

conga-BM57

Maximum Computing Performance

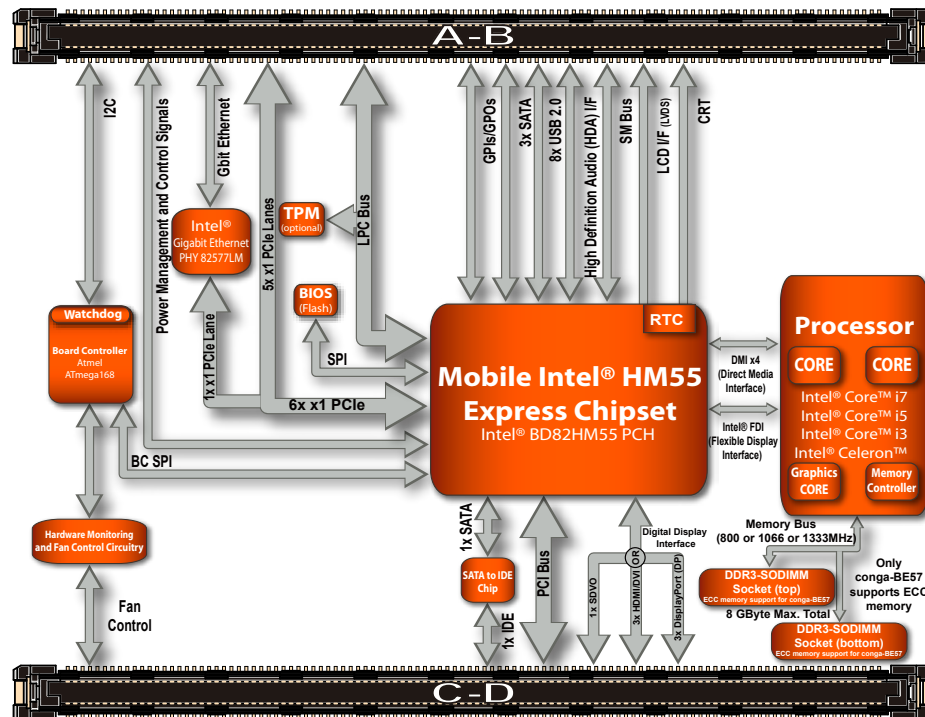


- up to Intel® Core™ i7 Processors 2.66 GHz
- Highest end graphics performance
- Intel® Turbo Boost Technology up to 3.33 GHz

COM  **Express®**

Formfactor	COM Express™ Basic (95 x 125 mm) Type II Connector Layout						
CPU	Intel® Core™ i7-620M	2.66 GHz	32 nm process	4MB cache	1066 MHz	TDP 35 W	PGA package
	Intel® Core™ i5-520M	2.4 GHz	32 nm process	3MB cache	1066 MHz	TDP 35 W	PGA package
	Intel® Celeron™ P4500	1.86 GHz	32 nm process	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) 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® 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	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 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 I²C bus (fast mode 400 kHz multi-master) Power Loss Control						
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 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 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 standoff 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 standoff 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 standoff 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 standoff 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 standoff 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 standoff 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	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
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set.
COM-Express-carrier-board-Socket-5	400007	Connector for COM-Express carrier boards height 5mm packing unit 4 pieces
COM-Express-carrier-board-Socket-8	400004	Connector for COM-Express carrier boards height 8mm packing unit 4 pieces

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