

COM Express Compact Module

Low Power Consumption

conga-CA

Best Performance / Watt COM Express™ Module

Compact size for easy integration

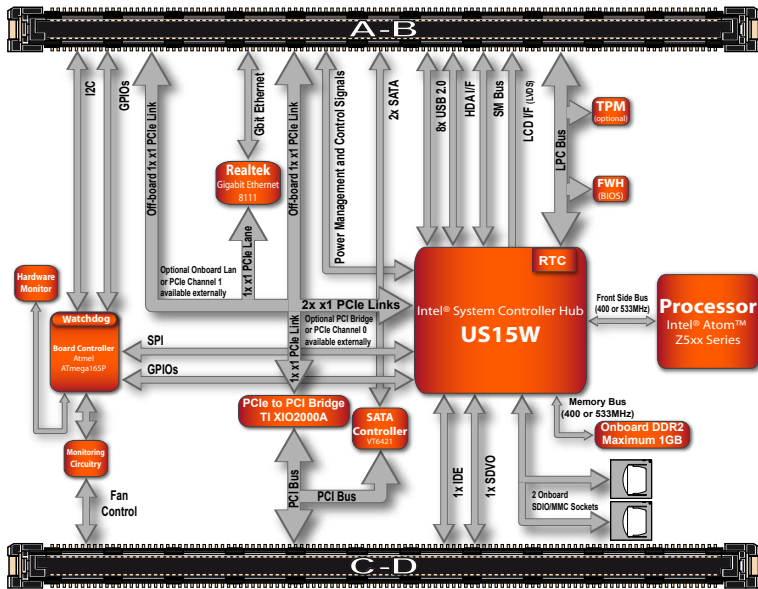
Extremely low power consumption, Flat Panel detection ...



| | |
|----------------------------------|---|
| Formfactor | COM Express™ Compact, (95 x 95 mm), Type II Connector Layout |
| CPU | Intel® Atom™ processor Z530 1.6 GHz, 533 MHz FSB and memory bus speed, 512k cache, 45 nm, with Hyper-Threading Technology and Intel® Virtualization Technology Intel® Atom™ processor Z510 1.1 GHz, 400 MHz FSB and memory bus speed, 512k cache, 45 nm |
| DRAM | Up to 1 GByte on-board DDR2 400/533 MHz |
| Chipset | Intel® System Controller Hub US15W |
| Ethernet | Gigabit Ethernet Realtek RTL8111 |
| I/O Interfaces | 2x SATA, 1x EIDE (UDMA-66/100), PCI bus Rev. 2.3, LPC bus, 8x USB 2.0, I²C bus, up to 2 PCI Express links optional |
| Sound | Intel® High Definition Audio (Intel® HD Audio) |
| Graphics | Intel® Graphics Media Accelerator 500 (Intel® GMA 500), up to 256 MByte frame buffer supporting Direct X 9.0E and Open GL 2.0 |
| Video Decode Acceleration | Full hardware acceleration for MPEG2, MPEG4, H.264, WMV9 and VC1 |
| Motion Video Support | Single channel 112 MHz LVDS transmitter, support for flat panels (1920x1080) with 1x18 and 1x24 bit data mapping up to resolutions of 1366x768 pixel Single channel SDVO interface, supports resolutions up to 1280x1024 pixel Dual independent display support |
| 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® |
| Power Management | ACPI 3.0 with battery support |
| Operating Systems | Microsoft® Windows 7, Microsoft® Windows XP, Microsoft® Windows CE 6.0, Microsoft® Windows® Embedded Compact 7, Microsoft® Windows® embedded Standard, Linux |
| Power Consumption | Typ. application 5 Watt |
| Temperature | Operating: 0 to +60°C Storage: -20 to +80°C, extended temperature versions in preparation |
| Humidity | Operating: 10 to 90% r. H. non cond. Storage: 5 to 95% r. H. non cond. |
| Size | 95 x 95 mm (3¾" x 3¾") |

Block Diagram conga-CA

Order Information conga-CA



| Article | PN | CPU-Z510 | CPU-Z530 | 512MB onboard | 1.0 GB onboard | SATA | GB Ethernet | PCIe | PCI | Onboard SDIO MMC Sockets |
|-------------------|--------|----------|----------|---------------|----------------|------|-------------|------|-----|--------------------------|
| conga-CA/Z510-512 | 087477 | ✓ | | ✓ | | ✓ | ✓ | | ✓ | ✓ |
| conga-CA/Z510-1G | 044412 | ✓ | | | ✓ | ✓ | ✓ | | ✓ | ✓ |
| conga-CA/Z530-1G | 061125 | | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ |

| Article | PN | Description |
|----------------|--------|---|
| conga-CA/HSP-B | 055441 | Heatspreader, Standoff with 2.7mm bore hole |
| conga-CA/HSP-T | 061788 | Heatspreader, Standoff with M2.5mm thread |

| Engineering Tools / Accessories for COM Express* | | |
|--|----------|---|
| conga-CEVAL | 065749 | Evaluation carrier board for COM-Express-modules |
| conga-Cdebug | 047854 | COM-Express debugging platform. Including cable for COM, PS/2 and VGA. |
| conga-CKIT | 064714 | COM-Express-Starterkit, incl. conga-CEVAL, conga-CDEBUG, conga-FPA1 (PN: 024241), Dual DVI-D ADD2 card, Power supply, USB-Stick, ... Without COM Express-module |
| conga-MCB/COM Express | 020715 | Mini Carrier Board for COM Express with smart battery manager interface for mobile applications. |
| conga-MCB/COM Express Cable Kit | 14000040 | Complete cable kit for the COM Express mini carrier board |
| conga-LDVI/EPI | 011115 | LVDS to DVI converter board for digital flat panels with onboard EEPROM |
| conga-HDMI/Display Port adapter | 500014 | The conga-HDMI/DisplayPort adapter is used to convert the chipset graphic ports Port-B, Port-C and Port-D to the HDMI or DisplayPort Interface |
| DVI-D ADD2 Card | 058500 | ADD2 display adapter card with single DVI-D digital output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard, x16 PCI Express Graphics (PEG) port. |
| Dual DVI-D ADD2 Card | 013226 | ADD2 display adapter card with dual independent DVI-D output. Suitable for all Intel based platforms that support Serial Digital Display Outputs (SDVO) on the standard, x16 PCI Express Graphics (PEG) port. |
| conga-FPA2 | 047250 | Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set. |
| COM-Express-carrierboard-socket-5 | 400007 | Connector for COM-Express carrier boards, height 5mm, packing unit 4 pieces |
| COM-Express-carrierboard-socket-8 | 400004 | Connector for COM-Express carrier boards, height 8mm, packing unit 4 pieces |