



conga - BM45

- 45nm Intel® Core™ Duo Processors up to 2.53 GHz
- Provides up to 8 GByte dual channel DDR3 DRAM
- Intel AMT 4.0
- New Display Interfaces DisplayPort and HDMI/HDCP
- ACPI Battery Support, Flat Panel detection....

COM Express



conga-BM45	
Formfactor	COM Express™ Basic, (95 x 125 mm), Type II Connector Layout
CPU	Intel® Core™ 2 Duo T9400, 2.53 GHz (6M cache, 1066 MHz FSB, 45nm), Socket mPGA479M Intel® Celeron™ processor 575, 2.0 GHz, Socket mPGA479M
DRAM	2 Sockets, SO-DIMM DDR3 1067 MHz, up to 8 GByte
Chipset	Graphics & Memory Controller Hub: Intel® GM45 I/O Controller Hub: Intel® ICH9M-E
Ethernet	Integrated within the ICH9M-E, 10/100/1000 LAN MAC + Intel 82567 Phy, AMT 4.0 support
I/O Interfaces	5x PCI Express™ lanes, PCI Express Graphics (PEG x16), 4x Serial ATA® (AHCI) supporting RAID 0/1/5/10, 1x EIDE (UDMA-66/100) optional, 2x ExpressCard® (uses 2x USB & 2x PCI Express), 8x USB 2.0 (EHCI), PCI bus 33 MHz Rev. 2.3, LPC bus, I²C bus (fast mode, 400 kHz, multi-master), Power Loss Control, temperature controlled Power-Up
Sound	Digital High Definition Audio Interface with support for multiple audio codecs
Graphics	Mobile Intel® Graphics Media Accelerator 4500MHD, graphics core speeds up to 533 MHz, improved graphics and 3D rendering performance Intel® Dynamic Video Memory Technology (Intel® DVM 5.0) OpenGL 2.0 and DirectX10 support Two independent pipelines for full dual view support
Display Interfaces	High performance hardware MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support Blu-ray support @ 40 Mb/s, hardware motion compensation
LVDS	Dual channel 112 MHz LVDS transmitter, Supports flat panels with 1x18, 2x18, 1x24, 2x24 bit interface, VESA- and openLDI mappings, resolutions from 640x480 up to 1920x1200, Automatic Panel Detection via EDID/EPI/DisplayID
DisplayPort (DP)	Supports three DisplayPorts multiplexed with the PCI Express Graphics interface 1.62 Gb/s and 2.7 Gb/s, 1/2/4 data lanes, 8B10B-coding, Hot-Plug detect support, HDCP support
HDMI	Single TMDS Link, only support for RGB Video support for CEA modes 480i/p, 576i/p, 720p, 1080i/p and PC modes via dot clock, HDCP and HDMI repeater support
CRT Interface	300 MHz RAMDAC, resolutions up to QXGA
AUX Output	Supports two SDVO Ports multiplexed with the PCI Express Graphics interface
TV Out	Onboard TV encoder, supports HDTV (420p, 720p and 1080i), supports component and S-video
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, temperature controlled Power-Up
Embedded BIOS Features	OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, Based on AMIBIOS®
Security	Integrated TPM 1.2/TPA security functions, for Hash, RSA, keys and random numbers
Power Management	ACPI 3.0 with battery support
Operating Systems	Microsoft®, Windows Vista, Windows XP, Windows XP embedded, Windows® CE 6.0, LINUX, QNX
Power Consumption	Typ. application: TBD W@12V, 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 mm² (3.74" x 4.92")



congatec

the rhythm of embedded computing

Headquarters:

congatec AG

Auwiesenstraße 5
94469 Deggendorf, Germany

Phone +49 (991) 2700-0
Fax +49 (991) 2700-222
info@congatec.com
www.congatec.de

Subsidiaries:

congatec AG Asia Pacific

11F-2, 341, Sec 4, Zhong Xiao E. Rd.
106 Taipei City, Taiwan

Phone +886 2 2775 4645
Fax +886 2 2775 3263
sales-asia@congatec.com
www.congatec.tw

congatec, Inc.

2187 Newcastle Ave, Suite 201
Cardiff by the Sea, CA 92007 USA

Phone +1 760-635-2600
Fax +1 760-635-2601
sales-us@congatec.com
www.congatec.us

congatec s.r.o.

Brojova 16
PSC 326 00 Plzeň
Czech Republic