

High Performance COM Express®

Dramatically Increased Graphics Performance

conga-BM67

Up to Intel® Core™ i7-2710QE quad core processor

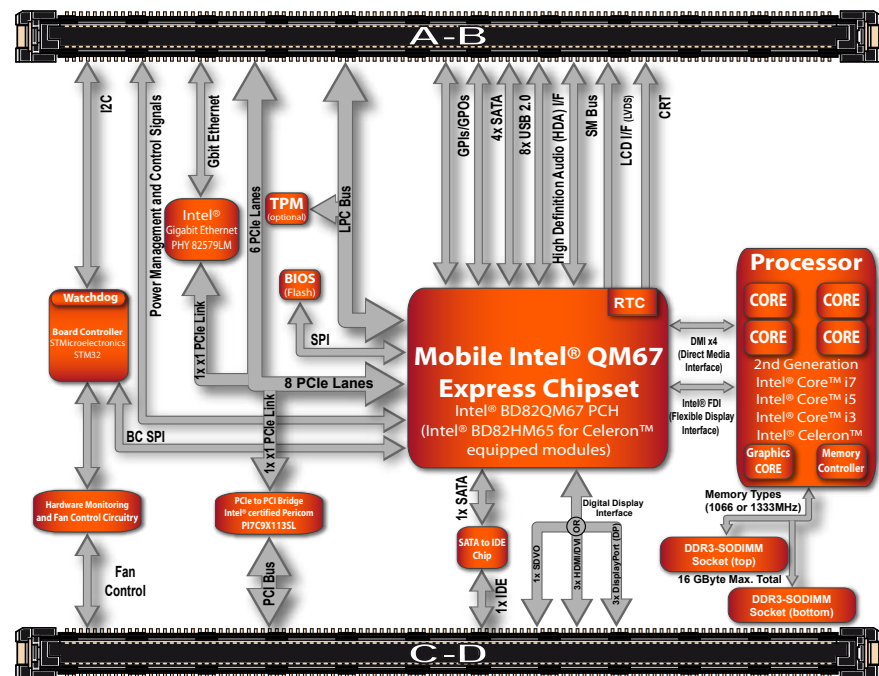
Extreme graphics performance

COM Express™ Type 2 module featuring DisplayPort and HDMI



| | |
|----------------------------------|--|
| Formfactor | Formfactor COM Express™ Basic, (95 x 125 mm), Type II Connector Layout |
| CPU | Intel® Core™ i7-2710QE (SV), 2.1 GHz (32 nm process, 6MB cache, 1333 MHz, TDP 45 W, 989 rPGA package) Intel® Core™ i5 -2510E (SV), 2.5 GHz (32 nm process, 3MB cache, 1333 MHz, TDP 35 W, 989 rPGA package) Intel® Core™ i3-2330E, 2.2 GHz, (32 nm process, 3MB cache, 1333 MHz, TDP 35W, 989 rPGA package) Intel® Celeron® B810, 1.6 GHz (32nm process, 2MB cache, TDP 35W, 989 rPGA package) Integrated dual channel memory controller, up to 25,6 GByte/sec. memory bandwidth, Integrated Intel® HD Graphics with dynamic frequency up to 1100 MHz, Intel® Clear Video HD Technology |
| DRAM | 2 Sockets, SO-DIMM DDR3 1333 MHz, up to 16 GByte |
| Chipset | Mobile Intel® 6 Series Chipset, Intel® QM67 Platform Controller Hub |
| Ethernet | Gigabit Ethernet, Intel® Ethernet PHY with AMT support |
| I/O Interfaces | 6x PCI Express™ lanes, 4x Serial ATA® (AHCI) with RAID support, 1x EIDE (UDMA-66/100) optional, 8x USB 2.0 (EHCI), PCI Bus 33 MHz Rev. 2.3, LPC bus, I²C bus (fast mode, 400 kHz, multi-master) |
| Sound | Digital High Definition Audio Interface with support for multiple audio codecs |
| Graphics | Processor integrated Mobile Intel® 6 Series HD graphics, OpenGL 3.0 and DirectX 10.1 support, Two independent pipelines for full dual view support, High performance hardware MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 Mbit/s, hardware motion compensation (using HDMI 1.4 with 3D), no PEG support |
| LVDS | Dual channel LVDS transmitter, Supports flat panels 2x24 Bit interface, VESA mappings, resolutions up to 1920x1200, Automatic Panel, Detection via EDID/EPI |
| Display Port (DP) | 3x DisplayPorts 1.1, max. resolution 2560x1600 |
| HDMI or DVI | 3x ports shared |
| CRT Interface | 350 MHz RAMDAC, resolutions up to QXGA (2048x1536) |
| SDVO | 1 x Intel compliant SDVO ports with 200MPixel/sec. Supports external DVI, TV and LVDS transmitter |
| congatec Board Controller | Multi Stage Watchdog, non-volatile User Data Storage, Manufacturing and Board Information, Board Statistics, BIOS Setup Data Backup, I²C bus (fast mode, 400 kHz, multi-master), Power Loss Control |
| Embedded BIOS Features | AMI Aptio® UEFI 2.x firmware, 8 MByte serial SPI firmware flash |
| Security | The conga-BM67 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e commerce will benefit also with improved authentication, integrity and confidence levels. |
| Power Management | ACPI 3.0 with battery support |
| Operating Systems | Microsoft® Windows 8, Microsoft® Windows7, Microsoft® Windows® embedded Standard, Microsoft® Windows XP, Linux |
| Power Consumption | Typ. application: Processor TDP: 35 .. 45 W, see manual for full details |
| Temperature: | Operating: 0 .. +60°C Storage: -20 .. +80°C |
| Humidity Operating: | 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond. |
| Size | 95 x 125 mm (3.74" x 4.92") |

