

High Performance COM Express[®]

conga-BS67

Intel[®] Core[™] 2nd Generation CPUs

Extreme graphics performance

COM Express[™] Type 2 module featuring
DisplayPort and HDMI

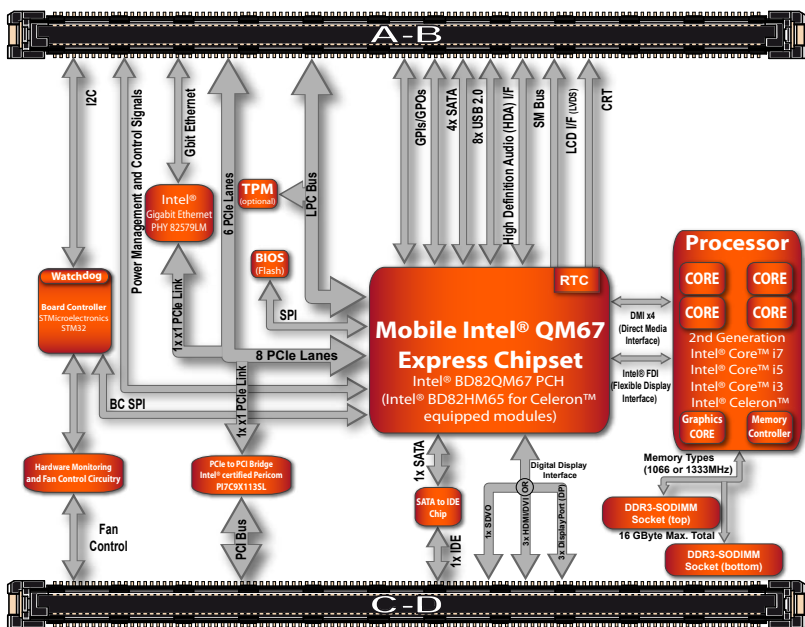
COM 
Express[®]



Formfactor	Formfactor COM Express[™] Basic, (95 x 125 mm), Type II Connector Layout
CPU	Intel [®] Core [™] i7-2655LE, 2.20 GHz, (32 nm process, 4MB cache, 1333 MHz, TDP 25 W) Intel [®] Core [™] i7-2610UE, 1.50 GHz, (32 nm process, 4MB cache, TDP 17 W) Intel [®] Core [™] i3-2340UE, 1.30 GHz (32nm process, 3MB cache, TDP 17W) Intel [®] Celeron [®] Processor 847E, 1.1GHz (32nm process, 2 MB cache, TDP 17W) Intel [®] Celeron [®] Processor 827E, 1.4 GHz (32nm process, 1.5 MB cache, TDP 17W) Intel [®] Celeron [®] Processor 807UE, 1.0GHz (32nm process, 1MB cache, TDP 10W) 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/HM65 Platform Controller Hub
Ethernet	Gigabit Ethernet, Intel [®] Ethernet PHY optional
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, I ² C 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 with Display Port
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, I ² C 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 [®] Windows 7, Microsoft [®] Windows [®] embedded Standard, Microsoft [®] Windows XP, Linux
Power Consumption	Typ. application: Processor TDP: 17 .. 25 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.

Block Diagram conga-BS67

Order Information conga-BS67



Article	PN	Description
conga-BS67/i7-2655LE	046151	Intel® Core™ i7-2655LE dual core processor with 2.2GHz, 4MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-BS67/i7-2610UE	046152	Intel® Core™ i7-2610UE dual core processor with 1.5GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-BS67/i3-2340UE	046153	Intel® Core™ i3-2340UE dual core processor with 1.3GHz, 3MB L2 cache and 1333MT/s dual channel DDR3 memory interface.
conga-BS67/847E	046154	Intel® Celeron® 847E dual core processor with 1.1GHz, 2MB L2 cache and 1066MT/s dual channel DDR3 memory interface for up to 4GB.
conga-BS67/827E	046155	Intel® Celeron® 827E single core processor with 1.4GHz, 1.5MB L3 cache and 1066MT/s dual channel DDR3 memory interface for up to 4GB.
conga-BS67/807UE	046156	Intel® Celeron® 807UE single core processor with 1.0GHz, 1MB L3 cache and 1066MT/s dual channel DDR3 memory interface for up to 4GB.
conga-BS67/HSP-HP-B	046170	Standard heatspreader with integrated heat pipes. All stand-offs are with 2.7mm bore hole
conga-BS67/HSP-HP-T	046171	Standard heatspreader with integrated heat pipes. All stand-offs are M2.5mm threaded
conga-BS67/CSP-HP-B	046172	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-BS67/CSP-HP-T	046173	Standard passive cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height. All stand-offs are M2.5mm threaded
conga-BS67/CSA-HP-B	046174	Standard active cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height and integrated 12V fan. All stand-offs are with 2.7mm bore hole
conga-BS67/CSA-HP-T	046175	Standard active cooling solution with integrated heat pipes, 15mm fins and 20mm overall heat sink height and integrated 12V fan. All stand-offs are M2.5mm threaded
DDR3L-SODIMM-1600 (2GB)	068755	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 2GB RAM
DDR3L-SODIMM-1600 (4GB)	068756	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 4GB RAM
DDR3L-SODIMM-1600 (8GB)	068757	DDR3L SODIMM memory module with 1600 MT/s (PC3L-12800S) and 8GB 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-HDMI/Display Port adapter	500014	The conga-HDMI/DisplayPort adapter is used to convert the chipset graphic ports Port-B, Port-C and Port-D to the HDMI or DisplayPort Interface
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.
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.

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Rev. July 28, 2014 BLU