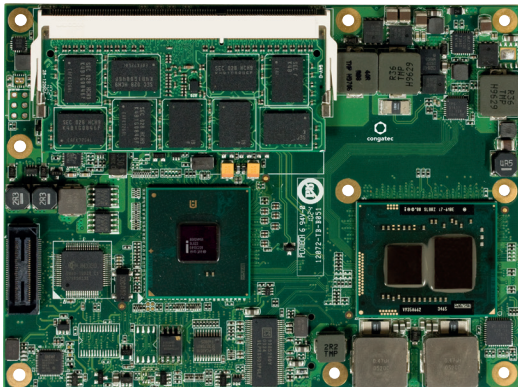


MAXIMUM COMPUTING PERFORMANCE

conga-BE57

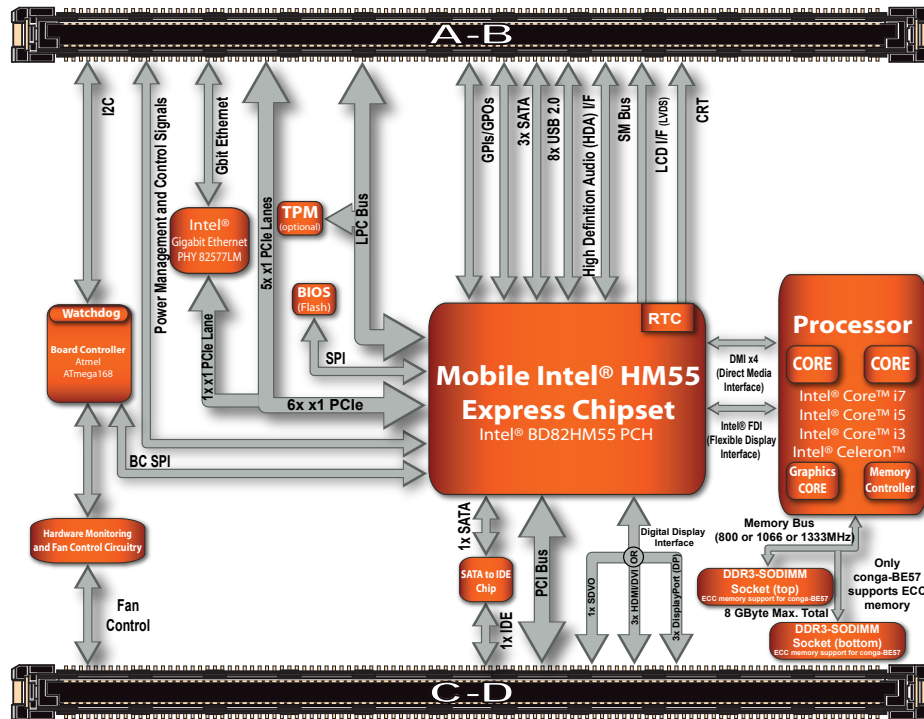


- ECC Support for maximum reliability
- Power-Efficient Processors
- Up to Intel® Core™ i7 Processor 2.0 GHz
- Intel® Clear Video HD Technology

COM  **Express®**

Formfactor	COM Express™ Basic (95 x 125 mm) Type II Connector Layout							
CPU	Intel® Core™ i7-610E	2.53 GHz	32 nm process	4MB cache	1066 MHz	TDP 25 W	BGA package	
	Intel® Core™ i7-620LE	2.0 GHz	32 nm process	4MB cache	1066 MHz	TDP 25 W	BGA package	
	Intel® Core™ i3-330E	2.13 GHz	32 nm process	3MB cache	1066 MHz	TDP 35 W	BGA package	
	Intel® Celeron® P4505	1.86 GHz	32 nm process	2MB cache	1066 MHz	TDP 35 W	BGA package	
	Intel® Celeron® Processor U3405	1.07 GHz	32 nm process	2MB cache	1066 MHz	TDP 18 W	BGA 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 ECC 1333 MHz up to 8 GByte							
Chipset	Intel® 5 Series Chipset: Intel® HM55							
Ethernet	Intel® 8257LM 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 (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 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-BE57 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® Windows8 Microsoft® Windows7 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-BE57 | Block diagram



conga-BE57 | Order Information

Article	PN	Description
conga-BAF/T56N	041001	AMD G-Series Dual Core Processor T56N 1.6GHz, 1MB L2 cache and 1333MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40N	041003	AMD G-Series Dual Core Processor T40N 1.0GHz, 1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T44R	041005	AMD G-Series Single Core Processor T44R 1.2GHz, 512kB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40R	041006	AMD G-Series Single Core Processor T40R 1.0GHz, 5.5W, 1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/T40E	041007	AMD G-Series Dual Core Processor T40E 1.0GHz, 6.5W, 1MB L2 cache and 1066MT/s DDR3 SODIMM memory interface for up to 8GB
conga-BAF/HSP-B	041020	Standard passive cooling solution for module conga-BAF. All standoffs are with 2.7mm bore hole
conga-BAF/HSP-T	041021	Standard heatspreader for COM Express Basic module conga-BAF. All standoffs are M2.5mm thread
conga-BAF/CSP-B	041025	Standard passive cooling solution for module conga-BAF. All standoffs are with 2.7mm bore hole
conga-BAF/CSP-T	041026	Standard passive cooling solution for module conga-BAF. All standoffs are M2.5mm thread
conga-BAF/CSA-B	041027	Standard active cooling solution for module conga-BAF. Integrated 12V fan. All standoffs are with 2.7mm bore hole
conga-BAF/CSA-T	041028	Standard active cooling solution for module conga-BAF. Integrated 12V fan. All standoffs are M2.5mm thread
DDR3-SODIMM-1066 (1GB)	068750	DDR3 SODIMM memory module with 1066MT/s and 1GB RAM
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
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