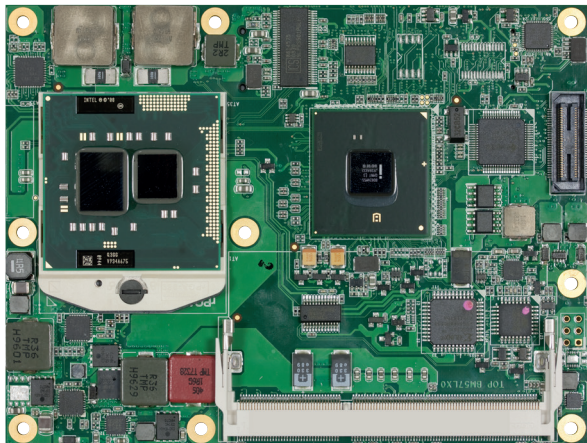


MAXIMUM COMPUTING PERFORMANCE

conga-BM57

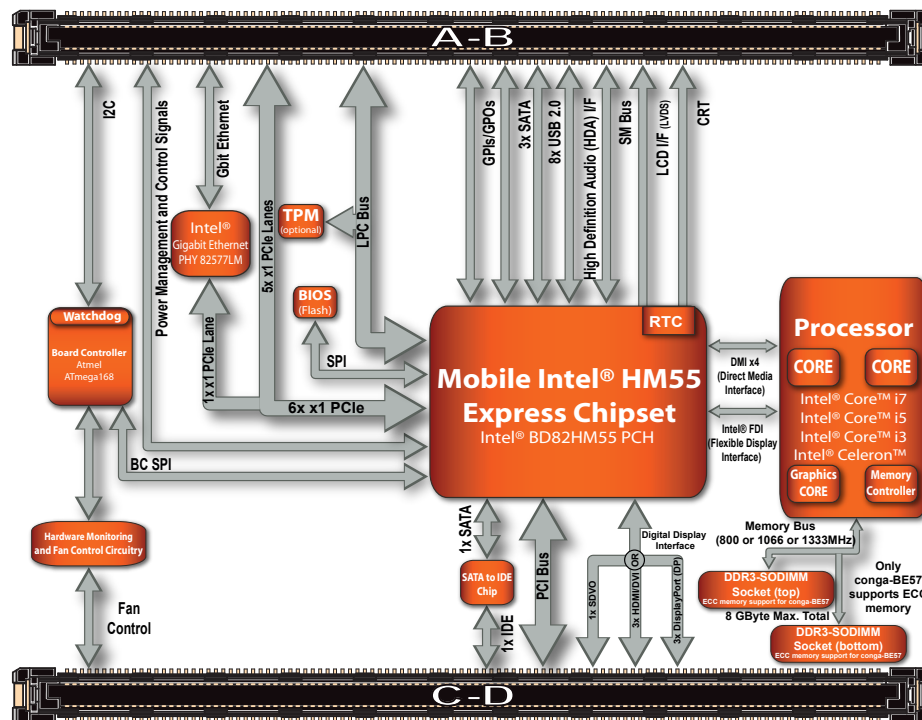


- up to Intel® Core™ i7 Processors 2.66 GHz
- Highest end graphics performance
- Intel® Turbo Boost Technology up to 3.33 GHz



