

# Qseven® Module

## Ultra Mobil

### conga-QA

Module for ultra mobile applications

Lowest power consumption

Fast serial differential interfaces for high data bandwidth

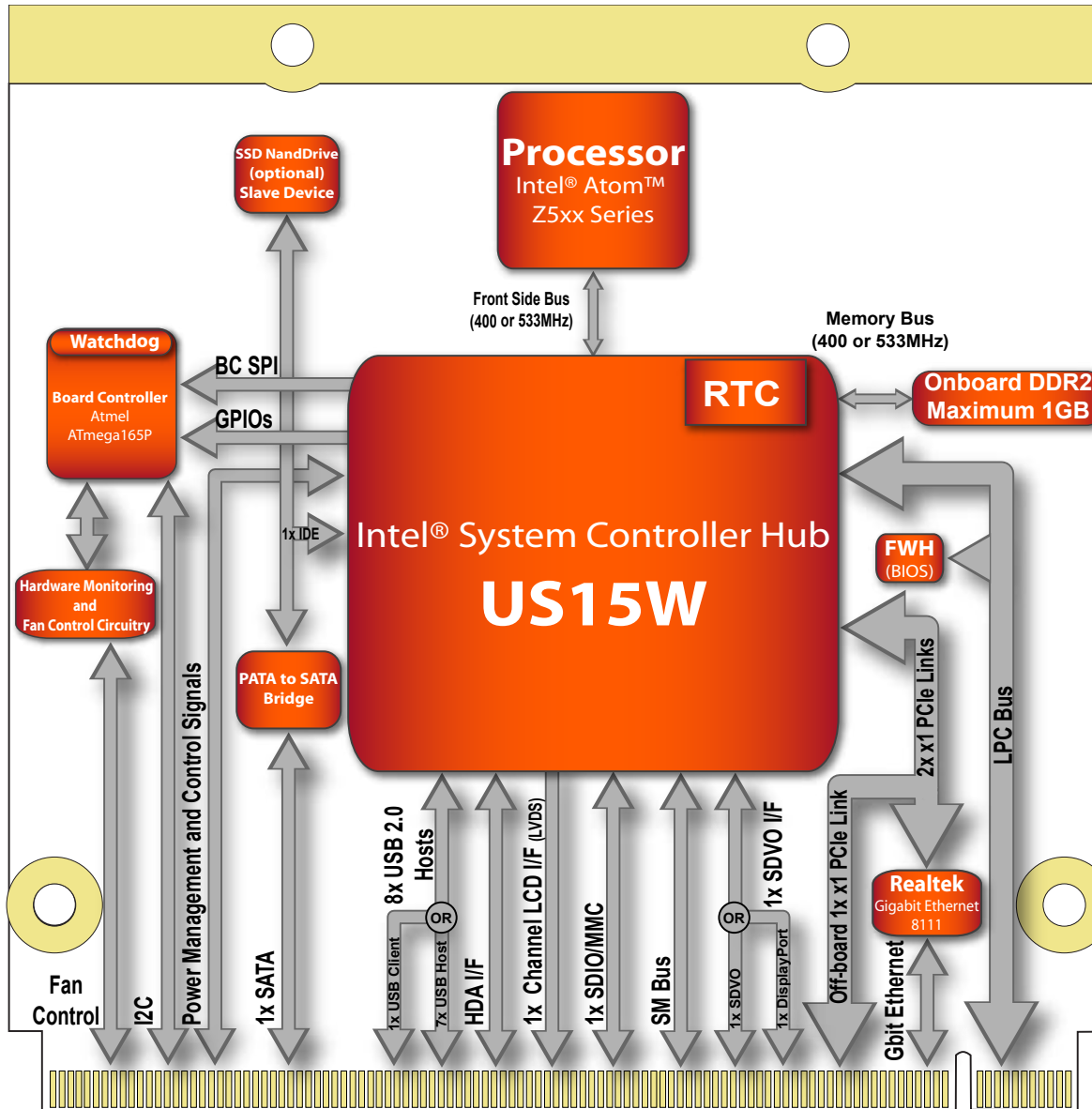
Q S E V E N



### Ultra compact Qseven® module based on Intel® Atom™ Processor Z5xx

|                                  |  |
|----------------------------------|--|
| <b>Formfactor</b>                | <b>Qseven Form Factor, 70x70 mm</b>  |
| <b>CPU</b>                       | Intel® Atom™ processor Z530 1.6 GHz, 533 MHz FSB and memory bus speed, 512k L2 cache, 45 nm, with Hyper-Threading Technology<br>Intel® Atom™ processor Z510 1.1 GHz, 400 MHz FSB and memory bus speed, 512k L2 cache, 45 nm                              |
| <b>DRAM</b>                      | Up to 1 GByte on-board DDR2 memory with 400/533 MT/s   |
| <b>Chipset</b>                   | Intel® SCH US15W   |
| <b>Ethernet</b>                  | Gigabit Ethernet Realtek RTL8111   |
| <b>I/O Interfaces</b>            | 8x USB 2.0, 1x SATA, 1x SDIO, 1x PCIe, I²C Bus, 1x USB client, LPC bus   |
| <b>Mass Storage</b>              | On-board ATA Solid State Drive up to 4 GByte (optional)  |
| <b>Sound</b>                     | Intel® High Definition Audio (Intel® HD Audio)   |
| <b>Graphics</b>                  | Intel® Graphics Media Accelerator 500 (Intel® GMA 500), up to 256 MByte frame buffer supporting Direct X 9.0E and Open GL 2.0  |
| <b>Video Decode Acceleration</b> | Full hardware acceleration for MPEG2, MPEG4, H.264, WMV9 and VC1   |
| <b>Motion Video Support</b>      | Single channel 112MHz LVDS transmitter, support for flat panels with 1x18 and 1x24 bit data mapping up to resolutions of 1366x768 pixel<br>Single channel SDVO interface, supports resolutions up to 1280x1024 pixel<br>Dual independent display support |
| <b>congatec Board Controller</b> | Multi Stage Watchdog, non-volatile User Data Storage, Manufacturing and Board information, Board Statistics, I²C bus (fast mode, 400 kHz, multi-master), Power Loss Control  |
| <b>Embedded BIOS Features</b>    | OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, based on AMIBIOS®   |
| <b>Power Management</b>          | ACPI 3.0 compliant, Smart Battery Management   |
| <b>Operating Systems</b>         | Microsoft® Windows7, Windows® XP, Windows® XP embedded, Windows® CE 6.0, LINUX, QNX  |
| <b>Power Consumption</b>         | Typ. application ~5 Watt @ 5V  |
| <b>Temperature</b>               | Operating: 0 to +60°C<br>Storage: -20 to +80°C   |
| <b>Humidity</b>                  | Operating: 10 to 90% r. H. non cond.<br>Storage: 5 to 95% r. H. non cond.  |
| <b>Size</b>                      | 70 x 70 mm (2¾" x 2¾")   |

# conga-QA - Block diagram



# conga-QA - Order information

| Article                    | PN     | CPU-Z510 | CPU-Z530 | 2GB SSD* | 4GB SSD* | 8GB SSD* | SATA | SSD |
|----------------------------|--------|----------|----------|----------|----------|----------|------|-----|
