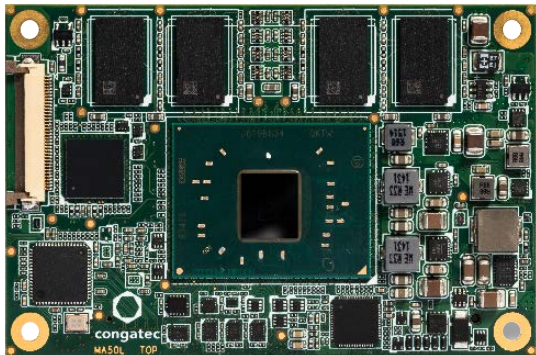


POWERFUL AND SMALL

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

COM  **Express®**

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