Formfactor	COM Express™ Basic (95 x 125 mm) Type II Connector Layout						
CPU	Intel® Core™ i7-620M	2.66 GHz	32 nm processor	4MB cache	1066 MHz	TDP 35 W	PGA package
	Intel® Core™ i5-520M	2.4 GHz	32 nm processor	3MB cache	1066 MHz	TDP 35 W	PGA package
	Intel® Celeron™ P4500	1.86 GHz	32 nm processor	2MB cache		TDP 35 W	PGA package
	Integrated dual channel memory controller up to 17.1 GByte/sec. memory bandwidth Integrated Intel® HD Graphics with dynamic frequency up to 667 MHz Intel® Clear Video HD Technology						
DRAM	2 Sockets SO-DIMM DDR3 1333 MHz up to 8 GByte						
Chipset	Intel® 5 Series Chipset: Intel® HM55						
Ethernet	Intel® 82577LM Ethernet PHY						
I/O Interfaces	5x PCI Express™ lanes 3x Serial ATA® (AHCI) no RAID support 1x EIDE (UDMA-66/100) optional 2x ExpressCard® 8x USB 2.0 (EHCI)						
Sound	Digital High Definition Audio Interface with support for multiple audio codecs						
Graphics	Processor integrated Mobile Intel® 5 Series HD graphics OpenGL 2.1 and DirectX10 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 no PEG support						
LVDS (eDP optional)	Dual channel LVDS transmitter Supports flat panels 2x24 Bit interface VESA mappings resolutions up to 1920x1200 Automatic Panel						
DisplayPort	3x DisplayPorts 1.1 shared with HDMI						
HDMI	3x ports shared with DisplayPorts						
CRT Interface	350 MHz RAMDAC resolutions up to QXGA (2048x1536)						
AUX Output	Supports one SDVO port shared with HDMI and DisplayPort capable of driving a 200MP pixel rate						
congatec Board Controller	Multi Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics BIOS Setup Data Backup						
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware 4 MByte serial SPI firmware flash						
Security	The conga-BM57 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and						
Power Management	ACPI 3.0 with battery support						
Operating Systems	Microsoft® Windows 8 Microsoft® Windows 7 Microsoft® Windows XP Microsoft® Windows® embedded Standard Linux						
Power Consumption	Typ. application: tbd. see manual for full details CMOS Battery Backup						
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-BM57 | Block diagram



conga-BM57 | Order Information

Article	PN	Description
conga-BM57/i5-520M	046001	Intel® Core™ i5-520M processor with 2.4GHz 3MB L2 cache and 1066MT/s dual channel DDR3 memory interface
conga-BM57/i7-620M	046002	Intel® Core™ i7-620M processor with 2.66GHz 4MB L2 cache and 1066MT/s dual channel DDR3 memory interface
conga-BM57/P4500	046005	Intel® Celeron® P4500 processor with 1.86 GHz 2MB L2 cache and 800MT/s dual channel DDR3 SODIMM memory interface for up to 8GB
conga-BM57/CSP-HP-B	046022	Standard passive cooling solution for high performance COM Express module conga-BM57 with integrated heat pipes 15mm silver fins and 20mm overall heat sink height. All standoffs are with 2.7mm bore hole
conga-BM57/CSP-HP-T	046023	Standard passive cooling solution for high performance COM Express module conga-BM57 with integrated heat pipes 15mm silver fins and 20mm overall heat sink height. All standoffs are M2.5mm thread
conga-BM57/CSA-HP-B	046024	Standard active cooling solution for high performance COM Express module conga-BM57 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-BM57/CSA-HP-T	046025	Standard active cooling solution for high performance COM Express module conga-BM57 with integrated heat pipes 15mm silver fins 20mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm thread
conga-BM57/HSP-HP-B	046020	Standard heatspreader for high performance COM Express module conga-BM57 with integrated heat pipes. All standoffs are with 2.7mm bore hole
conga-BM57/HSP-HP-T	046021	Standard heatspreader for high performance COM Express module conga-BM57 with integrated heat pipes. All standoffs are M2.5mm thread
DDR3-SODIMM-1066 (1GB)	068750	DDR3 SODIMM memory module with 1066MT/s and 1GB RAM
DDR3-SODIMM-1066 (2GB)	068760	DDR3 SODIMM memory module with 1066MT/s and 2GB RAM
DDR3-SODIMM-1066 (4GB)	068765	DDR3 SODIMM memory module with 1066MT/s and 4GB 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 evaluation 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.
COM-Express-carrierboard-Socket-5	400007	Connector for COM-Express carrier boards height 5mm packing unit 4 pieces
COM-Express-carrierboard-Socket-8	400004	Connector for COM-Express carrier boards height 8mm packing unit 4 pieces

Mouser Electronics

Authorized Distributor

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[conga-BM57/CSP-HP-B](#) [conga-BM57/CSP-HP-T](#) [conga-BM57/HSP-HP-T](#)