

COM Express® Compact Type 6 Module

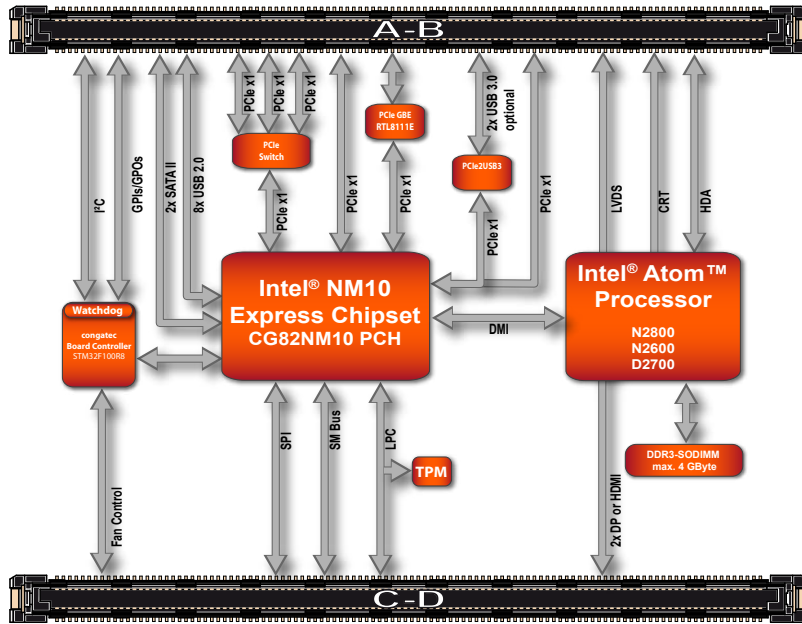
conga-TCA



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| Formfactor | Formfactor COM Express™ Compact, (95 x 95 mm), Type 6 Connector Layout |
| CPU | Intel® Atom™ D2700, 2 cores, 4 threads, 2.13GHz, 1MB L2 Cache, TDP 10W Intel® Atom™ N2800, 2 cores, 4 threads, 1.86GHz, 1MB L2 Cache, TDP 6.5W Intel® Atom™ N2600, 2 cores, 4 threads, 1.6GHz, 1MB L2 Cache, TDP 3.5W |
| DRAM | SO-DIMM DDR3 up to 1066MT/s and 4 GByte |
| Chipset | Intel® NM10 Express Chipset CG82NM10 PCH, TDP 2.1W |
| Ethernet | GBE Realtek 8111E |
| I/O Interfaces | up to 5x PCIe, 2x Serial ATA II with 3 Gb/s 8x USB 2.0, 2x USB 3.0 (optional, uses 1x PCIe lane), LPC bus, I²C bus (fast mode, 400 kHz, multi-master) |
| Sound | Digital High Definition Audio Interface with support for multiple audio codecs |
| Graphics | Integrated Graphics, supporting DirectX 9, Pixel Shader v3.0 and OGL 3.0 Two independent display pipes Support full MPEG2 (VLD/IDCT/MC), WMV, Fast video Composing, HW decode/acceleration for MPEG4 (AVC/H.264) & VC-1; 720p60, 1080i60, 1080p@24 up to 20 Mps Video Image enhancements |
| LVDS | 1x24 Bit LVDS (D2700) max. Resolution 1440x900 1x18 Bit LVDS (N2000 Series) max. Resolution 1366x768 Automatic Panel Detection via EDID/EPI |
| Digital Display Interface (DDI) | 2x DisplayPort 1.1 / TMDS (DVI, HDMI 1.3a) |
| CRT Interface | 350 MHz RAMDAC, resolutions up to 1920x1200 |
| 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 | AMI Aptio® UEFI 2.x firmware, 4 MByte serial SPI firmware flash |
| Security | Trusted Platform Module (TPM) optional. Hash and RSA algorithms, key lengths up to 2,048 bits, real random number generator |
| Power Management | ACPI 3.0 with battery support |
| Operating Systems | Microsoft® Windows7, Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Embedded POS Ready (WEPOS), Linux 3.0 |
| Power Consumption | Typ. application: tbd., see manual for full details, CMOS Battery Backup |
| Temperature: | Operating: 0 .. +60°C Storage: -20 .. +80°C |
| Humidity Operating: | Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond. |
| Size | 95 x 95 mm (3.74" x 3.74") |

Block Diagram

Order Information



| Article | PN | Description |
|----------------------|--------|---|
| conga-TCA/D2700 | 047003 | COM Express Type 6 Compact modul with Intel® Atom™ D2700 Dual Core Processor with 2.13GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface. |
| conga-TCA/D2700 USB3 | 047004 | COM Express Type 6 Compact modul with Intel® Atom™ D2700 Dual Core Processor with 2.13GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface. PCIe to 2x USB 3.0 Controller onboard |
| conga-TCA/N2600 | 047001 | COM Express Type 6 Compact modul with Intel® Atom™ N2600 Dual Core Processor with 1.6GHz, 1MB L2 cache and 800MT/s DDR3 memory interface. |
| conga-TCA/N2800 | 047002 | COM Express Type 6 Basic modul with Intel® Atom™ N2800 Dual Core Processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface. |
| DDR3-SODIMM (1GB) | 068750 | DDR3-SODIMM memory module with 1 GB RAM |
| DDR3-SODIMM (2GB) | 068760 | DDR3-SODIMM memory module with 2 GB RAM |
| DDR3-SODIMM (4GB) | 068765 | DDR3-SODIMM memory module with 4 GB RAM |

Engineering Tools / Accessories for COM Express®

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|------------------------------------|--------|---|
| conga-TEVAL | 065800 | Evaluation carrier board for Type 6 COM-Express-modules |
| conga-SBM²C-module | 014141 | SMART Battery Manager Module for COM Express |
| conga-SBM²C-kit | 029874 | Starterkit to evaluate SBM-Features for COM Express with SMART-Battery Manager Module and cable set |
| conga-SBM²C Licence and Design Kit | 025478 | SMART Battery Manager Module Design Kit for COM including licence agreement for customer integration, Hardware design files (Schematics, Bill of Material), Battery Manager Firmware (incl. commented source code), AVR-Programming Tool AT90 JTAG ICE MKII |
| conga-LDVI/EPI | 011115 | LVDS to DVI converter board for digital flat panels with onboard EEPROM |
| 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 |