



Think outside the box

**More features, more insight,
more potential**

The **QXi-7000 LITE** is the latest PC-based gaming platform solution from Quixant. It's also our most versatile and benefit-loaded. Packing the unprecedented power of AMD's Ryzen™ Embedded APU technology with Quixant's proven gaming hardware and software to bring your 4K games to market in record time.



Because we pack more in, you get more out

The **QXi-7000 LITE** allows you to push game design to the limit. With support for up to four independent 4K UHD displays, out of the box security and features required for compliance with all major global gaming markets, and development acceleration through Quixant's field-proven **Gaming Ecosystem[®]**. All you have to do is add the game.

The future is **thinking** outside the box

Setting the pace in the gaming market means approaching tomorrow in new, innovative ways. With Quixant on your side, you can see things and solve problems in a way you'd never believed possible before. Because we put more features and benefits inside the chassis, you get more scope to deliver immersive, next generation content around it. And that means greater profitability.

The Quixant Gaming Ecosystem[®]

Discover the tools, knowledge and tech to keep you **ahead of the game**

Total support to maximise your game. We work worldwide in partnership with you, offering a wide range of personal and downloadable support services including design integration, product customisation and application optimisation.

Tried, tested and ready to go. Our software API and drivers give you access to libraries, example code and rapid plug and play use of a range of supported devices and off the shelf sample images. Plus straightforward connectivity to back-end casino services and a range of third-party devices such as ticket printers, coin-hoppers and bill validators.

Platforms that perform and flex with you. Our mechanical designs offer efficient heat dissipation, easy serviceability, physical security and ESD compliance. And many of our platforms can be adapted for different products at different price-points to suit your precise end market.

Streamlined compliance you can trust. With over 12 years, field-proven deployment in machines meeting gaming regs in most global jurisdictions, you can develop and launch your next games and machines in any market more easily and more confidently.



Customer support /
partnership



Innovative
gaming features



Latest technology



Game portability



Display technology

Unparalleled 4K performance

Out-of-the-box global regulatory compliance

Quixant Gaming Ecosystem®

Up to four 4K monitors

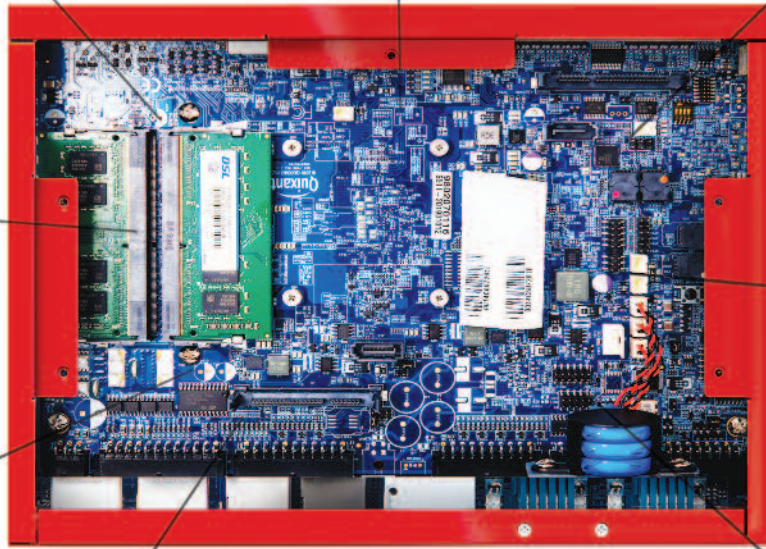
Reduced cost of ownership

Quixant acclaimed reliability

Reduced time to market

The new QXi-7000 LITE

Industry-leading patented security



Problem? Solved. Developing 4K games is enough of a challenge. Quixant's Gaming Ecosystem® tools provide acceleration of game development through hardware-level debugging and a wealth of drivers and libraries for communication with industry standard third party peripherals.

Get secure, faster. QxBOOT is a patent pending BIOS and mass storage hashing technology which cuts the time for secure boot by more than half. This solution is flexible to implement with different secure BIOS designs.

Create games that grab attention. Want to link your LED effects to your game content? No problem. QxLED makes this easy through a purpose-built QxLED driver interface on the QXi-7000 LITE and an integrated software suite to create eye catching cabinet illumination.

Flexible, future-proofed solutions. As our Gaming Ecosystem® evolves, we maintain backward compatibility to all previous versions. So moving to any platform in Quixant's range is simple.

An end to end of life. Quixant takes the pain out of controlling the bill of materials for regulatory compliance away from you through careful component selection and a strict procurement discipline.



