

COM Express® Basic Module

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 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 (32nm process, 2MB cache, TDP35 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 (DP)	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")

