

conga-MA3

COM Express® Mini Type 10 module

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COM Express Mini Type 10

3rd Generation Intel® Atom™

Low Processor Power from 5 to 10 Watt TDP

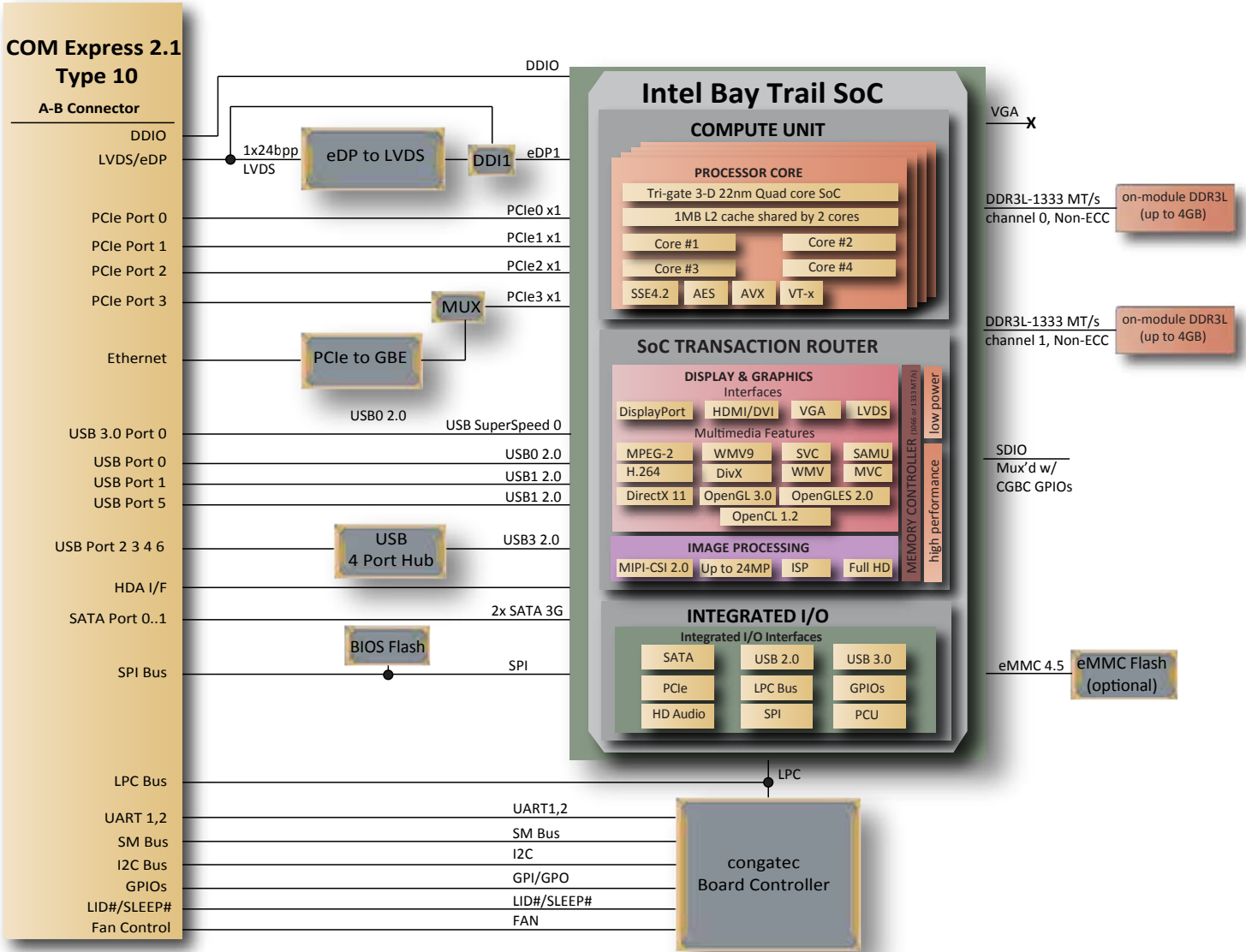
Intel® HD Graphics Generation 7

Industrial Temperature Range



Formfactor	Formfactor COM Express™ Mini, (55 x 84 mm), Type 10
CPU	Intel® Atom™ E3845 quad core processor, 1.91GHz, 2MB L2 cache and 10W TDP Intel® Atom™ E3827 dual core processor, 1.75GHz, 1MB L2 cache and 8W TDP Intel® Atom™ E3826 dual core processor, 1.46GHz, 1MB L2 cache and 7W TDP Intel® Atom™ E3825 dual core processor, 1.33GHz, 1MB L2 cache and 6W TDP Intel® Atom™ E3815 single core processor, 1.46GHz, 512kB L2 cache and 5W TDP Intel® Celeron™ N2930 quad core processor, 1.86GHz, 2MB L2 cache
DRAM	Onboard DDR3L memory support for up to 8 GByte with 1333MT/s
Chipset	Integrated in SoC
Onboard storage	eMMC 4.51 interface, up to 64GB of MLC NAND or up to 4GB of SLC NAND
Ethernet	Intel I210 Gigabit Ethernet
I/O Interfaces	Up to 4x PCIe x1 lanes with 5 Gb/s PCI Express 2.0, 2x SATA 2.0 3Gb/s ports, 7x USB 2.0, 1x USB 3.0, LPC, SPI, I²C bus (fast mode 400 kHz, multi-master), SDIO
Sound	Digital High Definition Audio Interface
Graphics	Intel® HD Graphics Gen 7, Full hardware acceleration for MPEG2, H.264, DirectX11, OCL 1.2, OGL 3.2, WMV9 and VC1
LVDS	Single channel LVDS transmitter, support for flat panels with 1x18 bit/1x24 bit data mapping up to a resolution of 1920x1200@60Hz.
Digital Display Interface (DDI)	Displayport 1.1 up to 2560x1600 or HDMI 1.4a / DVI 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	OEM Logo, OEM CMOS Defaults, LCD Control, Display Auto Detection, Backlight Control, Flash Update, based on AMI Aptio UEFI
Power Management	ACPI 5.0 with battery support
Operating Systems	Microsoft® Windows® 8, Microsoft® Windows® 7, Linux, Microsoft® Windows® Embedded Standard, Microsoft® Windows® 7 Embedded Compact
Power Consumption	Typ. application: see user's guide for full details
