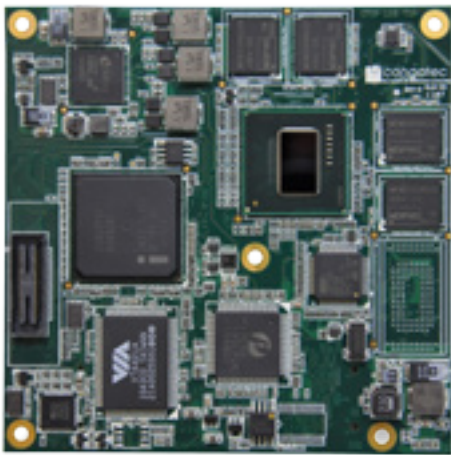# conga-CA6

Industrial Temperature
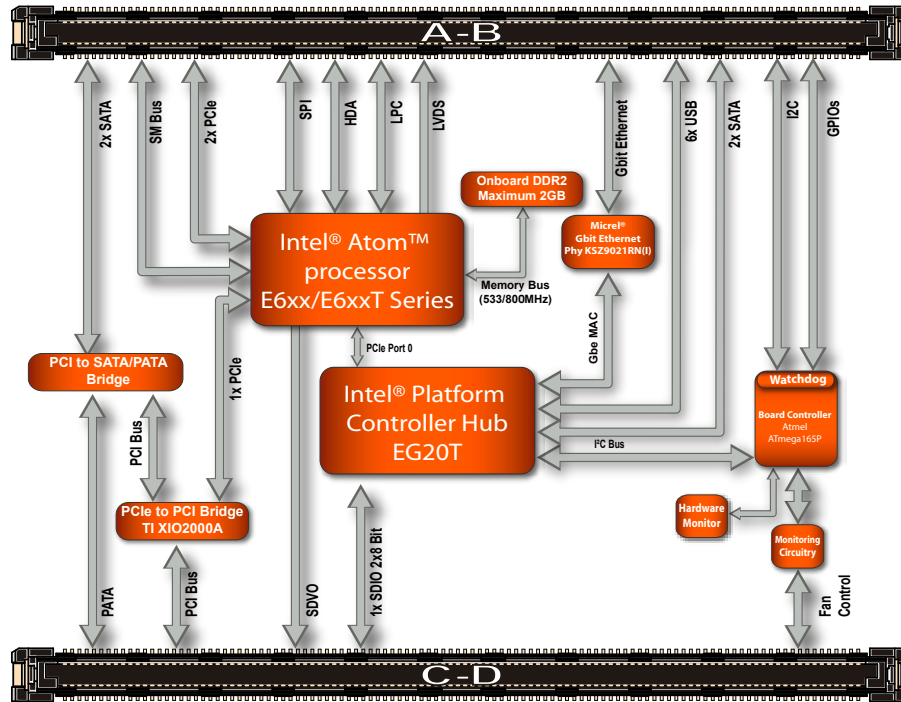

- Extended Temperature Range -40° .. +85°C
- Intel® 3D Graphics

COM✦Express®

Formfactor	COM Express™ Compact | (95 x 95 mm) | Type II Connector Layout
CPU	Intel® Atom™ processor E600 series with 1.6 Ghz | 1.3 GHz | 1.0 GHz and 600 MHz

Intel® Atom™ E680T / E680	1.6 GHz	45 nm process	512kb cache	TDP 3.9 W
Intel® Atom™ E640T / E640	1.0 GHz	45 nm process	512kb cache	TDP 3.6 W
Intel® Atom™ E620T / E620	600 MHz	45 nm process	512kb cache	TDP 2.7 W

DRAM	Up to 2 GByte onboard DDR2 memory with 667/800 MT/s
Chipset	Intel® Platform Controller Hub EG20T
Ethernet	Micrel® Gbit Ethernet Phy KSZ9021RN
I/O Interfaces	2x PCI Express™ x1 lanes | 4x Serial ATA® (AHCI only) | 1x SDIO | 6x USB 2.0 | PCI Bus (Rev. 2.3 compliant , 33 MHz) | 1x EIDE (optional)
Mass Storage	Onboard SATA Solid State Drive up to 32 GByte (optional)
Sound	High Definition Audio Interface
Graphics	Intel® Graphics Core with 2D and 3D hardware Accelerator and dual independet display support.
Video Decode Acceleration	Full hardware acceleration for MPEG2 | MPEG4 | H.264 | WMV9 and VC1
Motion Video Support	Single channel 80MHz LVDS transmitter | support for flat panels with 1x18 and 1x24 bit data mapping up to a resolution of 1280x768@60Hz. Single channel 160MHz SDVO interface | supports resolutions up to 1920x1080@60Hz and 1280x1024@85Hz. Dual independent display support
congatec Board Controller	Multi Stage Watchdog | non-volatile User Data Storage | Manufacturing and Board information | Board Statistics 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 AMI Aptio UEFI
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
Temperature	Operating: 0 .. +60°C (opt. -40 to +85°C) | Storage: -20 .. +80°C (opt. -40 to +85°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")

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conga-CA6 | Block diagram

conga-CA6 | Order Information

Article	PN	Description
conga-CA6/E640-1G	061201	Intel® Atom™ E640 processor with 1.0GHz	512kB L2 cache and 1GB DDR2 onboard memory. Based on Intel® Platform Controller Hub EG20
conga-CA6/E680-1G	061203	Intel® Atom™ E680 processor with 1.6GHz	512kB L2 cache and 1GB DDR2 onboard memory. Based on Intel® Platform Controller Hub EG20
conga-CA6/E640T-1G	061211	Intel® Atom™ E640T processor with 1.0GHz	512kB L2 cache and 1GB DDR2 onboard memory. Based on Intel® Platform Controller Hub EG20T	Industrial grade temperature range from -40°C to 85°C
conga-CA6/E680T-1G	061213	Intel® Atom™ E680T processor with 1.6GHz	512kB L2 cache and 1GB DDR2 onboard memory. Based on Intel® Platform Controller Hub EG20T	Industrial grade temperature range from -40°C to 85°C
conga-CA6/HSP-B	061220	Standard heatspreader for COM Express Compact module conga-CA6. The four corner standoffs are with 2.7mm bore hole The center standoff is with 2.5mm metric thread
conga-CA6/HSP-T	061221	Standard heatspreader for COM Express Compact module conga-CA6	All standoffs are M2.5mm thread

Accessories		
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-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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