Security



Software tools



Gaming regulation



Mechanical design



Software drivers /
API / OS images

QXi-7000 LITE General Features

APU

AMD Ryzen™ Embedded SoC

Dual or Quad 64-bit Zen Cores

- Multi-threaded architecture supports up to 4/8 threads
- Quad core configuration supports frequencies up to 3.35GHz (up to 3.8GHz with boost)
- Dual core configuration supports frequencies up to 2.3GHz (up to 3.2GHz with boost)
- Up to 2MB L2 Cache and 4MB L3 Cache

Integrated AMD Radeon™ Vega graphics

- Up to four independent HD/4K displays with support for DisplayPort 1.4
- Up to 8 Compute Units
- Hardware accelerated 4K video encoder/decoder

Main Memory

- 2 x DDR4-2400/3200 SODIMM Sockets
- Up to 32GB main memory

Quixant Gaming Ecosystem®

64-bit PCI Express® Gen 2 gaming technology

Up to 16MB of NVRAM

- Battery backed SRAM
- Lithium primary or optional Lithium Pentoxide rechargeable cells
- Hardware accelerated memory bank mirroring, copying, verification and CRC support
- Four independent physical banks
- 5-year battery life

Battery powered logging processor

- 8 intrusion inputs (including jumper supervision)
- Supports standard and opto switches
- Date/time stamped recording of 64 events
- Board power status handling
- Double programmable watchdog timers
- Battery voltage monitoring & warning
- Automatic meter handling

Up to 32 digital inputs

- Configurable hardware debounce filtering trigger on rising or falling edges, or both
- Input pulse width screening for pulse devices

Up to 32 digital outputs:

- Detection and reporting of open and short circuits
- Output overload protection

Quixant Advanced Tracing System (QxATS) Gen 1

- Hardware system tracing infrastructure
- Fixed, low CPU utilization
- Simultaneous hardware and software events tracing over dedicated ethernet port
- Hardware trigger to generate system dump
- Full development system management through ALCE tool

Quixant Video Decoder and Renderer (QxVDR)

- Low CPU utilisation video decoding engine hardware accelerated with alpha transparency
- Can synchronize up to 16 videos simultaneously with LED and Audio
- Alpaca tool for video compression and multimedia integration

Quixant LED software suite (QxLED) Gen 1

- LED editor GUI to accelerate development of advanced LED patterns, LED live view and LED pattern simulation
- QXi-7000 LITE can drive 4000+ LEDs simultaneously without additional external hardware.

Security

- Hardware AES128/256 - ECB/CBC
- Hardware RSA 2048 engine
- Onboard SATA encryption/decryption engine
- Secure key storage
- Unique electronic serial number
- SHA-1 chip / EEPROM write protection support
- TPM security device
- Authentication (hardware lock mechanism)
- AMD Secure Memory Encryption (SME)

Communication Interfaces

6 x PCI Express® Gen 2 QxCom serial ports

- Ready to use for SAS protocol handling
- 9-bit management in hardware
- Hardware timestamping of arriving bytes
- RS232, RS485, ID003, TTL and dual ccTalk interfaces

2 x PCI Express® Gigabit LAN interfaces

1 x Gigabit LAN interface internal for system tracing (QxATS)

8 x USB ports

- 4 x external USB ports (2 x USB 3.1, 2 x USB 2.0)
- 4 x USB ports to front panel (USB 3.0)

Meter Power detection / PSU control

SPI header for clock serial peripherals (e.g. SEC meter) or LED strips

I2C Interface

iButton interface

Dedicated interface to drive 4 x LED strips (to drive 4000+ LED RGB)

Power requirement

12V single voltage input

Storage

- 2 x front panel CFast sockets up to 6GB/s
- 2 x SATA sockets up to 6Gb/s (SATA DOM, SSD, HDD)
- 256Bytes of user EEPROM storage (optional up to 128KB)

Audio

High Definition Audio

- 7.1 Audio channels
- 2 x stereo 18W/ channel digital amplified outputs

BIOS

- QxBOOT accelerated BIOS security
- Hardware protected chain of trust
- Hardware validation of BIOS via secure hash algorithm
- BIOS validation of boot drive via secure hash algorithm
- Write-protection of BIOS ROM
- Fully customisable



All trademarks are acknowledged. Specifications subject to change without notice. E&OE. This datasheet does not represent an offer by Quixant to sell any particular product. ©2019 Quixant PLC



FOR MORE INFORMATION: sales@quixant.com

www.quixant.com

Quixant