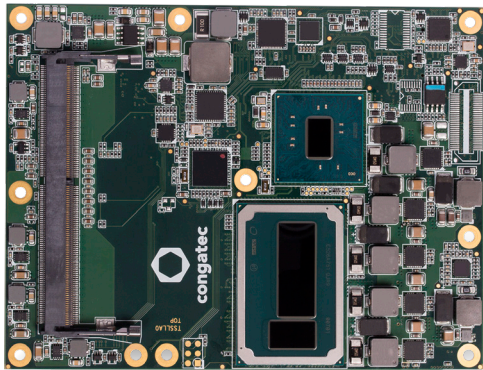


SERVER-CLASS EMBEDDED PERFORMANCE

conga-TS170



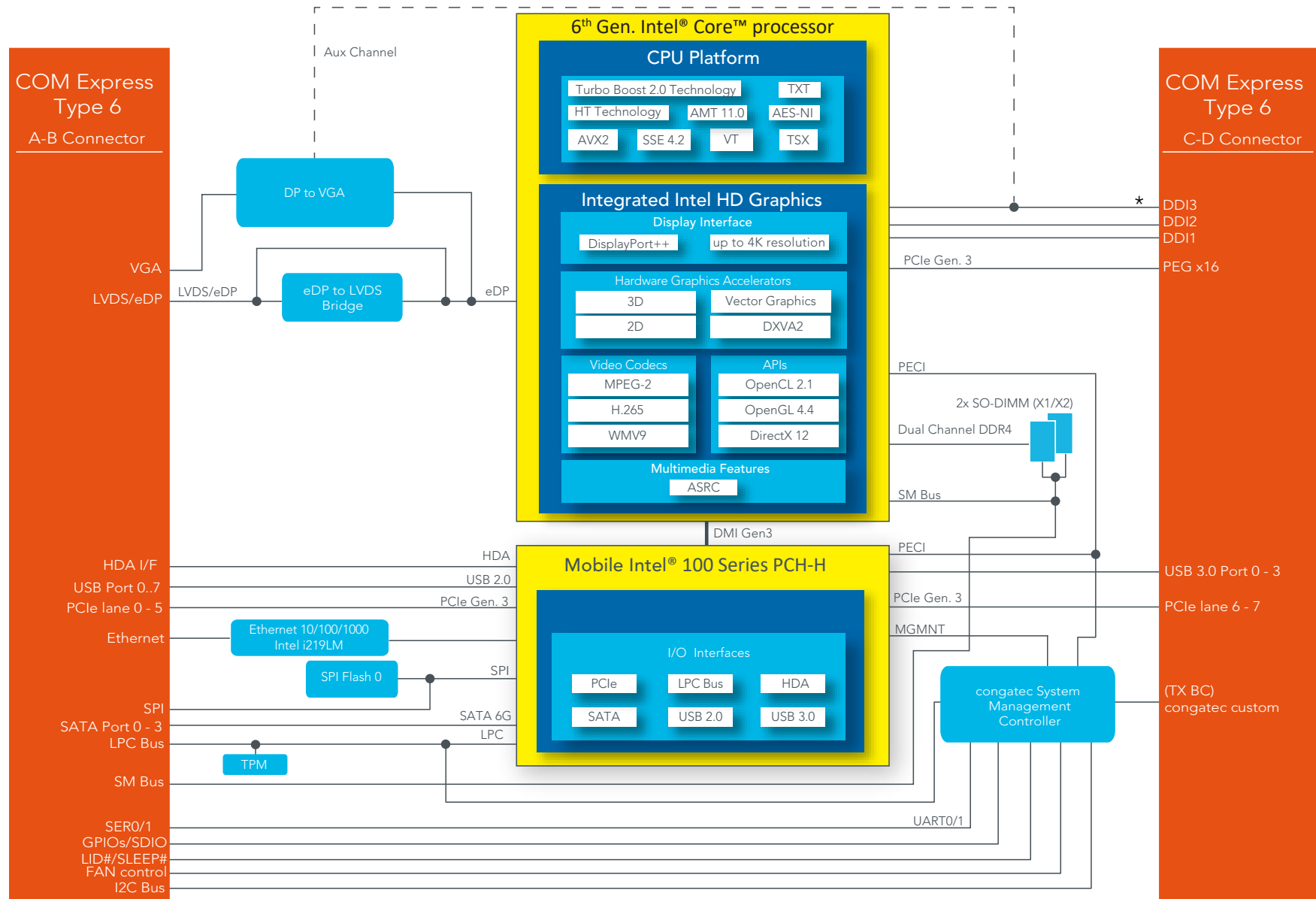
- 6th Generation Intel® Core™ processor
- Intel® Gen9 HD Graphics with HEVC (H.265) support up to Intel® Iris™ Pro Graphics P580
- ECC memory support
- Up to 32 GByte dual channel DDR4 memory
- Intel® Xeon® processors for data center applications