Temperature:	Commercial : Operating: 0 to +60°C Storage: -20 to +80°C Industrial : Operating: -40 to +85°C Storage: -45 to +85°C
Humidity Operating:	Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond.
Size	55 x 84 mm (2.17" x 3.31")

conga-MA3 - Block diagram



conga-MA3 - Order Information

Article	PN	Description
conga-MA3/E3845-4G eMMC8	047400	COM Express module with Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L onboard memory and 8GB eMMC onboard flash.
conga-MA3/E3827-2G eMMC4	047401	COM Express module with Intel® Atom™ E3827 dual core processor with 1.75GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-MA3/E3826-2G eMMC4	047402	COM Express module with Intel® Atom™ E3826 dual core processor with 1.46GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-MA3/E3815-2G	047404	COM Express module with Intel® Atom™ E3815 single core processor with 1.46GHz, 512kB L2 cache and 2GB 1333MT/s DDR3L onboard memory.
conga-MA3/N2930-2G	047406	COM Express module with Intel® Celeron N2930 quad core processor with 1.86 GHz, 2MB L2 cache and 2GB 1333MT/s DDR3L onboard memory.
conga-MA3/i-E3845-4G eMMC8	047410	Industrial temperature COM Express module with Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 4GB 1333MT/s DDR3L onboard memory and 8GB eMMC onboard flash.
conga-MA3/i-E3827-2G eMMC4	047411	Industrial temperature COM Express module with Intel® Atom™ E3827 dual core processor with 1.75GHz, 1MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-MA3/i-E3845-2G eMMC4	047413	Industrial temperature COM Express module with Intel® Atom™ E3845 quad core processor with 1.91GHz, 2MB L2 cache, 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash.
conga-MA3/i-E3815-2G	047414	Industrial temperature COM Express module with Intel® Atom™ E3815 single core processor with 1.46GHz, 512kB L2 cache and 2GB 1333MT/s DDR3L onboard memory.

Engineering Tools / Accessories for COM Express®		
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

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