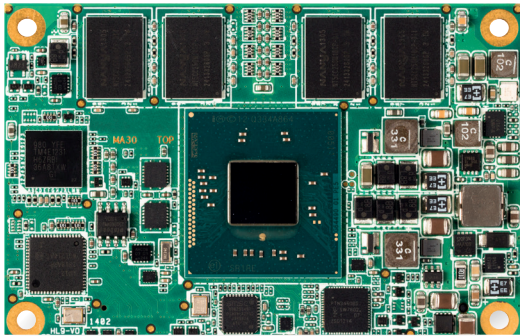


POWERFUL AND SMALL

conga-MA3

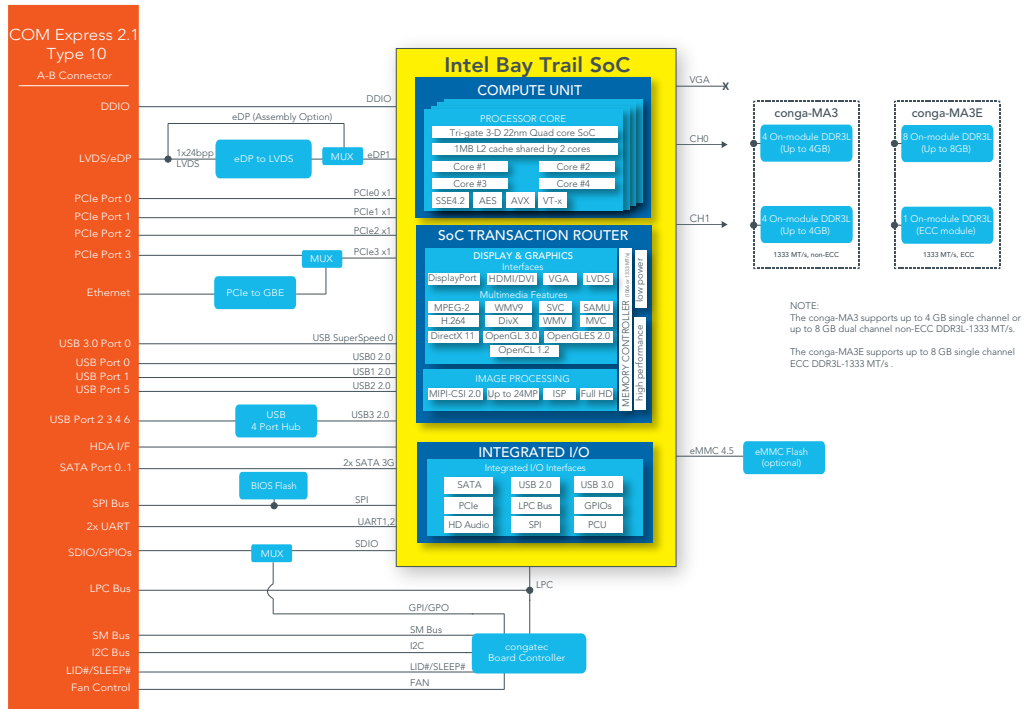


- 3rd Gen. Intel® Atom™ | Intel® Celeron® processor family
- COM Express Mini Type 10 module
- High resolution Intel® Gen. 7 graphics
- Temperature range up to -40°C .. +85°C

COM  **Express®**

| | | | | |
|---------------------------|---|---------------------|----------------|----------|
| Formfactor | Formfactor COM Express® Mini (55 x 84 mm) Type 10 | | | |
| CPU | Intel® Atom™ E3845 | 1.91GHz Quad Core | L2 cache 2MB | 10W TDP |
| | Intel® Atom™ E3827 | 1.75GHz Dual Core | L2 cache 1MB | 8W TDP |
| | Intel® Atom™ E3826 | 1.46GHz Dual Core | L2 cache 1MB | 7W TDP |
| | Intel® Atom™ E3815 | 1.46GHz Single Core | L2 cache 512kB | 5W TDP |
| | Intel® Celeron® N2807 | 1.58GHz Single Core | L2 cache 1MB | 4.3W TDP |
| | Intel® Celeron® N2930 | 1.86GHz Quad Core | L2 cache 2MB | 7.5W TDP |
| 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 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 I ² C 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 | 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 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 10 IoT Enterprise Microsoft® Windows 10 IoT Core Microsoft® Windows® 8 Microsoft® Windows® 7 Linux Microsoft® Windows® Embedded Standard Microsoft® Windows® 7 Embedded Compact Android Yokto MoonIsland / WindRiver IDP | | | |
| 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: 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 | Intel® Atom™ E3845 quad core processor with 1.91GHz 2MB L2 cache 4GB 1333MT/s DDR3L onboard memory and 8GB eMMC onboard flash. |
| conga-v MA3/E3827-2G eMMC4 | 047401 | 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 | Intel® Atom™ E3826 dual core processor with 1.46GHz 1MB L2 cache 2GB 1066MT/s DDR3L onboard memory and 4GB eMMC onboard flash. |
| conga-MA3/E3815-2G | 047404 | Intel® Atom™ E3815 single core processor with 1.46GHz 512kB L2 cache 2GB 1066MT/s DDR3L onboard memory. |
| conga-MA3/N2930-2G | 047406 | Intel® Celeron® N2930 quad core processor with 1.83GHz up to 2.16GHz 2MB L2 cache and 2GB 1333MT/s DDR3L onboard memory. Low power consumption with 7.5W TDP |
| conga-MA3/N2807-2G | 047407 | Intel® Celeron® N2807 single core processor with 1.58GHz up to 2.16GHz 1MB L2 cache and 2GB 1333MT/s DDR3L onboard memory. Low power consumption with 4.3W TDP |
| conga-MA3/i-E3845-4G eMMC8 | 047410 | Intel® Atom™ E3845 quad core processor with 1.91GHz 2MB L2 cache 4GB 1333MT/s DDR3L onboard memory and 8GB eMMC onboard flash. Industrial grade temperature range from -40°C to 85°C. |
| conga-MA3/i-E3827-2G eMMC4 | 047411 | Intel® Atom™ E3827 dual core processor with 1.75GHz 1MB L2 cache 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash. Industrial grade temperature range from -40°C to 85°C |
| conga-MA3/i-E3845-2G eMMC4 | 047413 | Intel® Atom™ E3845 quad core processor with 1.91GHz 2MB L2 cache 2GB 1333MT/s DDR3L onboard memory and 4GB eMMC onboard flash. Industrial grade temperature range from -40°C to 85°C. |
| conga-MA3/i-E3815-2G | 047414 | Intel® Atom™ E3815 single core processor with 1.46GHz 512kB L2 cache 2GB 1066MT/s DDR3L onboard memory. Industrial grade temperature range from -40°C to 85°C. |
| conga-MA30/HSP-T | 047450 | Standard heatspreader for COM Express Type 10 module conga-MA3. All standoffs are M2.5 thread. |
| conga-MA30/HSP-B | 047451 | Standard heatspreader for COM Express Type 10 module conga-MA3. All standoffs are 2.7mm bore hole. |
| conga-MA30/CSP-T | 047452 | Standard passive cooling solution for COM Express Type 10 module conga-MA3 with fins. All standoffs are M2.5mm thread. |
| conga-MA30/CSP-B | 047453 | Standard passive cooling solution for COM Express Type 10 module conga-MA3 with fins. All standoffs are 2.7mm 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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