

Trusted Gaming Platforms

Tailored to Fit Gaming Products

- ✓ Casino
- ✓ Arcade
- ✓ Pachinko
- ✓ Lottery POS



Trusted ePlatform Services

ADVANTECH

About Advantech

Founded in 1983, Advantech has provided leadership for innovative ePlatform products and services for over 20 years. With comprehensive product ranges, customer-centric design services, and an extensive global network, Advantech is your most trustworthy partner to empower numerous innovations in the connected eWorld.



OEM/ODM Services

Advantech DTOS (Design To Order Services) is a design service which provides tailor-made systems to meet specific application requirements through the latest cutting-edge technologies, different levels of customization capability, flexible manufacturing, global fulfillment, and post-manufacturing services.



Advantech Global Services

We are located in 36 cities and 18 countries in each major operating region to have a global reach with teams in many geographic regions. We support our services through an extensive global network of offices and an industry-leading eBusiness infrastructure designed to provide responsive service that benefits customers anytime, anywhere.

- Design Centers
- Manufacturing Services
- Global Services Centers
- Worldwide Offices

Manufacturing Capability

Advantech complements its design strengths with three world-class manufacturing centers in China and Taiwan which are fully capable of meeting your manufacturing needs. To maximize the efficiency of operational procedures, Advantech has implemented the cluster manufacturing concept to enable a direct, simplified, and highly streamlined design-to-manufacture process.



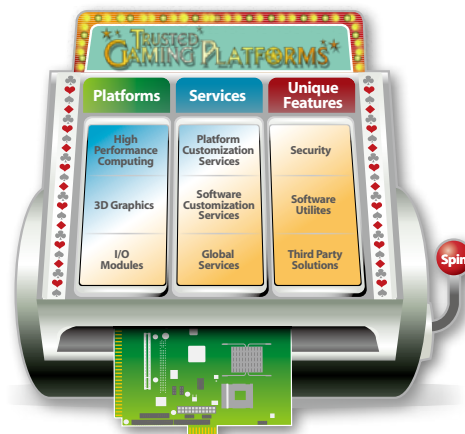
Advantech Trusted Gaming Platforms

Advantech is dedicated to helping customers develop reliable gaming machines. We have years of industrial ePlatform design know-how and experience with professional software development. We offer gaming motherboards, chassis, and cabinet customization services to meet the requirements for Casino, Arcade, and Pachinko and Lottery POS applications.



Gaming Platform Customization Services

- X86-based gaming platforms
- Cabinet and chassis design
- Capability for system integration
- I/O connections and security
- GPU Design-in services
- Enhanced BIOS and OS customization services
- Friendly & gaming-specific firmware & API
- Longevity support
- OEM/ODM services



Advantech- Your Best Partners in Class II / III Gaming

- **Software Gaming Package:** Advantech provides one of the most extensive software support packages in the business. With our customized embedded BIOS, OS and API Library (SUSI), your program development cycle will be quicker and easier.
- **Trusted Security Technologies:** With Advantech's latest developments in FPGA technology, AES, RNG, HDD encryption, SAS, ccTalk and Comma6A gaming compliant protocols, security is assured.
- **Services and Support:** Advantech skilled technicians provide on site service. Regional service centers allow for quick response times, minimizing equipment downtime and increasing profits.
- **Commitment on Longevity:** Advantech fully understands the importance of product revision control and long life support. We are committed to 3 to 5 years product life time support, and restrictions on product design changes to ensure your investment is protected.

Successful Practices

With highly experienced engineers in hardware and firmware, Advantech designs solutions to meet customer's unique requirements. Advantech has served well known Japanese gaming manufacturers for Arcade applications, slot machine mainboard developers in Europe, and Lottery and POS integrators in China. Based on our broad gaming experience with global players, we are confident we can provide you with the best solutions for your all your gaming applications.



Advantech Gaming Solutions

Streamlined Integration Hardware & Software for Gaming Applications

Dedicated to providing advanced gaming solutions for customers, Advantech provides reliable and secure gaming motherboards, customizable chassis & cabinet solutions plus unique embedded software & API solutions to help gaming customers differentiate their applications.

