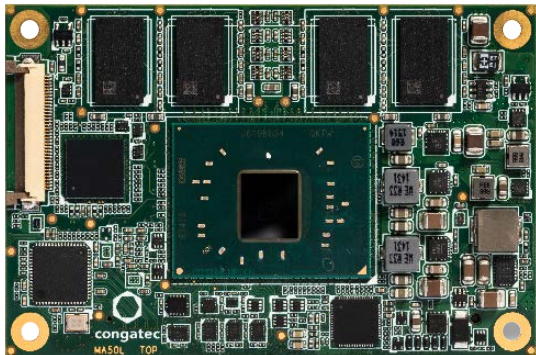


POWERFUL AND SMALL

conga-MA5



- 5th Gen. Intel® Atom™ processor family
- COM Express Mini Type 10 module
- Intel 9th generation (Gen 9) LP graphics
- Up to 4k resolution (4096x2160@60Hz)
- 4K Codec Decode & Encode for HEVC, H.264, VP8



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|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------|--------------|----------|--|
| Formfactor | Formfactor COM Express® Mini (55 x 84 mm) Type 10 | | | | | |
| CPU | Intel® Pentium® N4200 | 2.50 GHz (Burst) 1.1 GHz Clock | Quad Core | L2 cache 2MB | 6W TDP | |
| | Intel® Celeron® N3350 | 2.40 GHz (Burst) 1.1 GHz Clock | Dual Core | L2 cache 2MB | 6W TDP | |
| | Intel® Atom™ x7-E3950 | 2.00 GHz (Burst) 1.6 GHz Clock | Quad Core | L2 cache 2MB | 12W TDP | |
| | Intel® Atom™ x5-E3940 | 1.80 GHz (Burst) 1.6 GHz Clock | Quad Core | L2 cache 2MB | 9.5W TDP | |
| | Intel® Atom™ x5-E3930 | 1.80 GHz (Burst) 1.3 GHz Clock | Dual Core | L2 cache 2MB | 6.5W TDP | |
| DRAM | Dual channel onboard DDR3L memory support for up to 8 GByte at 1866MT/s | | | | | |
| Chipset | Integrated in SoC | | | | | |
| Ethernet | Intel® I210 (Industrial) / I211 (Commercial) Gigabit Ethernet Controller | | | | | |
| I/O Interfaces | 4x PCIe Gen2 2x USB 3.0/2.0 6x USB 2.0 2x SATA3 SDIO LPC Bus SMBus I2C Bus 2x UART | | | | | |
| Onboard storage | eMMC 5.0 interface up to 128GB | | | | | |
| Sound | Intel® High Definition Audio (Intel® HD Audio) | | | | | |
| Graphics | Intel® HD Graphics 500 with support for 4k Ultra HD displays DirectX 12 OpenGL 4.4 OpenCL 2.0 OpenGL ES 3.0 HDCP 1.4 (wired), HDCP 2.0 (wireless) Video decode hardware acceleration including support for 4kp60 HEVC (H.265), H.264, MVC, VP8, VP9, VC-1, WMV9, JPEG/MJPEG Video encode hardware acceleration including support for 4kp30 HEVC (H.265), H.264, MVC, VP8, JPEG/MJPEG. | | | | | |
| LVDS | 18/24-bit Single Channel LVDS Interface, resolutions up to 1280x1024@60Hz VESA standard or JEIDA data mapping Automatic Panel Detection via EDID/EPI shared with eDP 1.3 supporting up to 3840x2160@60 Hz (option) | | | | | |
| Digital Display Interface | DisplayPort 1.2 up to 4096x2160@60Hz or DDI up to 3840x2160@60Hz | | | | | |
| congatec Board Controller | Multistage watchdog non-volatile user data storage manufacturing and board Information board statistics I ² C bus (fast mode) 400 kHz multi master power loss control | | | | | |
| Embedded BIOS Features | AMI Aptio® UEFI 2.x firmware 8 MByte serial SPI with congatec Embedded BIOS features OEM Logo OEM CMOS Defaults LCD Control Display Auto Detection Backlight Control Flash Update | | | | | |
| TPM | Infineon's Trusted Platform Module (TPM 2.0/1.2) SLB 9665/9660 option | | | | | |
| Power Management | ACPI 5.0 compliant Smart Battery Management | | | | | |
| Operating Systems | Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows 10 IoT Core Linux Yocto Android | | | | | |
| Power Consumption | Typ. application 6W...12W | | | | | |
| Temperature | Commercial : | Operating: 0 to +60°C | Storage: -20 to +70°C | | | |
| | Industrial: | Operating: -40 to +85°C | Storage: -40 to +85°C | | | |
| Humidity | Operating: | 10 to 90% r. H. non cond. | | | | |
| | Storage: | 5 to 95% r. H. non cond. | | | | |
| Size | 55 x 84 mm (2.17" x 3.31") | | | | | |

conga-MA5 | Block diagram

