# DRAMATICALLY INCREASED GRAPHICS PERFORMANCE ga-BM67



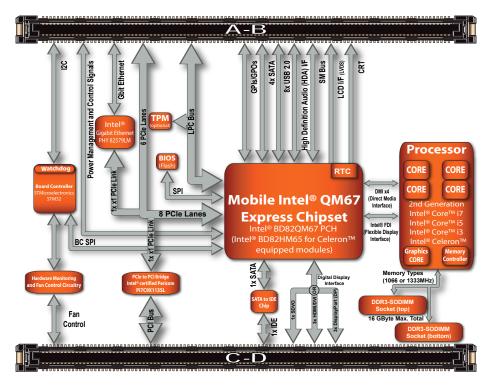
- Up to Intel® Core™ i7-2710QE quad core procesor
- Extreme graphics performance
- COM Express<sup>™</sup> Type 2 module featuring DisplayPort and HDMI



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       rPGA package         Intel® Core™ i5-2510E (SV)       2.5 GHz       32 nm process       3MB cache       1333 MHz       TDP 35 W       rPGA package         Intel® Core™ i3-2330E       2.2 GHz       32 nm process       3MB cache       1333 MHz       TDP 35 W       rPGA package         Intel® Celeron® B810       1.6 GHz       32 nm process       2MB cache       TDP 35 W       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 (eDP optional)	Dual channel LVDS transmitter   Supports flat panels 2x24 Bit interface   VESA mappings   resolutions up to 1920x1200   Automatic Panel Detection via EDID/EPI			
DisplayPort	3x DisplayPorts 1.1   max. resolution 2560x1600			
HDMI	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 I <sup>2</sup> 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® 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")			



### conga-BM67 | Block diagram



## conga-BM67 | Order Information

Article	PN	Description
conga-BM67/i7-2710QE	046101	Intel® Core™ i7-2710QE quad core processor with 2.1GHz   6MB L3 cache and 1600MT/s dual channel DDR3 memory interface
conga-BM67/i5-2510E	046102	Intel® Core™ i5-2510E dual core processor with 2.5GHz   3MB L3 cache and 1333MT/s dual channel DDR3 memory interface
conga-BM67/i3-2330E	046104	Intel® Core™ i3-2330E dual core processor with 2.2GHz   3MB L3 cache and 1333MT/s dual channel DDR3 memory interface
conga-BM67/B810	046105	Intel® Celeron® B810 dual core processor with 1.6GHz   2MB L3 cache and 1333MT/s dual channel DDR3 memory interface
conga-BM67/HSP-HP-B	046120	Standard heatspreader for high performance COM Express module conga-BM67 with integrated heat pipes. All standoffs are with 2.7mm bore hole
conga-BM67/HSP-HP-T	046121	Standard heatspreader for high performance COM Express module conga-BM67 with integrated heat pipes. All standoffs are M2.5mm thread
conga-BM67/CSP-HP-B	046122	Standard passive cooling solution for high performance COM Express module conga-BM67 with integrated heat pipes 15mm silver fins and 20mm overall heat sink height. All standoffs are with 2.7mm bore hole
conga-BM67/CSP-HP-T	046123	Standard passive cooling solution for high performance COM Express module conga-BM67 with integrated heat pipes 15mm silver fins and 20mm overall heat sink height. All standoffs are M2.5mm thread
conga-BM67/CSA-HP-B	046124	Standard active cooling solution for high performance COM Express module conga-BM67 with integrated heat pipes 15mm silver fins   20mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole
conga-BM67/CSA-HP-T	046125	Standard active cooling solution for high performance COM Express module conga-BM67 with integrated heat pipes 15mm silver fins   20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread
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
Accessories		
conga-CEVAL	065749	Evaluation Carrier Board for COM Express Type 2 modules
conga-Cdebug	047854	COM-Express debugging platform. Including cable for COM   PS/2 and VGA.
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
conga-HDMI/Display Port adapter 4k	500030	The conga-DP/HDMI adapter 4k is used for evlauation of the DP/HDMI graphics interface of x86 Qseven and COM Express modules in combination with the congatec evaluation carrier boards conga-QEVAL and conga-TEVAL. It supports full 4k display resolution.
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set.



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