congatec, Inc. {ESC Silicon Valley BOOTH 1223}

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conga-QA – for Mobile and Ultra Mobile Applications

Qseven is unlike previous Computer-On-Module (COM) standards due to its primary focus being directed toward mobile and ultra mobile applications. It defines fast serial differential interfaces such as PCI Express and Serial ATA, but omits support for legacy interfaces like EIDE and PCI in order to provide ideal support for today as well as future CPUs and chipsets.

Lowest Power Consumption – The complete module is designed for ultra low power consumption. Thanks to the extremely low power consumption of the brand-new Intel® Atom™ processor Z5xx series and the Intel® System Controller Hub US15W, fanless and ultra mobile applications are easily implemented.

Small Form Factor – The module's dimensions are only 70x70mm^2. This means it can be easily integrated into size constricted systems.
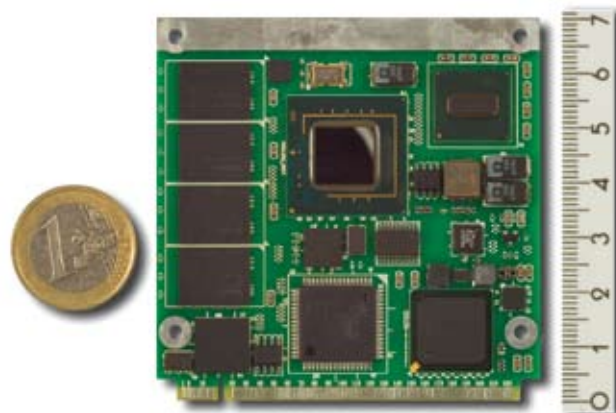
Connector – The MXM edge connector is a robust, single-connector solution that is capable of handling high speed PCI Express signals. This connector is available in 2 different heights (5.5mm and 7.8mm) for maximum flexibility. SMT Type 0.50mm [.020"] Pitch, 230 Pos (MXM Socket).

Gigabit Ethernet – The conga-QA features Gigabit Ethernet via the Qseven connector to enable fast communication links.

SDIO – The SDIO interface is also a new COM feature. Rugged and cheap SD-Cards can be used as bulk memory. Qseven defines an 8 Bit SDIO interface that is capable of supporting MMC 4.0 cards, thereby providing a maximum data transition rate of 52 MByte/s. The Secure Digital Standard also enables other applications such as WLAN, Bluetooth, RFID, etc. while using the same card format.

Performance – Intel® Atom™ processor Z5xx series offers a performance level that can be utilized by many different applications.

Flexible Graphics – The integrated graphics controller has the ability to control displays and monitors. Flat panel displays can be attached using LVDS or SDVO. EPIDisplayID is supported to allow automatic panel detection.

FEATURES

❯ **Embedded BIOS Features –** The conga-QA is equipped with the congatec Embedded BIOS and supports the following features:

– ACPI 3.0 Power Management

– ACPI Battery Support

– Supports Customer Specific CMOS Defaults

– Multistage Watchdog

– User Data Storage

– Manufacturing Data and Board Information

– OEM Splash Screen

– Flat Panel Auto Detection

– BIOS Setup Data Backup

– Fast Mode I²C Bus

– Real Headless Operation

❯ **Design-In Support –** congatec support begins with your product idea and philosophy and continues throughout the series phase all the way up to the next product generation. This commitment to support helps our customers keep system development costs low and speeds up time-to-market.

❯ **System Integration –** An important factor for each system integration is the thermal design. The heatspreader is a thermal coupling interface that makes fanless and rugged solutions possible.

❯ **Embedded Application Software Interface (EASI) –** Qseven™ is the first COM standard that defines an integrative software interface. This Application Programming Interface (API) covers these important embedded features: Watchdog Timer, I²C Bus, LCD brightness control, BIOS user memory and system temperature. Qseven modules from different manufacturers can thus be easily exchanged without modifications to hardware or software.

❯ **Lead-Free Design (RoHS) –** All congatec designs are created from lead-free components and are completely RoHS compliant.

❯ Dual displays supported

For more information, contact: sales-us@congatec.com   **RSC# 41102 @ www.smallformfactors.com/rsc**