

conga-BM45

45nm Intel® Core™ 2 Duo Processors up to 2.53 GHz

Provides up to 8 GByte dual channel DDR3 DRAM

Intel AMT 4.0

COM 
Express



High End

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® Core™ 2 Duo P8400, 2.26 GHz (3M cache, 1066 MHz FSB, 45nm), Socket mPGA479M
 Intel® Celeron™ processor 575, 2.0 GHz, Socket mPGA479M, no PEG Support (with Intel® GL40 Chipset)

DRAM

2 Sockets, SO-DIMM DDR3 1067 MHz, up to 8 GByte

Chipset

Graphics & Memory Controller Hub: Intel® GM45/GL40 I/O Controller Hub: Intel® ICH9M-E

Ethernet

Integrated within the ICH9M-E, 10/100/1000 LAN MAC + Intel® 82567 Phy

I/O Interfaces

5x PCI Express™ lanes, PCI Express Graphics (PEG x16), 3x 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® DVMT 5.0) OpenGL 2.0 and DirectX10 support, Two independent pipelines for full dual view support

Motion Video Support

High performance hardware MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support
 Blu-ray support @ 40 Mb/s, hardware motion compensation

Flat panel Interface

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

DisplayPort (DP)

Supports two 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

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, tor Hash, RSA, keys and random numbers

Power Management

ACPI 3.0 with battery support

Operating Systems

Microsoft® Windows7, Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Linux 2.6, QNX 6.x

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

Headquarter:

congatec AG

Auwiesenstraße 5
94469 Deggendorf,
Germany

Phone +49 (991) 2700-0
Fax +49 (991) 2700-111

info@congatec.com
www.congatec.de

Subsidiaries:

congatec AG Asia Pacific

12F-5, No. 270, Sec 4,
Zhongxiao 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.

6262 Ferris Square
San Diego,
CA 92121 USA

Phone +1 858-457-2600
Fax +1 858-457-2602

sales-us@congatec.com
www.congatec.us

congatec s.r.o.

Brojova 16
PS 326 00 Plzeň
Czech Republic

www.congatec.com