

# COM Express Basic Module

## Economy Class

### conga-B915

Economy priced COM Express™ modules

Performance up to 1.5 GHz

Intel® Celeron® M

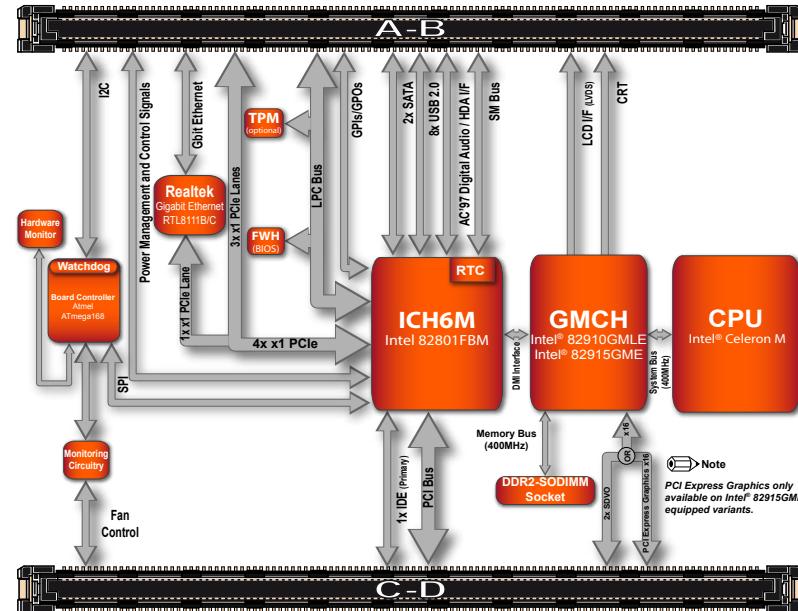
ACPI Battery Support,  
Flat Panel detection ...

**COM**   
**Express**®



Formfactor	COM Express™ Basic, (95 x 125 mm), Type II Connector Layout
CPU	Intel® Celeron® M 370 1.5 GHz, 1 MB cache, FSB 400 MHz Intel® Celeron® M 373 1.0 GHz, ULV, 512 KB cache, FSB 400 MHz Intel® Celeron® M 600 MHz, ULV, 512 KB cache, FSB 400 MHz
DRAM	SO-DIMM DDR2 DDR400/PC4200 up to 2 GByte
Chipset	Graphics & Memory Controller Hub: Intel® 910GMLE I/O Controller Hub: Intel® 82801FBM (ICH6-M)
Ethernet	Gigabit Ethernet, Realtek RTL8111
I/O Interfaces	3x PCI Express™ Lanes, PCI Express Graphic (PEG x16), 2x Serial ATA® (AHCI), 1x EIDE (UDMA-66/100), 2x Express Card® (uses 2x USB & 2x PCI Express), 8x USB 2.0 (EHCI), PCI Bus 33 MHz Rev. 2.3, LPC Bus, I²C (Fast Mode, 400 kHz, Multi Master)
Sound	AC'97 Rev.2.2 Compatible, Digital High Definition Audio Interface with support for multiple audio codecs
Graphics	Enhanced 256 Bit 3D Video Controller, Intel® Graphics Media Accelerator 900, 533 MHz Memory Clock, max. 128 MByte 64 Bit Video RAM (DVMT 3.0) Two independent pipelines for full dual view support
Motion Video Support	Motion Compensation, Subpicture Support, Dynamic Bob & Weave, HDTV (1920x1080) Support
Flat panel Interface	Dual 112 MHz LVDS Transmitter, Supports all 1x18, 2x18, 1x24, 2x24 Bit, VESA- and openLDI-Mappings, Resolutions 640x480 up to 1920x1200, Automatic Panel Detection via EPI, (Embedded Panel Interface, based on VESA EDID™ 1.3)
CRT Interface	400 MHz RAMDAC, Resolutions up to 2048x1536 @ 75 Hz, (QXGA), including 1920x1080 @ >85 Hz (HDTV)
AUX Output	2x SDVO
congatec Board Controller	Multi Stage Watchdog, Non-volatile User Data Storage, Manufacturing and Board information, Board Statistics, BIOS Setup Data Backup, I²C (Fast Mode, 400 kHz, Multi Master), Power Loss Control
Embedded BIOS Features	OEM Logo, OEM CMOS Defaults, LCD Control, (Auto Detection, Backlight Control), Flash Update, Based on AMIBIOS8®
Security	The conga-B915 can be optionally equipped with a discrete "Trusted Platform Module" (TPM). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e-commerce will benefit also with improved authentication, integrity and confidence levels.
Power Management	ACPI 2.0 with Battery support
Operating Systems	Microsoft® Windows XP, Microsoft® Windows® embedded Standard, Microsoft® Windows CE 6.0, Microsoft® Windows Embedded Compact 7, Linux
Power Consumption	Typ. application: 6.5 W @ 12V, (Intel® Celeron® M 1 GHz), 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 125 mm (3.74" x 4.92")

# Block Diagram conga-B915



# Order Information conga-B915

Article	PN	Description
conga-B915/CM600-512 eco	057741	Intel 910GMLE chipset and Intel Celeron M with 600MHz, 512 kB L2-Cache and 400 Mhz FSB
conga-B915/373 eco	077587	COM Express module with Intel 910GMLE chipset and Intel Celeron M 373, ULV-CPU with 1.0 GHz, 512kB L2-Cache and 400 Mhz FSB
conga-B915/370 eco	025540	COM Express module with Intel 910GMLE chipset and Intel Celeron M with 1.5GHz, 1 MByte L2-Cache and 400 Mhz FSB
conga-B915/HSP-B	024175	Heatspreader, Standoff with 2.7mm bore hole
conga-B915/HSP-T	058741	Heatspreader, Standoff with M2.5mm thread
conga-B915/CSA-B	054123	Standard active cooling solution, surface black with 10mm fins, integrated 12V fan 5500rpm, cable length 200mm, w/3 pin, 2.54 pitch connector, bore hole standoffs
conga-B915/CSA-T	069877	Standard active cooling solution, surface black with 10mm fins, integrated 12V fan 5500rpm, cable length 200mm, w/3 pin, 2.54 pitch connector, thread standoffs
conga-B915/CSP-B	087415	Standard passive cooling solution, surface black with 10mm fins, bore hole standoffs
conga-B915/CSP-T	068741	Standard passive cooling solution, surface black with 10mm fins, thread standoffs
DDR2-SODIMM-667 (512MB)	057841	DDR2 SODIMM memory module with 667MT/s and 512MB RAM.
DDR2-SODIMM-667 (1GB)	087412	DDR2 SODIMM memory module with 667MT/s and 1GB RAM.
DDR2-SODIMM-667 (2GB)	068712	DDR2 SODIMM memory module with 667MT/s and 2GB 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-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

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