conga-XA945

Featuring Intel® Atom® processor N270, 1.6 GHz

High Graphics Performance

ACPI Battery Support, Flat Panel detection ....

Formfactor	ETX® Spec 2.7. without ISA Support, XTX™ Extensions
CPU	Intel® Atom™ processor N270, 1.6 GHz, 512kB cache, 533MHz FSB, 45nm, 2.5W TDP
DRAM	SO-DIMM DDR2 667/PC5300 up to 2 GByte physical memory
Chipset	Graphics & Memory Controller Hub: Intel® 945GME I/O Controller Hub: Intel® 82801 GBM (ICH7-M) I/O Controller: Winbond 83627DHG Ethernet PHY: Intel® 82562
Ethernet	IEEE 802.3u 100Base-Tx, Fast Ethernet compatible
I/O Interfaces	4x PCI Express™ Lanes, 2x Serial ATA® (AHCI), 1x EIDE (UDMA-66/100), 2x Express Card® (uses 2x USB & 2x PCI Express), 6x USB 2.0 (EHCI), PCI Bus Rev. 2.3, no ISA Bus, LPC Bus, I²C (Fast Mode, 400 kHz, Multi Master), Floppy (Shared with LPT), LPT (EPP/ECP, Shared with Floppy), 2x COM Ports TTL Level, 1x IrDA Port, PS/2 Keyboard, Mouse, Fan Control
Sound	AC'97 Rev.2.2 Compatible, Line In, Line Out, Mic In, Digital High Definition Audio Interface with support for multiple audio codecs
Graphics	Enhanced 256 Bit 3D Video Controller, Intel® Graphics Media Accelerator 950, up to 10.6 GByte/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 Two independent pipelines for full dual view support
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, 1x24, 2x24 Bit, VESA- and openLDI-Mappings, Resolutions 640x480 up to 1600x1200, Automatic Panel Detection via EPI, (Embedded Panel Interface, based on VESA EDID™ 1.3)
CRT Interface	400 MHz RAMDAC, Resolutions up to 2048x1536 @ 75 Hz, including 1920x1080 @ >85 Hz (HDTV)
AUX Output	2x SDVO
TV Out	On ETX® X3 connector
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
Embedded BIOS Features	OEM Logo, OEM CMOS Defaults, LCD Control, (Auto Detection, Backlight Control), Serial Port Console Redirection, for Remote Setup and Installation, Flash Update, Based on AMIBIOS8®
Security	The conga-XA945 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 2.0 with Battery support, suspend to RAM (S3)
Operating Systems	Microsoft® Windows 7, Microsoft® Windows XP, Microsoft® Windows CE 6.0, Microsoft® Windows® embedded Standard, Windows Embedded Compact 7, Linux
Power Consumption	Typ. application: <10 W @ 5V, 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 114 mm (3.7" x 4.5")

Block Diagram conga-XA945

Order Information conga-XA945
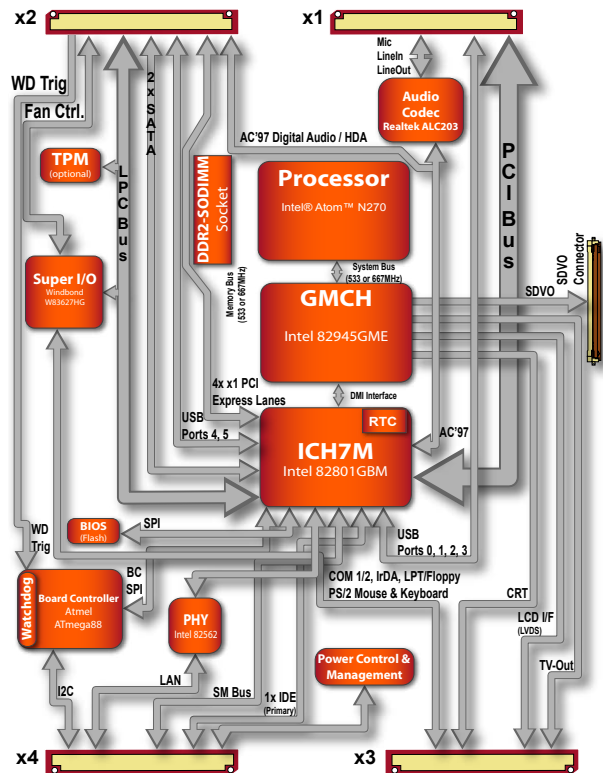
Article	PN	Description
conga-XA945/N270	055600	Intel Atom N270 processor
conga-XA945/HSP-B	055605	Heatspreader, Standoff with 2.7mm bore hole
conga-XA945/HSP-T	055610	Heatspreader, Standoff with M2.5mm thread
DDR2-SODIMM-667 ETX/XTX (512MB)	057845	DDR2 SODIMM memory module with 667 MT/s and 512MB RAM
DDR2-SODIMM-667 ETX/XTX (1GB)	087413	DDR2 SODIMM memory module with 667 MT/s and 1GB RAM
DDR2-SODIMM-667 ETX/XTX (2GB)	068713	DDR2 SODIMM memory module with 667 MT/s and 2GB RAM

Engineering Tools / Accessories for XTX°		
conga-Xeval	019482	Evaluation carrier board for XTX-modules
conga-XKIT	077441	XTX-Starterkit with conga-XEVAL, conga-Xdebug, conga-FPA2, conga-XDVI, Power supply, USB-Stick, ...Without XTX-module
conga-XDVI	098637	Evaluation platform to convert SDVO to DVI-D
conga-Xdebug	041784	XTX debugging platform. Including cable for COM, PS/2 and VGA
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set
XTX/ETX-baseboard-socket-3	400006	Connector for ETX and XTX carrier boards, height 3.0 mm, packing unit 8 pieces
XTX/ETX-baseboard-socket-9.5	400009	Connector for ETX and XTX carrier boards, height 9.5 mm, packing unit 8 pieces
conga-LDVI/EPI	011115	LVDS to DVI adapter board for digital fl at panels with a graphics resolution up to 1280x1024 pixel

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