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COM Express® Compact Type 2 Module

conga-CCA

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 2 Connector Layout**
CPU	Intel® Atom™ D2550, 2 cores, 4 threads, 1.86GHz, 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	1 Socket SO-DIMM DDR3 up to 1066MT/s and 4 GByte
Chipset	Intel® NM10 Express Chipset NM10 PCH, TDP 2.1W
Ethernet	GBE Realtek 8111E
I/O Interfaces	up to 4x PCIe, 2x Serial ATA II with 3 Gb/s 8x USB 2.0, PCI bus, 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® 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")

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Block Diagram

Order Information

Article	PN	Description
conga-CCA/D2550	047103	COM Express Type 2 Compact module with Intel® Atom™ D2550 Dual Core processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface.
conga-CCA/N2600	047101	COM Express Type 2 Compact module with Intel® Atom™ N2600 Dual Core processor with 1.6GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface.
conga-CCA/N2800	047102	COM Express Type 2 Compact module with Intel® Atom™ N2800 Dual Core processor with 1.86GHz, 1MB L2 cache and 1066MT/s DDR3 memory interface.
conga-TCA/HSP-T	047032	Standard heatspreader for COM Express modules conga-TCA and CCA. All standoffs are M2.5 thread.
conga-TCA/HSP-B	047033	Standard heatspreader for COM Express modules conga-TCA and CCA. All standoffs are 2.7mm bore hole.
conga-TCA/CSP-T	047030	Standard passive cooling solution for COM Express modules conga-TCA and CCA with 3mm fins. All standoffs are M2.5mm thread.
conga-TCA/CSP-B	047031	Standard passive cooling solution for COM Express modules conga-TCA and CCA with 3mm fins. All standoffs are with 2.7mm bore hole.
DDR3-SODIMM-1333 (1GB)	068751	DDR3-SODIMM memory module with 1 GB RAM
DDR3-SODIMM-1333 (2GB)	068761	DDR3-SODIMM memory module with 2 GB RAM
DDR3-SODIMM-1333 (4GB)	068764	DDR3-SODIMM memory module with 4 GB RAM

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 fo convert the chipset graphic ports Port-B, Port-C and Port-D to the HDMI or DisplayPort Interface
conga-FPA2	047250	Flatpanel prototype adapter to develop your own flatpanel adapter Including cables set.

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