register structures and timing protocols.

- Fully Featured SAS protocol library
- Mature field-proven product
- Approved in all major jurisdictions
- Supports latest versions
- Multi-game support
- Windows and Linux
- Ticket in / Ticket Out (TITO)
- Advanced Funds transfer facilities
- Real Time events
- Supports different currencies
- Progressives and tournament support.

DPX® Diagnostics SDK

The DPX® Diagnostics SDK is the perfect pre-deployment hardware verification tool, allows gaming features and software testing. USB and CD bootable, and comprehensive Windows and Linux support. Source code is available.

1-Wire / iButton® SDK

The 1-Wire / iButton® SDK provides support for all 1-Wire and iButton devices, comprehensive Windows and Linux support. Source code is available.

PuC Microcontroller

The PuC embedded Microcontroller (IOC, PuC, MPuc and PuC-Lite* depending on the DPX®-Model) is an integrated subsystem used across the range of Advantech Innocore motherboard products and provides a range of user functions suited to the gaming industry.

What is it?
On-board, low cost, low power, 8 bit microcontroller.

What does it do?
Provides system maintenance, diagnostics, configuration, reliability, security, event logging and manageability functions.

Customer Benefits
Improved system reliability, remote manageability, remote updates, simplified factory set up (jumper-less design, single firmware image), improved security and logging, quieter operation.
Designed exclusively for gaming applications, our gaming display solutions provide a wide range of gaming monitors to meet the special requirements of applications such as slot machines and casinos. Our solutions include open frame monitors and ultra widescreen displays. These display solutions feature widescreens, reliable touch screens and flexible mechanical designs that can be integrated with Advantech gaming platforms for a total gaming solution. Applications include slot machine, lottery terminals, jackpot systems, Sports Betting terminals, lottery terminals etc.

### Gaming Monitors

**HALO Series**

**Standard, Front LED and Edge LED**

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<th>Panel Size: 21.5”</th>
<th>Panel Size: 23.8”</th>
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<tbody>
<tr>
<td>Resolution: 1920x1080@60Hz</td>
<td>Resolution: 1920x1080@60Hz</td>
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<tr>
<td>Brightness: 250 nits</td>
<td>Brightness: 250 nits</td>
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<tr>
<td>Viewing Angle: 89/89/89/89 LRUD</td>
<td>Viewing Angle: 89/89/89/89 LRUD</td>
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<tr>
<td>Video Inputs: HDMI/DP</td>
<td>Video Inputs: VGA, DVI, DP</td>
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<table>
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<tr>
<td>Viewing Angle: 89/89/89/89 LRUD</td>
<td>Viewing Angle: 89/89/89/89 LRUD</td>
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<tr>
<td>Video Inputs: VGA, DVI, DP</td>
<td>Video Inputs:VGA/DP/HDMI</td>
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**Open Frame / Button Deck Touch**

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<th>Panel Size: 13.3”</th>
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<tbody>
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<td>Resolution: 1280x800</td>
<td>Resolution: 1920 x 1080</td>
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<tr>
<td>Brightness: 500 nits</td>
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<td>Viewing Angle: 89/89/89/89 LRUD</td>
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<td>Video Inputs: VGA, DVI</td>
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CURVED Series

For C and J curved

Panel Size: 32" C Curved/43" in C & J Curved (Non-LED)
Resolution: 2560 x 1440@144Hz (32") / 3840 x 2160@60Hz (43")
Brightness: 250nits (32")/500nits (43")
Viewing Angles: 89/89/89/89
Video Inputs: HDMI/DVI/DP/USB (Type B)

Panel Size: 43" in C & J Curved
Resolution: 3840 x 2160@60Hz
Brightness: 500nits
Viewing Angles: 89/89/89/89
Video Inputs: HDMI/DVI/DP/USB (Type B)

EDGE Series

Zero Bezel

Panel Size: 10.1"
Resolution: 1280 x 800@60Hz
Brightness: 500nits
Viewing Angle: 85/85/85/85
Video Inputs: VGA/DVI/USB (Type B)

Panel Size: 17"
Resolution: 1280 x 1024@60Hz
Brightness: 250nits
Viewing Angle: 85/85/80/80
Video Inputs: HDMI/VGA/USB (Type B)

Panel Size: 21.5"
Resolution: 1920 x 1080@60Hz
Brightness: 250nits
Viewing Angle: 89/89/89/89
Video Inputs: HDMI/VGA/USB (Type B)

Panel Size: 15"
Resolution: 1024 x 768@60Hz
Brightness: 350nits
Viewing Angle: 80/80/80/80
Video Inputs: VGA/DVI/USB (Type B)

Panel Size: 19"
Resolution: 1280 x 1024@60Hz
Brightness: 250nits
Viewing Angle: 85/85/80/80
Video Inputs: HDMI/VGA/DVI/DP/USB (Type B)

