

Ultra Low Power

Formfactor	COM Express™ Compact, (95 x 95 mm), Type II Connector Layout
CPU	Intel® Atom™ N270, 1.6 GHz, 512 kB cache, 533 MHz FSB, 45nm, 2.5W TDP
DRAM	1 Socket, SO-DIMM DDR2 533, up to 2 GByte
Chipset	Graphics & Memory Controller Hub: Intel® 945GSE I/O Controller Hub: Intel® 82801GHM (ICH7M)
Ethernet	Gigabit Ethernet, Realtek RTL8111C
I/O Interfaces	3x PCI Express™ Lanes, 2x Serial ATA® (AHCI), 1x EIDE (UDMA-66/100), 2x Express Card® (uses 2x USB & 2x PCI Express), 8x USB 2.0 (EHCI), PCI Bus 33 MHz Rev. 2.3, LPC Bus, I²C (Fast Mode, 400 kHz, Multi Master), Power Loss Control, Temperature Controlled Power-Up
Sound	AC'97 Rev.2.2 Compatible, Digital High Definition Audio Interface with support for multiple audio codecs
Graphic Interface	Enhanced 256 Bit 3D Video Controller, Intel® Graphics Media Accelerator 950, up to 10.6 GB/sec memory bandwidth, 256-bit graphics core, max. 224 MByte 64 Bit Video RAM (DVMT 3.0), Dynamic Display Modes for flat-panel, wide-screen and Digital TV support
Full Dual View	With two independent Pipelines
Motion Video Support	High Definition Hardware Motion Compensation to support high definition hi-bitrate MPEG2 media playback, Up and Down Scaling of Video Content, High Definition Content Decode, HDTV (1080i/p) Support
Flat panel Interface	Dual 112 MHz LVDS Transmitter, Supports all 1x18, 2x18, Resolutions 640x480 up to 1920x1200, Automatic Panel Detection via EPI, (Embedded Panel Interface, based on VESA EDID™ 1.3) and Display ID
CRT Interface	400 MHz RAMDAC, Resolutions up to 2048x1536 @ 75 Hz, including 1920x1080 @ >85 Hz (HDTV)
AUX Output	1x SDVO
congatec Board Controller	Multi Stage Watchdog, Non-volatile User Data Storage, Manufacturing and Board Information, Board Statistics, BIOS Setup Data Backup, I²C (Fast Mode, 400 kHz, Multi Master), Power Loss Control, Temperature Controlled Power-Up
Embedded BIOS Features	OEM Logo, OEM CMOS Defaults, LCD Control, (Auto Detection, Backlight Control), Flash Update, Based on AMIBIOS8®
Security (optional)	TPM 1.2/TPA Security Functions, for Hash, RSA, Keys and Random Numbers
Power Management	ACPI 2.0 with Battery support
Operating Systems	Microsoft® Vista™, Windows XP, Windows XP embedded, Windows® CE 5.0/6.0, LINUX, QNX
Power Consumption	Typ. application: <10 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 95 mm ² (3.74" x 3.74")

conga-CA945

Allows cost effective and power efficient COM Express™ solutions

Combines Intel® Atom™ processor technology with the feature rich embedded chipset Intel® 945 GSE



**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
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
PS 326 00 Plze
Czech Republic

www.congatec.com

© 2009 congatec AG. All rights reserved.

conga, congatec and ETX™ are registered trademarks of congatec AG. Intel, Pentium and Intel Atom are trademarks of Intel Corporation in the U.S. and other countries. COM Express is a registered trademark of PICMG. Express Card is a registered trademark of the Personnel Computer Memory Card International Association (PCMCIa). PCI express is a registered trademark of the Peripheral Component Interconnect Special Interest Group (PCISIG). CompactFlash is a registered trademark of the Compact Flash Association. Winbond is a registered trademark of the Winbond Electronics corps. AVR is a registered trademark of the Atmel corporation. ETX is a registered trademark of Kontron Embedded Modules GmbH. AMICORE8 is a registered trademark of American Megatrends Inc. Microsoft®, Windows®, Windows NT®, Windows CE and Windows XP® are registered trademarks of Microsoft corporation. VxWorks is a registered trademark of WindRiver. All product names and logos are property of the respective manufacturers.

All data is for information purposes only. Although all the information contained within this document is carefully checked no guarantee of correctness is implied or expressed.