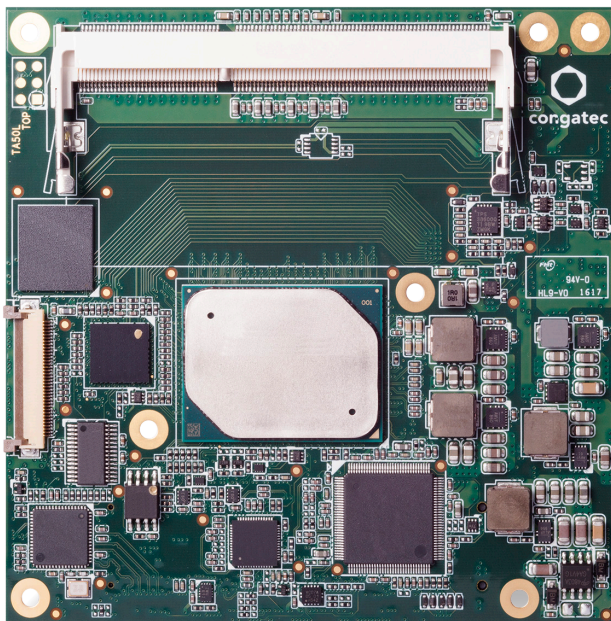


LOW POWER CONSUMPTION

conga-TCA5



- Intel® Pentium® Quad Core on COM Express
- Enhanced Security Execution
- Up to 3 independent Ultra HD displays

COM  **Express®**

Formfactor	Formfactor COM Express® Compact (95 x 95 mm) Type 6 Connector Layout					
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	2 SO-DIMM sockets for DDR3L memory modules up to 8 GByte with 1867 MT/s Dual channel memory interface for increased graphics performance					
Chipset	Integrated in SoC					
Ethernet	Intel i210 (Industrial) /i211 (Commercial) Gigabit Ethernet Controller					
I/O Interfaces	5x PCIe x1 4x USB 3.0 (XHCI) 8x USB 2.0 (EHCI) 2x SATA III LPC SPI I ² C bus (fast mode 400 kHz multi-master) SDIO 2x UART (RX/TX)s opt. 2x MIPI-CSI					
Mass Storage	opt. eMMC 5.0 onboard flash up to 64 GByte					
Sound	Digital High Definition Audio Interface					
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	Dual channel LVDS transmitter support for flat panels with 2x24 bit data mapping up to a resolution of 1920x1200@60Hz.					
Digital Display Interface (DDI)	Up to 2x DDI (max. 3840x2160 @ 30Hz) 1x eDP 1.3 (optional)					
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					
Security	Trusted Platform Module (TPM) optional. Hash and RSA algorithms key lengths up to 2048 bits real random number generator					
Power Management	ACPI 5.0 with battery support					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Microsoft® Windows 10 IoT Core Linux Yocto					
Power Consumption	see user's guide for full details CMOS Battery Backup					
Temperature	Commercial :	Operating: 0 to +60°C	Storage: -20 to +80°C			
	Industrial:	Operating: -40 to +85°C	Storage: -20 to +80°C			
Humidity	Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond.					
Size	95 x 95 mm (3.74" x 3.74")					

conga-TCA5 | Block diagram