■ Gaming Motherboard Solutions

Standard Motherboards: Advantech provides a full range of industrial standard embedded motherboards ranging from Mini-ITX, MicroATX, 3.25" SBC, 5.25" SBC, COM-Express, and ETX to fulfill any gaming requirements.

Customized Motherboards: To meet specific gaming requirements, Advantech provides expert customization capabilities for adding extra security features and GPU card integration for specific gaming machine applications.

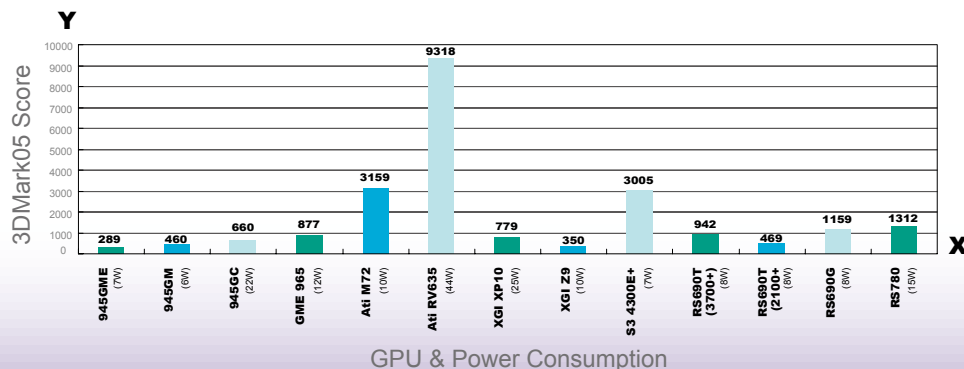
Security Features

- 128 bit AES protection
- HDD encryption protection
- 1-wire protection
- Triple protection security ID
- ePlatform flash support
- Data backup (SRAM/FRAM)
- Boot-safe technology
- Environmental monitor & protection
- Power saving control
- Watchdog timer support
- Boot logger support
- FBWM manager
- Gaming protocol support (Cctalk, SAS, Comma6A)



GPU Integration

- 4300E+ (S3), HD3650 (ATi) GPU support
- GPU onboard design-in services
- 3 ~ 5 years longevity service
- GPU VGA BIOS customization services
- OS base adaption services
- Multi-display configuration services





■ Gaming Chassis Solutions

- Anti-dust design
- Locking mechanism design
- Complete thermal simulated design

■ Gaming Cabinet Solutions

- Class II, Class III casino grade
- World class gaming cabinet custom configured
- Standard gaming peripheral mounting brackets included
- High luster industrial chrome and wrinkle powder coating (all interior metal Zinc dipped)
- Customized chromed button, panels and other options available

■ Gaming Peripheral Solutions

100% Compatible

- Advantech works directly with our strategic suppliers and partners to select warranted, quality components with long-term lifecycle support. All selected components are fully tested after integration with Advantech gaming boards and systems.

Worldwide Standardization

- Advantech offer a standardized peripheral product line to customers. This guarantees that all Advantech gaming systems get the same quality peripherals from our regional service centers, and each system receives the same after-sales (RMA) service worldwide.



Gaming Features

System Security



Security ID

Triple protection with special ID combination (board ID, vendor ID, user ID) reserved in area of BIOS and encrypted with SHA-1.



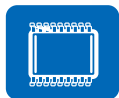
AES

Hardware Advanced Encryption Standard (AES) engine using one of the most popular algorithms used in symmetric key cryptography.



HDD Encryption

Real-time full disk encryption chip for SATA/PATA hard drives.



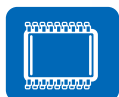
Battery-backed SRAM

Battery powered SRAM makes memory more secure from attacks and allows storage of game tracker data.



Boot-Safe

Compressed OS image loaded into BIOS for safe secure Booting.



ePlatformFlash

Utility to easily update and backup BIOS.

Management & Control



RNG

Certified and tested Random Number Generator (RNG) function.



