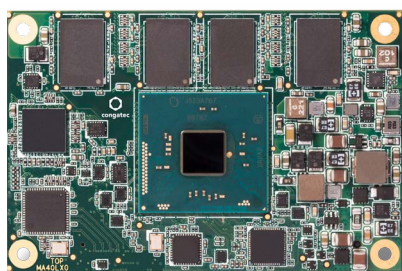


POWERFUL AND SMALL

conga-MA4

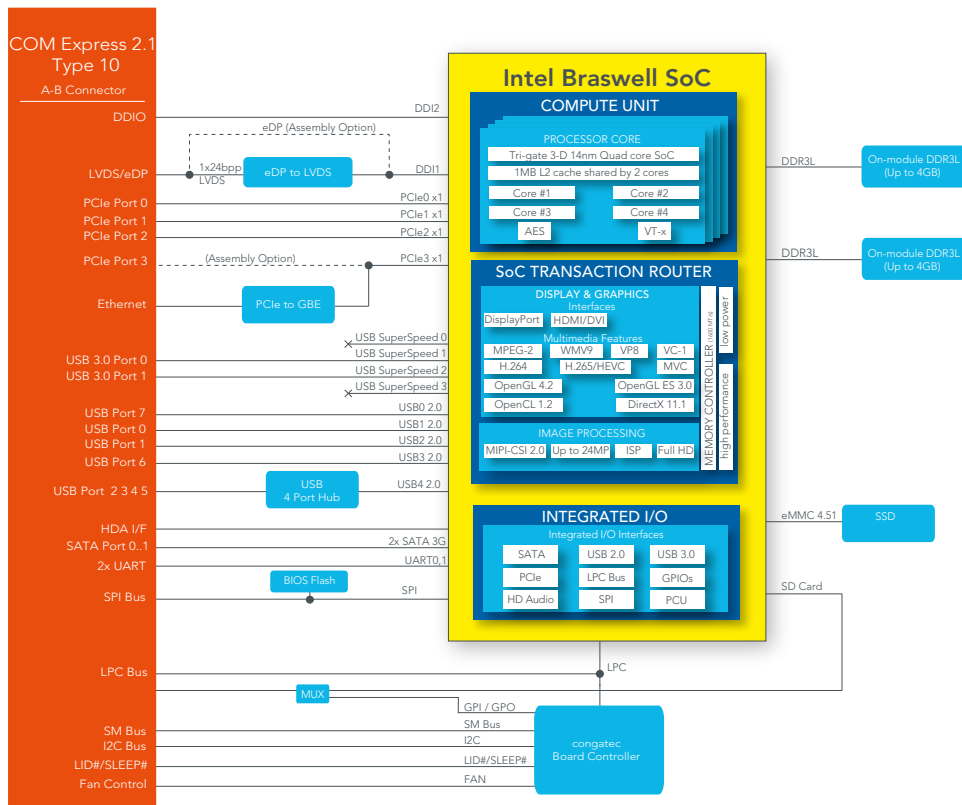


- 4th Gen. Intel® Atom™ processor family
- COM Express Mini Type 10 module
- High resolution Intel® Gen. 8 graphics



Formfactor	Formfactor COM Express® Mini (55 x 84 mm) Type 10					
CPU	Intel® Pentium® N3700	Quad Core 1.60 GHz	Burst 2.4 GHz	L2 cache 2MB	6W TDP	4W SDP
	Intel® Celeron® N3150	Quad Core 1.60 GHz	Burst 2.08 GHz	L2 cache 2MB	6W TDP	4W SDP
	Intel® Celeron® N3050	Dual Core 1.60 GHz	Burst 2.16 GHz	L2 cache 1MB	6W TDP	4W SDP
	Intel® Celeron® N3000	Dual Core 1.04 GHz	Burst 2.08 GHz	L2 cache 1MB	4W TDP	3W SDP
DRAM	Onboard DDR3L memory support for up to 4 GByte at 1600MT/s					
Chipset	Integrated in SoC					
Onboard storage	eMMC 4.51 interface up to 32GB					
Ethernet	Intel I211 Gigabit Ethernet					
I/O Interfaces	3x PCIe x1 lanes with 5 Gb/s PCI Express 2.0 2x SATA 3.0 8x USB 2.0 2x USB 3.0 LPC SPI I ² C bus (fast mode 400 kHz, multi-master) SDIO multiplexed with GPIO 2x UART SM Bus					
Sound	Digital High Definition Audio Interface					
Graphics	Intel® HD Graphics Gen 8 Full hardware acceleration for MPEG2 H.264 DirectX11.1 Direct X12 for Windows 10 OCL 1.2 OGL 4.2 WMV9 VC-1					
LVDS	Single channel LVDS transmitter support for flat panels with 1x18 bit/1x24 bit data mapping up to a resolution of 1400x1050@60Hz.					
Digital Display Interface	2x DisplayPort 1.1a or HDMI 1.4b / DVI up to up to 2560x1600@60Hz/3840x2160@30Hz; eDP 1.4 up to 2560x1440@60Hz					
congatec Board Controller	Multi Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics BIOS Setup Data Backup I ² C 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® 10 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					
Humidity	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-MA4 | Block diagram



conga-MA4 | Order Information

Article	PN	Description
conga-MA4/N3700-4G eMMC16	047900	Intel® Pentium® N3700 quad core processor with 1.6 GHz 2 MB L2 cache 4 GB 1600MT/s DDR3L onboard memory 16 GB eMMC onboard flash
conga-MA4/N3150-2G eMMC16	047901	Intel® Celeron® N3150 quad core processor with 1.6 GHz 2 MB L2 cache 2 GB 1600MT/s DDR3L onboard memory 16 GB eMMC onboard flash
conga-MA4/N3050-2G eMMC16	047902	Intel® Celeron® N3050 dual core processor with 1.6 GHz 1 MB L2 cache 2 GB 1600MT/s DDR3L onboard memory 16 GB eMMC onboard flash
conga-MA4/N3000-2G eMMC16	047903	Intel® Celeron® N3000 dual core processor with 1.04 GHz 1 MB L2 cache 2 GB 1600MT/s DDR3L onboard memory 16 GB eMMC onboard flash
conga-MA3/HSP-T	047450	Standard heatspreader for COM Express Type 10 module conga-MA3, conga-MA3E and conga-MA4. All standoffs are M2.5 thread.
conga-MA3/HSP-B	047451	Standard heatspreader for COM Express Type 10 module conga-MA3, conga-MA3E and conga-MA4. All standoffs are 2.7 mm bore hole.
conga-MA3/CSP-T	047452	Standard passive cooling solution for COM Express Type 10 module conga-MA3, conga-MA3E and conga-MA4 with fins. All standoffs are M2.5 thread.
conga-MA3/CSP-B	047453	Standard passive cooling solution for COM Express Type 10 module conga-MA3, conga-MA3E and conga-MA4 with fins. All standoffs are 2.7 mm bore hole.

Accessories

conga-MEVAL	065400	Evaluation carrier board for Type 10 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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