Block Diagram conga-BM67



Order Information conga-BM67

| Article | PN | Description |
|------------------------|--------|--|
| conga-BM67/i7-2710QE | 046101 | Intel® Core™ i7-2710QE Quad Core Processor 2.1GHz, 6MByte L2 cache and 1600MT/s dual channel DDR3 memory interface |
| conga-BM67/i5-2510E | 046102 | Intel® Core™ i5-2510E dual core processor 2.5GHz, 3MByte L2 cache and 1333MT/s dual channel DDR3 memory interface |
| conga-BM67/i3-2330E | 046104 | Intel® Core™ i3-2330E dual core processor 2.2GHz, 3MByte L2 cache and 1333MT/s dual channel DDR3 memory interface |
| conga-BM67/B810 | 046105 | Intel® Celeron™ B810 dual core processor 1.6GHz, 2MByte L2 cache and 1333MT/s dual channel DDR3 memory interface |
| conga-BM67/CSP-HP-B | 046122 | Standard passive cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All stand-offs are with 2.7mm bore hole. |
| conga-BM67/CSP-HP-T | 046123 | Standard passive cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All stand-offs are with 2.7mm bore hole. |
| conga-BM67/CSA-HP-B | 046124 | Standard active cooling solution with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All stand-offs are with 2.7mm bore hole. |
| conga-BM67/CSA-HP-T | 046125 | Standard active cooling solution with integrated heat pipes, 15mm fins, 20mm overall heat sink height and integrated 12V fan. All stand-offs are with 2.7mm bore hole. |
| conga-BM67/HSP-HP-B | 046120 | Standard heatspreader with integrated heat pipes. All stand-offs are with 2.7mm bore hole. |
| conga-BM67/HSP-HP-T | 046121 | Standard heatspreader with integrated heat pipes. All stand-offs are with 2.7mm bore hole. |
| DDR3-SODIMM-1333 (1GB) | 068751 | DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 1GB RAM |
| DDR3-SODIMM-1333 (2GB) | 068761 | DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 2GB RAM |
| DDR3-SODIMM-1333 (4GB) | 068764 | DDR3 SODIMM memory module with 1333 MT/s (PC3-10600) and 4GB RAM |

| Engineering Tools / Accessories for COM Express* | | |
|--|--------|---|
| conga-CEVAL | 065749 | Evaluation carrier board for COM-Express-modules |
| conga-Cdebug | 047854 | COM-Express debugging platform. Including cable for COM, PS/2 and VGA. |
| conga-CKIT | 064714 | COM-Express-Starterkit, incl. conga-CEVAL, conga-CDEBUG, conga-FPA1 (PN: 024241), Dual DVI-D ADD2 card, Power supply, USB-Stick, ... Without COM Express-module |
| conga-LDVI/EPI | 011115 | LVDS to DVI converter board for digital flat panels with onboard EEPROM |
| conga-HDM/Display Port adapter | 500014 | The conga-HDM/DisplayPort adapter is used to convert the chipset graphic ports Port-B, Port-C and Port-D to the HDMI or DisplayPort Interface |
| 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. |
| Dual DVI-D ADD2 Card | 013226 | ADD2 display adapter card with dual independent DVI-D output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard, x16 PCI Express Graphics (PEG) port. |
| conga-FPA2 | 047250 | Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set. |