GPIO

General Purpose Input Output (GPIO) is a flexible parallel interface that allows a variety of custom connections and supports digital I/O devices.



Watchdog

A watchdog timer (WDT) is a function that performs a specific operation after a certain period of time if something goes wrong with the system.



SUSI Manager

A user-friendly GUI API tool to configure and manage SUSI functions.



Video Brightness

A utility to adjust the LCD panel brightness and backlight.



Hotkey

A utility to manage keyboard events or GPIO inputs in order to execute specific applications or commands.

Gaming Interface



SAS

Communication protocol between slot machines and servers.



cctalk

cctalk serial communication protocol developed for monetary control systems.



Comm6A

Communication protocol between slot machines and servers.

Environment Protection



Monitoring

A utility to provide real time temperature, fan and voltage monitoring and alarm settings to enhance system safety.

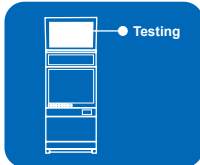


Power Saving

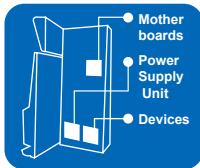
A utility to configure system power schemes and performance. Also supports adaptive CPU speed control based on system loading.

Cabinet Solutions

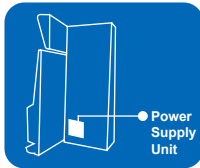
Gaming cabinet solutions include complete cabinet integration and assembly configured to meet customers' specific requirements. We offer several levels of cabinet integration to provide the best quality cabinet solutions to the casino industry.



Level 5
Full Electro and
Mechanical
Assembly & Testing



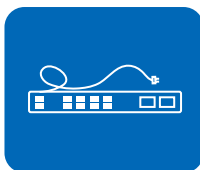
Level 4
Full Electro &
Mechanical
Assembly



Level 3
Electro & Mechanical
Assembly (Complex)



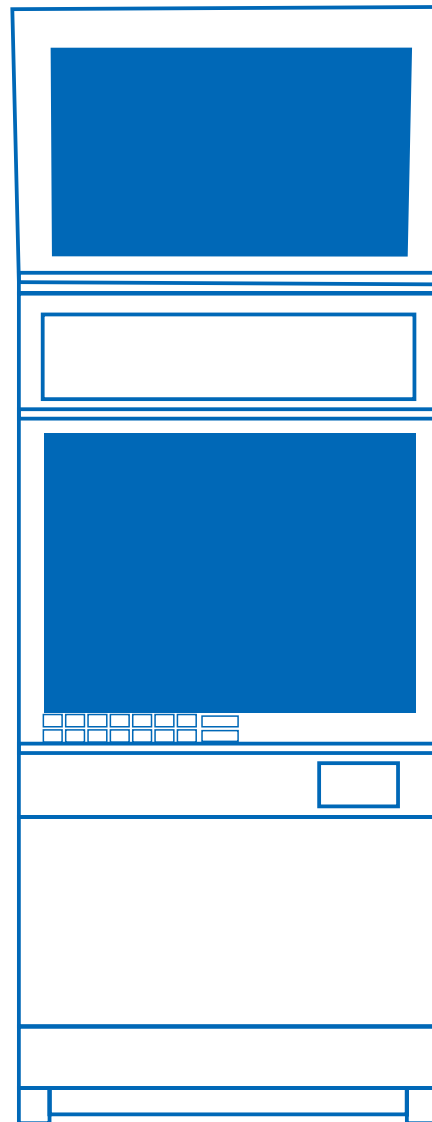
Level 2
Electro & Mechanical
Assembly



Level 1
Mechanical
Assembly



Level 0
Sourcing &
Manufacturing



Gaming Applications

Slot Machine

Advantech provides a trusted platform for slot machine game developers and system integrators. Our platforms allow customers to concentrate on their game development not complex hardware issues. We offer a development kit for controlling all internal peripherals and devices, and we can even customize the outlook of the slot machine for you. A broad range of peripheral products are supported by our hardware platform, giving you the best possible solution.