Panel Size: 27"
Resolution: 1920 x 1080@60Hz
Brightness: 300nits
Viewing Angle: 89/89/89/89
Video Inputs: HDMI/VGA/DVI/USB (Type B)
Industrial Memory & Storage, Microsoft OS, PCIe Graphics Cards

Advantech-Innocore gaming peripherals offer specialized, quality components with long lifecycle support for our gaming platforms. All peripherals are fully compatible with Advantech-Innocore gaming boards and systems. We provide

- Long lifecycle graphic cards
- Storage devices - HDD, CFast, SSD, M.2
- Embedded operating system licenses
- Long lifecycle, reliable RAM modules
- Backplanes and Connector Boards
- iButtons
- Enclosures

SQFlash Industrial Storage Solutions

SQFlash series supports various interfaces such as SATA, PCIe/ NVMe and PATA/IDE with multiple form factors including 2.5” SSD, mSATA, M.2, DOM, CFast, half-slim SSD and more.

SQRAM Industrial Memory Solutions

SQRAM series offers a comprehensive range of product lines including Unbuffered DIMM ECC DIMM, server DIMM and rugged DIMM with speed of DDR5, DDR4, DDR3, DDR2 and DDR1.

Graphic Cards

Increasingly in embedded systems, more and more demands are made for rich, vibrant graphics and enhanced parallel computing capabilities. Advantech recently introduced a comprehensive product line of graphics solutions specifically designed for diverse industrial applications needing high processing and imaging technology requirements. Graphics cards feature high performance, rich I/O interface, wide temperature operation, and low power consumption. Advantech supports long lifecycles from 3 to 5 years.

Microsoft OS License

Advantech is a gold worldwide partner and licensed distributor of Microsoft OS and Cloud solutions. Windows 10 IoT is a family of Windows 10 editions targeted towards a wide range of intelligent devices, from small industrial gateways to larger, more complex devices like point of sales terminals and ATMs. Combined with the latest Microsoft development tools and Azure IoT services, partners can gather, store and process data, creating actionable business intelligence that affects business outcomes. Partners building solutions based on Windows 10 IoT will realize expanded opportunities when they harness the full breadth of Microsoft technologies to offer end-to-end solutions.
Advantech understand that game developers and cabinet makers need to make their product stand out in the crowded casino floor, as well as thinking about the end user and their experience. The DPX-LED Controller is an key component in the developer’s tool box allowing ideas and visions to transferred from sketch pad to the big screens of the casino floor. With the capability to drive up to 4000 individual LED’s, and complimented by an easy to use GUI, (Graphical User Interface) the DPX-LED Controller is the perfect tool to develop, test and control your gaming cabinet lighting.

Features and Functions

- Industrial grade product
- Robust Metal Cover
- Watchdog timer
- Long term availability
- Custom Vibrance FX application for easy detailed content creation

Power

- Supports 12V or 5V LED’s
- Can be powered by a single 5V or 12V discrete PSU

4096 LEDs

Up to 4000 LED’s can be PWM driven Supports ‘tri’ or ‘quad’ colour addressable LEDs

USB Connectivity

USB Connectivity to DPX-Motherboard or standalone

LED Compatibility

- 16x 1-Wire channels or 8x 2-Wire LED Channels – User Configurable
- 1-Wire and 2-Wire type supported

Other Features

- Up to 64 Discrete pattern sequences
- Up to 4 layer FX creating depth
- 16 Clock Domains
- Pattern sequence position updates
Gaming Platform and Customization Services

Service Overview

Advantech-Innocore’s capability to provide customers with reliable computing solutions is not limited to our wide range of standard products. We welcome custom designs ranging from small modifications of one of our existing products up to completely new product design incorporating new motherboard, chassis, carrier boards, custom firmware and microcontroller design.

- Huge portfolio of reference designs
- 900+ R&D Engineers
- In house CAD design and simulation services
- Intel®, AMD, and RISC platforms

- In house design validation (EMC, signal integrity, thermal, vibration, HALT)
- Worldwide base of installed hardware and field proven software

- GPU design and integration
- FPGA, microcontroller custom firmware
- Peripheral integration
- Custom I/O
- BIOS customization

- Various security solutions
- BIOS Security extension code

- System validation (thermal, vibration, EMC, HALT etc)
- Integration of customer’s hardware

Hardware Design Services | Firmware and OS design services | System Design Services
---|---|---
• Custom CPU board designs | • Embedded OS support | • Custom enclosures
• Intel®, AMD, and RISC platforms | • OS image development | • Thermal simulation
• GPU design and integration | • FPGA, microcontroller custom firmware | • Peripheral integration
• Custom I/O | • BIOS customization | • System validation (thermal, vibration, EMC, HALT etc)
• Various security solutions | • BIOS Security extension code | • Integration of customer’s hardware
# Gaming Computing Platforms

## Standalone Series

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<th>DPX®-S450</th>
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## Economy Series

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## Modular Series

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## Jamma Series

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