| conga-QA/Z510-1G           | 015001 | ✓        |          | ✓        |          |          | ✓    | ✓   |
| conga-QA/Z510-1G SSD2      | 015021 | ✓        |          | ✓        |          |          |      | ✓   |
| conga-QA/Z510-1G SATA      | 015011 | ✓        |          |          |          |          | ✓    |     |
| conga-QA/Z530-1G           | 015002 |          | ✓        |          |          |          | ✓    | ✓   |
| conga-QA/Z530-1G SSD2      | 015022 |          | ✓        |          |          |          |      | ✓   |
| conga-QA/Z510-1G SSD4      | 015023 | ✓        |          |          | ✓        |          |      |     |
| conga-QA/Z530-1G SSD8/SATA | 015006 |          | ✓        |          |          | ✓        |      |     |
| conga-QA/Z530-1G SATA      | 015012 |          | ✓        |          |          |          | ✓    |     |
| conga-QA/Z530-1G SSD4/SATA | 015005 |          | ✓        |          | ✓        |          | ✓    | ✓   |

| Article        | PN     | Description  |
|----------------|--------|--|
| conga-QA-HSP-B | 042745 | Heatspreader, Standoff with 2.7mm bore hole  |
| conga-QA-CSP-B | 042735 | Standard passive cooling solution, surface orange anodized with 1.8mm fins, bore hole bracket, threaded standoffs. |

| Engineering Tools / Accessories for Qseven |          |  |
|--|----------|--|
| conga-QEVAL                                | 007001   | Evaluation platform for Qseven   |
| conga-QKIT                                 | 077455   | Starterkit for Qseven including conga-QEVAL, conga-LDVI/EPI, conga-FPA1, Dual DVI-D ADD2 Card, ATX power supply...   |
| Qseven Mobility Kit                        | 077460   | Complete ready-to-use starter-kit for mobile applications  |
| conga-MCB/Qseven SDVO                      | 020730   | Mini Carrier Board for Qseven with smart battery manager interface for mobile applications and SDVO display interface support for Intel® mobile platforms.   |
| conga-MCB/Qseven DP                        | 020731   | Qseven mini carrier board for mobile applications with DisplayPort   |
| conga-MCB/Qseven Cable Kit                 | 14000041 | Complete cable kit for Qseven mini carrier board   |
| Qseven MXM connector Foxconn               | 400017   | Socket for Qseven Carrier Boards. 10pcs package. Foxconn standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height.   |
| Qseven MXM Connector Aces                  | 400018   | Socket for Qseven Carrier Boards. 10pcs package. ACES standard type, SMT, lead free, 230 positions, 0.50mm pitch, 7.8mm height.  |
| conga-LDVI/EPI                             | 011115   | LVDS to DVI converter board for digital flat panels with onboard EEPROM  |
| Single DVI-D ADD2 Card                     | 058500   | ADD2 display adapter card with single DVI-D digital output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard x16 PCI Express Graphics (PEG) port. |

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Rev. July 30, 2014 BLU