Player Tracking

Small interactive displays powered by compact embedded computers in gaming machines help casinos identify, serve, and communicate better with customers. Once card readers access the customer's ID, the casino management will be able to track the customer's playing activity and help tailor services to them. Full color touch screen displays are useful for casino management to track loyal players, and they provide a better user experience for players. The compact embedded computers behind this system also connect to other peripheral devices such as ticket readers, bill acceptors and card readers, as well as communicating with other gaming machines and back-end servers.



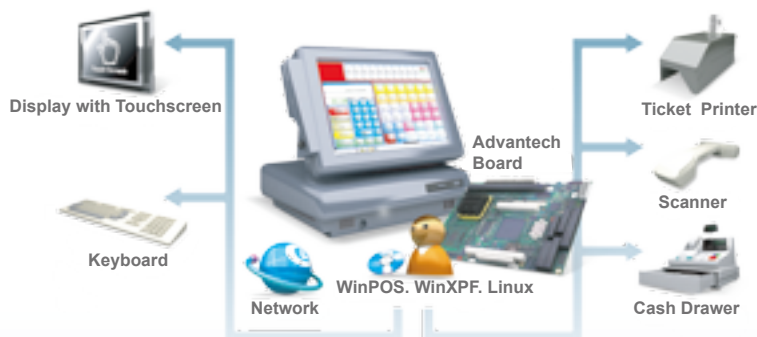
■ Arcade/ Amusement

Advantech's reliable and powerful hardware platforms provide the ideal solution for arcade game developers. Advantech provides API's to reduce application development cycles, and we also offer I/O cards for controlling the joystick, push buttons, and gaming communication protocols such as, JVS and JAMMA.



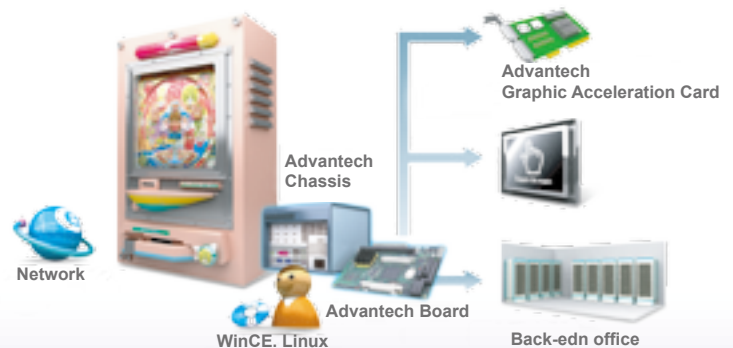
■ Lottery POS

Advantech offers a full customization service for lottery POS machines including board and chassis modifications to complete tooling and ID design. In order to speed up the design cycle, many different technologies have been modularized into the Advantech IP library. This means we can deliver a good quality customized products in a short period of time. We also provide an API suite for shortening the development cycle of the POS system.



■ Pachinko

Open-frame LCD panel solutions are widely applied in Pachinko/ Pachin machines for integrating with gaming graphic display controllers and MPEG2/4 video decoders. We offer a wide range of different sized, cost-effective, open-frame LCD displays and compact sized low cost motherboards to reduce project budgets. Advantech also provides API tools for shortening application development cycles, and we even offer an I/O card for controlling the ball sensor and push buttons.



Gaming Platform Solutions

Gaming Motherboards

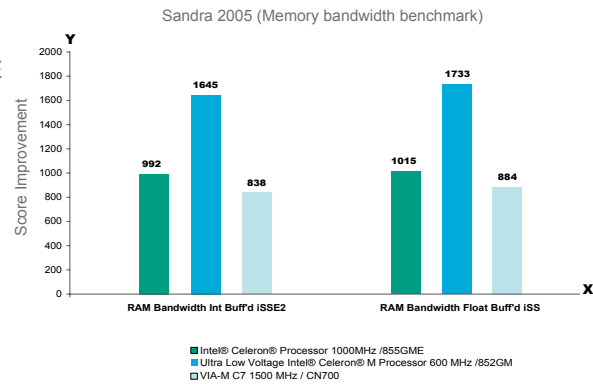


Mini-ITX GMB-910

- Intel ULV CM 600 with 910GMLC chipset (CM1G optional)
- Standard size Mini-ITX
- Dual display and dual gigabit Ethernet
- Fanless design
- Rich I/O connection
- 5 years long life support



