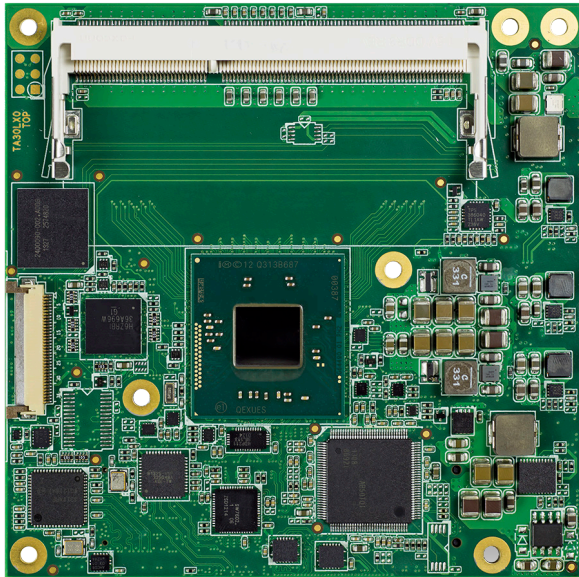


# LOW POWER CONSUMPTION

## conga-TCA3



- 3<sup>rd</sup> Gen. Intel® Atom™ processor up to Quad Core
- COM Express Compact Type 6 module
- Temperature range up to -40°C .. +85°C

**COM**  **Express®**

Formfactor	Formfactor COM Express® Compact   (95 x 95 mm)   Type 6 Connector Layout			
CPU	Intel® Atom™ E3845	1.91 GHz Quad Core	L2 Cache 2MB	10W TDP
	Intel® Atom™ E3827	1.75 GHz Dual Core	L2 Cache 1MB	8W TDP
	Intel® Atom™ E3826	1.46 GHz Dual Core	L2 Cache 1MB	7W TDP
	Intel® Atom™ E3825	1.33 GHz Dual Core	L2 Cache 1MB	6W TDP
	Intel® Atom™ E3815	1.46 GHz Single Core	L2 Cache 512kB	5W TDP
	Intel® Celeron® J1900	2.0 GHz Quad Core	L2 Cache 2MB	10W TDP
	Intel® Celeron® N2930	1.83 GHz Quad Core	L2 Cache 2MB	7.5W TDP
	Intel® Celeron® N2807	1.58 GHz Dual Core	L2 Cache 1MB	4.3W TDP
DRAM	2 SO-DIMM sockets for DDR3L memory modules up to 8 GByte with 1333MT/s   Dual channel memory interface for increased graphics performance.			
Chipset	Integrated in SoC			
Ethernet	Intel I210 Gigabit Ethernet			
I/O Interfaces	Up to 5x PCIe x1   8x USB 2.0   1x USB 3.0   2x SATA   LPC   SPI   I <sup>2</sup> 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 1.1   OGL 3.2   WMV9 and VC1			
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. 2560x1600)			
CRT Interface	320 MHz RAMDAC   resolutions up to 2560x1600			
congatec Board Controller	Multi Stage Watchdog   non-volatile User Data Storage   Manufacturing and Board Information   Board Statistics   BIOS Setup Data Backup   I <sup>2</sup> 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   Microsoft® Windows 8   Microsoft® Windows 7   Microsoft® Windows Embedded Standard   Microsoft® Windows 7 Embedded Compact   Android   Yocto   MoonIsland / WindRiver IDP			
Power Consumption	Typ. application: 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: -45 to +85°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-TCA3 | Block Diagram

