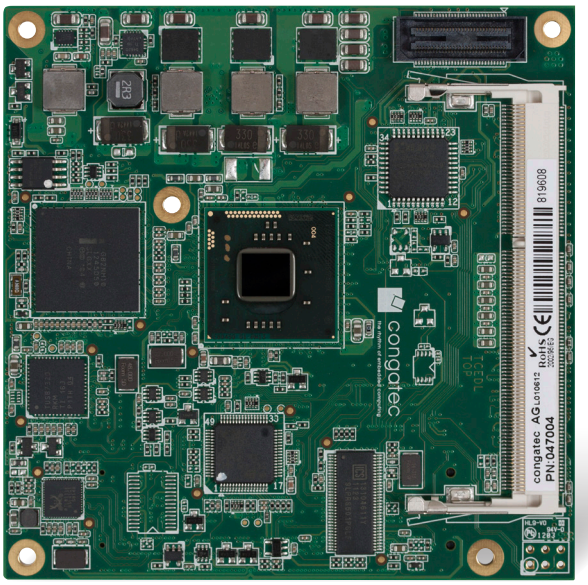
COM EXPRESS® COMPACT TYPE 6 MODULE

conga-TCA

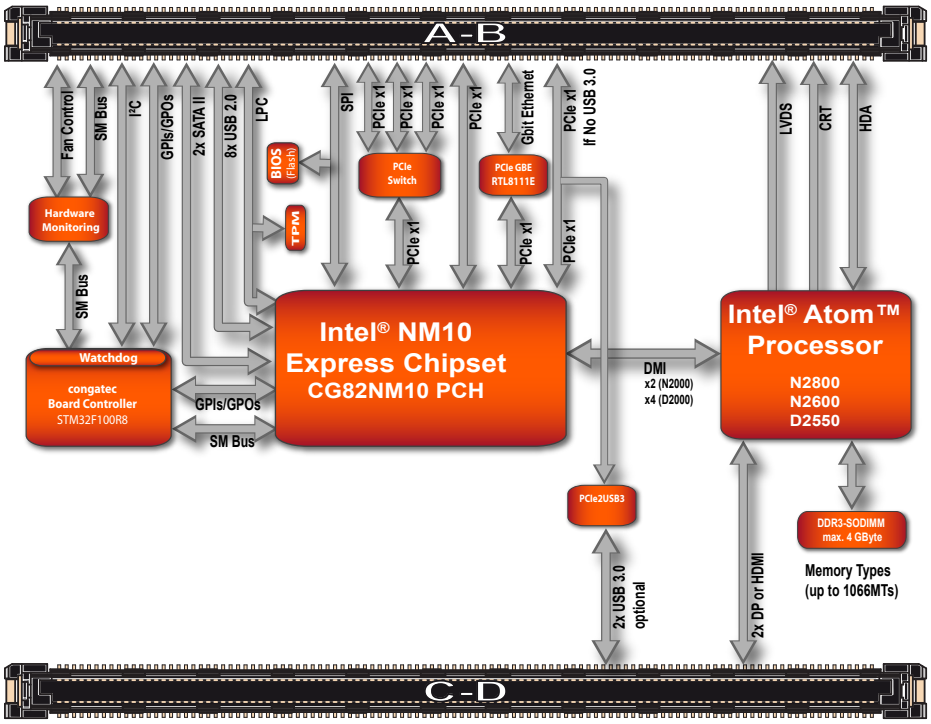


- COM Express Type 6 Entry-Level-Module
- Intel® Atom™ Dual Core Generation on 32nm
- Only 3.5 Watt TDP on Intel® Atom™ Processor N2600
- HD video performance 2D/3D
- Up to 4 GB DDR3 memory

COM Express®

Formfactor	Formfactor COM Express™ Compact | (95 x 95 mm) | Type 6 Connector Layout
CPU	Intel® Atom™ Processors Intel® Atom™ D2550 1.86 GHz Dual Core 4 threads L2 Cache 1MB 10W TDP Intel® Atom™ N2800 1.86 GHz Dual Core 4 threads L2 Cache 1MB 6.5W TDP Intel® Atom™ N2600 1.6 GHz Single Core 4 threads L2 Cache 1MB 3.5W TDP
DRAM	1 Socket 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 Grapics | 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 (D2550) 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® Windows 8 | Microsoft® Windows 7 | Linux | Microsoft® Windows® embedded Standard
Power Consumption	Typ. application: tbd. | 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 (3.74" x 3.74")

conga-TCA | Block diagram



conga-TCA | Order Information

Article	PN	Description
TCA/N2600	47001	COM Express Type 6 Compact module with Intel® Atom™ N2600 dual core processor with 1.6GHz, 1MB L2 cache and 800 MT/s DDR3 memory interface.
TCA/N2800	47002	COM Express Type 6 Compact module with Intel® Atom™ N2800 dual core processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface.
TCA/D2550	47003	COM Express Type 6 Compact module with Intel® Atom™ D2550 dual core processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface.
TCA/D2550 xHCI	47004	COM Express Type 6 Compact module with Intel® Atom™ D2550 dual core processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface. PCI Express to dual port USB 3.0 onboard controller.
TCA/HSP-T	47032	Standard heatspreader for COM Express modules conga-TCA and CCA. All standoffs are M2.5 thread.
TCA/HSP-B	47033	Standard heatspreader for COM Express modules conga-TCA and CCA. All standoffs are 2.7mm bore hole.
TCA/CSP-T-LF	47030	Standard passive cooling solution for COM Express modules conga-TCA and CCA with 3mm fins. All standoffs are M2.5mm thread.
TCA/CSP-B-LF	47031	Standard passive cooling solution for COM Express modules conga-TCA and CCA with 3mm fins. All standoffs are with 2.7mm bore hole.
TCA/CSP-T-HF	47034	Standard passive cooling solution for COM Express module conga-TCA and CCA with 10mm fins. All standoffs are M2.5mm thread.
TCA/CSP-B-HF	47035	Standard passive cooling solution for COM Express module conga-TCA and CCA with 10mm fins. All standoffs are 2.7mm bore hole.
DDR3-SODIMM-1066 (1GB)	68750	DDR3 SODIMM memory module with 1066MT/s and 1GB RAM.
DDR3-SODIMM-1066 (2GB)	68760	DDR3 SODIMM memory module with 1066MT/s and 2GB RAM.
DDR3-SODIMM-1066 (4GB)	68765	DDR3 SODIMM memory module with 1066MT/s and 4GB RAM.

Accessories		
conga-TEVAL	065800	Evaluation carrier board for Type 6 COM-Express-modules
conga-LDVI/EPI	011115	LVDS to DVI converter board for digital flat panels with onboard EEPROM
COM-Express-carrier-board-Socket-5	400007	Connector for COM-Express carrier boards | height 5mm | packing unit 4 pieces
COM-Express-carrier-board-Socket-8	400004	Connector for COM-Express carrier boards | height 8mm | packing unit 4 pieces

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