- Introduction offer
- For limited quantity only



MiniATX GMB-945 (Project Based)

- Intel Core 2 Duo support (945GM)
- Dual display, 48-bit LCD support
- 6 COM, 8 USB, SATA
- 64 bit GPIO, AES, RNG, SRAM backup, TPM, JAMMA compliant



MiniATX GMB-RS690 (Project Based)

- AMD 64X2 CPU support (RS690T)
- ATi X1250 GPU built-in
- Dual GbE & display
- 6 COM, 8 USB, SATA
- FPGA 64 bit GPIO, AES, Hardware RNG, SRAM backup build-in, TPM (optional)



Mini-ITX AIMB-258

- Intel socket 478 Core 2 Duo (GM45)
- Dual GbE & display (VGA, DVI, & LVDS)
- 6 COM, 8 USB, 1 CF
- PCIe x16



Mini-ITX AIMB-262

- Intel LGA775 Core 2 Duo (945GC)
- Single GbE & CRT display
- 4 COM, 6 USB
- PCIe x16



Mini-ITX AIMB-266

- Intel LGA775 Core 2 Duo (Q35)
- Dual GbE & display (VGA & DVI)
- 6 COM, 8 USB, 1 CF
- PCIe x16



Mini-ITX AIMB-210

- Intel Atom processor N270 1.6 G
- Dual GbE & display (VGA, LVDS)
- 6 COM, 8 USB, 1 CF
- PCIe x16



COM-Express SOM-5786

- Intel Core 2 Duo processor
- Single GbE & display (VGA & LVDS)
- 8 USB, 3 SATAII, 5 PCIe x1
- PCIe x16 or 2 SDVO



COM-Micro SOM-6760

- Intel Atom processor Z500 series
- Intel SCH US 15W chipset
- Single 10/100 LAN & display (VGA & LVDS)
- 8 USB, 1 PCIe x1, 1 SDIO



3.5" SBC PCM-9342

- Low power fanless EVA-X4300
- Onboard 128/64 DDR2 RAM
- 1 10/100 Base-T Ethernet
- 1024 x 768 @ 18/24 bit TTL/LVDS support



5.25" SBC PCM-9591

- AMD 64X2 CPU support (RS690T)
- ATi X1250 GPU built-in
- Single GbE & dual display
- 4 COM, 8 USB, 4 SATA
- FPGA 20-bit GPIO, AES, hardware RNG, SRAM backup build-in, 64 MB frame buffer side port, TPM (optional)

Gaming Motherboards Chassis & Customization



Mini-ITX Chassis ARK-6610

- Bi-directional mounting options
- Easily accessible front I/O interface
- Expansion slot for graphics add-on card
- Supports additional I/O with extra cutout



Customized Chassis

- Removable HDD cage for easy maintenance (Hot-Swap)
- Excellent thermal solution
- Supports both Micro-ATX & Mini-ITX form factor
- Flexible I/O board position
- Anti-dust mechanical design

GPU Solutions



PCA-5681 (ATI HD3650)

- Industrial PCIe x16 graphics card
- 512 MB DDR3 SDRAM
- Supports dual display modes
- 9318 score 3DMark05
- 3 ~ 5 years longevity support

Embedded Software Services

Firmware & OS Customization Services for Gaming Solutions Development

Advantech provides gaming-specific firmware and software customization services that delivers superior performance, compatibility and functionality that is expected by manufactures of gaming platforms. Advantech simplified the firmware and OS integration process by providing a user-friendly API for device access and control of: GPIO, Watchdog, Thermal Sensor, LCD Brightness, Fan Speed control, and secure ID storage.



