

XTX™ Module

High Performance

conga-X945

Featuring the latest Intel® Core™ 2 Duo LV Processors up to 1.5 GHz

Provides up to 2 GByte top of the line DRAM performance

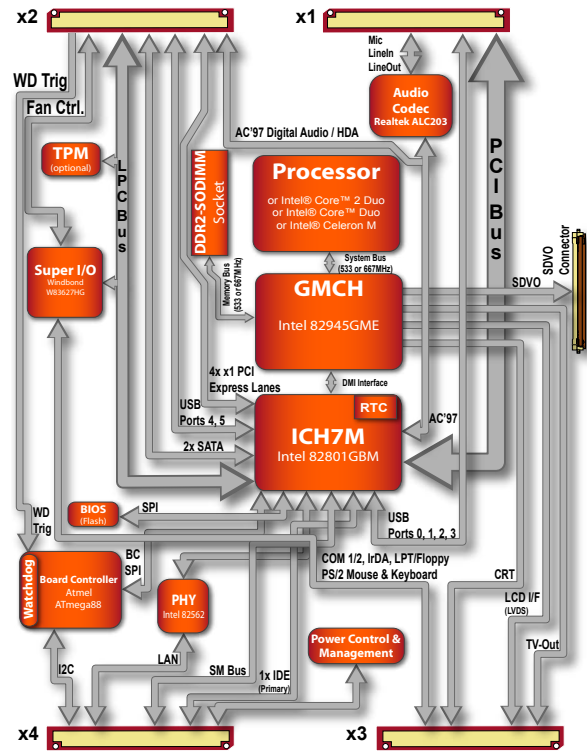
ACPI Battery Support,
Flat Panel detection



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|----------------------------------|---|
| Formfactor | ETX® Spec 2.7. without ISA Support, XTX™ Extensions |
| CPU | Intel® Core™ 2 Duo L7400 LV, 1.5 GHz, (4M cache, 667 MHz FSB, 65nm) Intel® Core™ 2 Duo U7500 ULV, 1.06 GHz, (2M cache, 533 MHz FSB, 65nm) Intel® Core™ Duo L2400 LV, 1.66 GHz, (2M cache, 667 MHz FSB, 65nm) Intel® Celeron® M440, 1.86 GHz, (1M cache, 533 MHz FSB, 65nm) Intel® Celeron® M423 ULV, 1.06 GHz, (1M cache, 533 MHz FSB, 65nm) |
| DRAM | SO-DIMM DDR2 667/PC 5300 up to 2 GByte |
| Chipset | Graphics & Memory Controller Hub: Intel® 945GME I/O Controller Hub: Intel® 82801GBM (ICH7-M) I/O Controller: Winbond 83627HG 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 |
| 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 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, 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 AMIBIOS® |
| Security | The conga-X945 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 |
| Operating Systems | Microsoft® Windows7, Microsoft® Windows XP, Microsoft® Windows CE 6.0, Microsoft® Windows® embedded Standard, Windows Embedded Compact 7, Linux |
| Power Consumption | Typ. application: 10.5 W @ 5V, (1.66 GHz Core Duo), 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-X945

Order Information conga-X945



| Article | PN | Description |
|---------------------------------|--------|--|
| conga-X945/423 | 034571 | Intel 945GME and Intel® Celeron® M 423 processor with 1.06GHz, 1MB L2 cache and 533MHz FSB. |
| conga-X945/440 | 078965 | Intel 945GME and Intel® Celeron® M 440 processor with 1.86GHz, 1MB L2 cache and 533MHz FSB. |
| conga-X945/L2400 | 085691 | Intel 945GME and Intel® CoreDuo™ L2400 processor with 1.66GHz, 2MB L2 cache and 667MHz FSB. |
| conga-X945/U7500 | 014781 | Intel 945GME and Intel® Core2Duo™ U7500 processor with 1.06GHz, 2MB L2 cache and 533MHz FSB. |
| conga-X945/L7400 | 055874 | Intel 945GME and Intel® Core2Duo™ L7400 processor with 1.5GHz, 2MB L2 cache and 667MHz FSB. |
| conga-X915+X945/HSP-B | 062579 | Heatspreader, Standoff with 2.7mm bore hole |
| conga-X915+X945/HSP-T | 011278 | Heatspreader, Standoff with M2.5mm thread |
| conga-X915+X945/CSP-B | 024873 | Standard passive cooling solution, black surface with 10mm fins, bore hole standoffs |
| conga-X915+X945/CSP-T | 073258 | Standard passive cooling solution, black surface with 10mm fins, thread standoffs |
| conga-X915+X945/CSA-B | 088741 | Standard active cooling solution, black surface with 10mm fins, integrated 12V fan 5500rpm, cable length 200mm, w/3 pin, 2.54 pitch connector, bore hole standoffs |
| conga-X915+X945/CSA-T | 036198 | Standard active cooling solution, black surface with 10mm fins, integrated 12V fan 5500rpm, cable length 200mm, w/3 pin, 2.54 pitch connector, thread standoffs |
| DDR2-SODIMM-667 ETX/XTX (512MB) | 057845 | DDR2 SODIMM memory module with 667MT/s and 512MB RAM |
| DDR2-SODIMM-667 ETX/XTX (1GB) | 087413 | DDR2 SODIMM memory module with 667MT/s and 1GB RAM |
| DDR2-SODIMM-667 ETX/XTX (2GB) | 068713 | DDR2 SODIMM memory module with 667MT/s and 2GB RAM |

Engineering Tools / Accessories for XTX*

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| conga-Xeval | 019482 | Evaluation carrier board for XTX-modules |
| conga-XXIT | 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 flat panels with a graphics resolution up to 1280x1024 pixel |