

Quixant

ahead of the game

The QXi-400 is a complete all-in-one PC based gaming platform designed to drive pay-to-play gaming machines. Its high performance and comprehensive features make it an ideal platform to power the next generation of gaming machines.

- Supports up to two independent HD monitors
- 3rd Generation AMD Embedded G-Series SoC I Family with integrated AMD Embedded Radeon™ HD 10000 (R6E) Series graphics
- Fan-less operation
- Advanced PCI Express® gaming logic & NVRAM

High Performance APUs

Dual-core (15W) AMD Embedded G-Series SoCs up to 2.0 GHz with latest AMD Embedded Radeon™ HD 10000 (R6E) integrated graphics delivers powerful graphics acceleration for DirectX®12, OpenGL® 4.2, OpenCL™ 1.2 and hardware HD video decoding & encoding.

Dual Independent Monitors

Capable of driving up to two independent high definition displays with support for the latest DisplayPort 1.2 standard.

Fan-less operation, small form factor

High efficiency components and innovative Quixant case design enables the QXi-400 to be operated without fans, improving reliability and reducing noise and power usage. Physically compact case dimensions.

Comprehensive gaming features

Two banks of NVRAM, digital inputs and outputs, audio amplifier, multiple layers of security and intrusion detection.



QXi-400 Highest Performance Two-Screen Gaming Platform



Market compliance

Meets the requirements of GLI-11 and all major global gaming jurisdictions.

Complete Software Suite

Device drivers, gaming protocols including SAS 6.02, secure customizable BIOS. Full support for Windows Embedded and Linux operating systems.

7+ Years Guaranteed Supply

The latest AMD Embedded chipset and graphics processors provide 7+ years product lifetime from launch.

Compatibility

Mechanically, electrically, and API compatible with the QXi-300.



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Quixant

QXi-400 General features

APU

3rd Generation AMD Embedded G-Series SoC I Family

- Dual 64-bit cores
- Core frequencies up to 2.0GHz
- Up to 2MB L2 cache
- AVX 1.0/1.1 AES, SSE 4.1 & 4.2, XOP & FMA4 instructions
- Low Power (15W TDP) design

Graphics

Advanced integrated AMD Embedded Radeon™ HD 10000 (R6E) Series graphics:

- Up to two independent HD displays with support for DisplayPort 1.2, HDMI™ 1.1/2.0 and DVI displays.
- Q-Port™ interface enables connection of Q-Port™ touch screen monitors using a single cable
- HAS (Heterogeneous System Architecture) 1.0 compliant with support for NUMA technology
- DirectX® 12, OpenGL® 4.2, OpenCL™ 1.2, DirectX Compute compatible
- UVD6.0 Hardware HD Decode of H.264, VC-1, MPEG-2 & DivX
- Hardware Encode of H.264 at 1080p@60fps

Main Memory

- 2 x DDR4-1600 (PC4-1600) SODIMM Sockets
- Up to 32 GBytes, 128-bit bus

Communication Interfaces

- 6 x PCI Express® QxCom™ serial ports
- 16550 compatible
- Advanced hardware SAS protocol capability
- 9-bit hardware management
- Hardware timestamping of arriving bytes
- RS232, RS485, ID003, TTL, iButton and dual ccTalk interfaces
- 2 x PCI Express® Gigabit LAN controller
- 2 x USB 3.0 ports (front panel)
- 2 x USB 2.0 ports (front panel)
- SPI header for clock serial peripherals (e.g. SEC meter)
- I²C Interface

Power requirement

- 12V or 24V nominal input
- No extra ATX PSU – uses standard cabinet PSU
- Low total power consumption for low heat and energy efficiency

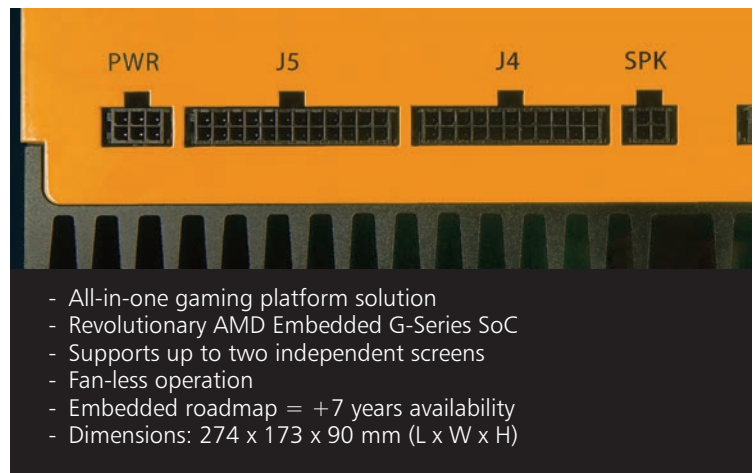
Storage

- 2 x CFast sockets up to 6GB/s
- 2 x SATA 3.0 sockets up to 6Gb/s (for SATA DOM with selectable power on pin7, SSD, HDD)
- 256Bytes of user EEPROM storage (optional up to 128KBytes)



High Performance NVRAM

- Up to 16MBytes of NVRAM
- Non-volatile MRAM or battery backed SRAM
- Ultra-fast 32-bit bus, PCI Express® connection
- Hardware accelerated mirroring and CRC support
- Dual independent physical banks
- AT/ATX power mode control
- 5-year battery life
- Optional Lithium Pentoxide rechargeable cells



- All-in-one gaming platform solution
- Revolutionary AMD Embedded G-Series SoC
- Supports up to two independent screens
- Fan-less operation
- Embedded roadmap = +7 years availability
- Dimensions: 274 x 173 x 90 mm (L x W x H)



Battery powered logging processor

- 12 monitored intrusions, including 4 available externally
- Supports standard and opto switches
- Date/time stamped recording of 64 events
- Auto system switch on (time configured)
- Programmable watchdog timer
- Battery voltage monitoring & warning
- Automatic meter handling



Advanced digital I/O connected via PCI Express®

- 32 digital inputs
- Individually configurable for interrupt generation
- Trigger on rising or falling edges or both
- Input pulse width measurement and screening
- Configurable hardware debounce filtering
- 32 digital outputs
- 24 x 50V 350mA open drain with overload protection
- 4 x 50V 3A open drain
- 4 x TTL level
- Meter power detection/ PCU control



Security

- Advanced hardware security engine
- 1kb EEPROM with SHA-1 MAC engine
- Challenge-and-response authentication
- Optional TPM 1.2/2.0 compliant
- Guaranteed unique electronic serial number
- Compliant with Germany TR5.0 regulation



Audio

- High Definition Audio
- 7.1 Audio channels
- 2x Built-in stereo 18W/channel digital amplifier
- Stereo line input
- Microphone input



BIOS

- BIOS designed specifically for gaming:
- Hardware validation of BIOS via secure hash algorithm
- BIOS validation of boot drive via secure hash algorithm
- Write-protection of BIOS ROM
- Fully customisable

Software

- Software development kits for Windows and Linux OSs
- Device drivers, SW libraries and .NET wrappers
- 32 and 64-bit architectures
- Example applications source code

Protocol software

- Quixant supplied communication & peripheral protocols
- SAS 6.02 and 9-bit data packets
- JCM ID003, MEI EBDS, ccTalk (including MD100 and JCM Vega devices support)
- iButton, I²C devices, generic SPI, SEC Meter
- Futurelogic, Money Controls, Ithaca

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