Embedded BIOS

- Enhanced CPU Power Management
- Animated Logo and Sound Effects
- Modularization Core Architecture
- Broad Peripheral Device Support
- Secure SW Protocol & Interface
- Embedded Controller
- Remote Management
- Smart Battery
- Security Features



Embedded OS

- Custom CE/XPE OS Image
- File Based Write Filter Utility
- Custom Logo Utility
- Screen Resolution Utility
- System Boot Log Utility
- Memory Adjustment Utility
- Auto Launch Utility
- Registry Editor Utility
- System Reboot Utility
- Watchdog Timer Utility

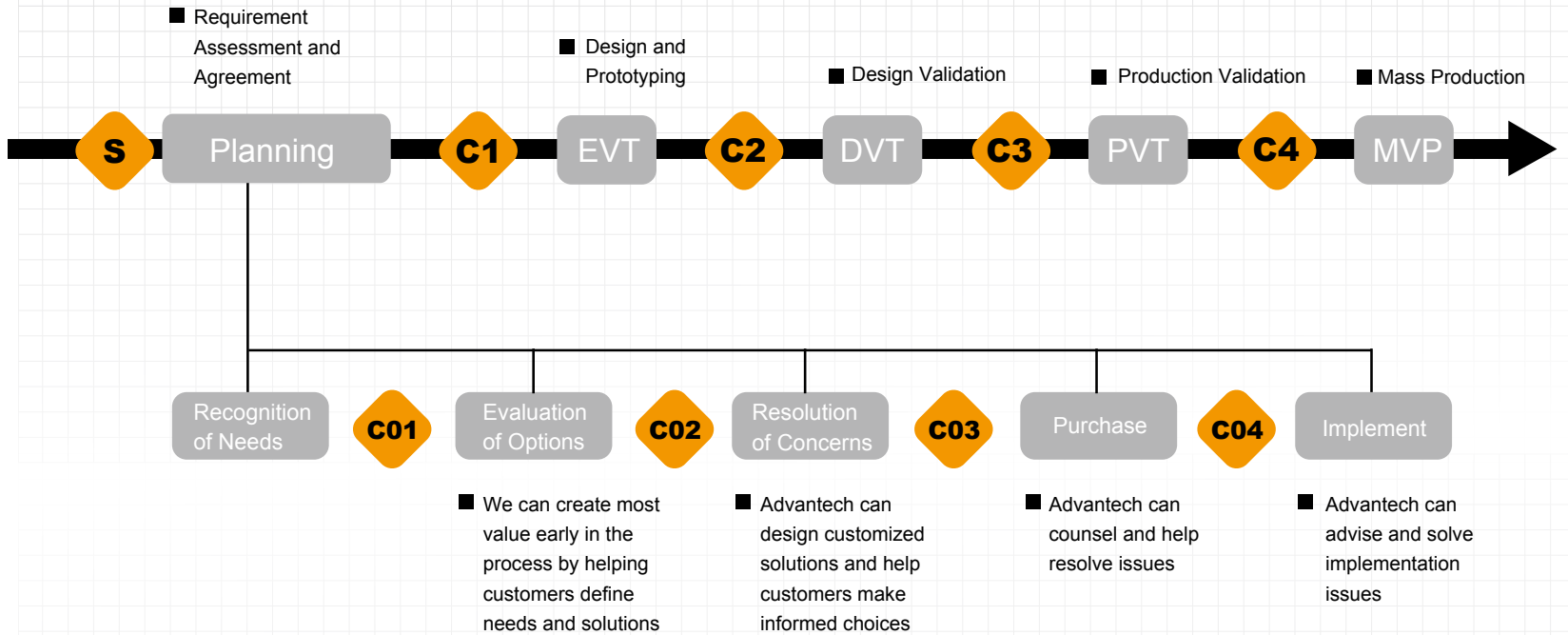


SUSI Application Interface (Secure & Unified Smart Interface)

- GPIO Control
- I2C Control
- SMBus Access
- Thermal Sensor
- WatchDog Timer
- LCD Brightness / Backlight
- Power Saving
- Hotkey Control
- Boot Logger
- Secure Application Interface



Advantech Gaming Solutions



Contact Advantech to find out more or visit the website:

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Trusted ePlatform Services

ADVANTECH

www.advantech.com

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