Formfactor	COM Express® Basic, (95 x 125 mm), Type 6 Connector Pinout					
CPU	Intel® Xeon® E3-1578LV5	Quad Core	2.0 / 3.4 GHz	8 MB Cache	45W TDP, 35W cTDP	Iris™ Pro P580 Graphics 0.35-1.0 GHz
	Intel® Xeon® E3-1558LV5	Quad Core	1.9 / 3.3 GHz	8 MB Cache	45W TDP, 35W cTDP	Iris™ Pro P555 Graphics 0.35-1.0 GHz
	Intel® Xeon® E3-1515MV5	Quad Core	2.8 / 3.7 GHz	8 MB Cache	45W TDP, 35W cTDP	Iris™ Pro P580 Graphics 0.35-1.0 GHz
	Intel® Xeon® E3-1505MV5	Quad Core	2.8 / 3.7 GHz	8 MB Cache	45W TDP, 35W cTDP	HD P530 Graphics 0.35-1.05 GHz
	Intel® Xeon® E3-1505LV5	Quad Core	2.0 / 2.8 GHz	8 MB Cache	25W TDP	HD P530 Graphics 0.35-1.0 GHz
	Intel® Core™ i7-6820EQ	Quad Core	2.8 / 3.5 GHz	8 MB Cache	45W TDP	HD 530 Graphics 0.35-1.0 GHz
	Intel® Core™ i7-6822EQ	Quad Core	2.0 / 2.8 GHz	8 MB Cache	25W TDP	HD 530 Graphics 0.35-1.0 GHz
	Intel® Core™ i5-6440EQ	Quad Core	2.7 / 3.7 GHz	6 MB Cache	45W TDP	HD 530 Graphics 0.35-1.0 GHz
	Intel® Core™ i5-6442EQ	Quad Core	1.9 / 2.7 GHz	6 MB Cache	25W TDP	HD 530 Graphics 0.35-1.0 GHz
	Intel® Core™ i3-6100E	Dual Core	2.7 GHz	3 MB Cache	35W TDP	HD 530 Graphics 0.35-0.95 GHz
	Intel® Core™ i3-6102E	Dual Core	1.9 GHz	3 MB Cache	25W TDP	HD 530 Graphics 0.35-0.95 GHz
	Intel® Celeron® G3900E	Dual Core	2.4 GHz	2 MB Cache	35W TDP	HD 530 Graphics 0.542-0.792 GHz
	Intel® Celeron® G3902E	Dual Core	1.6 GHz	2 MB Cache	25W TDP	HD 510 Graphics 0.35-0.95 GHz
	Intel® Turbo Boost Technology Intel® Hyper-Threading Technology (Intel® HT Technology) Intel® Advanced Vector Extensions 2.0 (Intel® AVX2) Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI) Integrated dual channel memory controller up to 34,1 GByte/sec. memory bandwidth Integrated Intel® Gen9 HD Graphics with frequency up to 1GHz Intel® Clear Video HD Technology Intel® Virtualization Technology (Intel® VT) Intel® Trusted Execution Technology (Intel® TXT) Intel® Secure Key					
DRAM	2 Sockets, SO-DIMM DDR4 up to 2133 MT/s and 32GByte dual channel, Intel® Xeon® and Intel® Core® i3 with ECC support					
Chipset	Mobile Intel® 100 Series Chipset					
Ethernet	Intel® i219-LM GbE LAN Controller with AMT 11 support					
I/O Interfaces	8x PCI Express™ gen. 3.0 lanes 4x Serial ATA® Gen 3 4x USB 3.0 (XHCI) 8x USB 2.0 (XHCI) 1x PEG x16 Gen 3 LPC bus (no DMA) I²C bus (fast mode, 400 kHz, multi-master) 2x UART					
Sound	Digital High Definition Audio Interface with support for multiple audio codecs					
Graphics	Intel® Gen9 HD Graphics Engine with OpenCL 2.0, OpenGL 4.3 and DirectX12 (for Windows 10) support up to three independent displays High performance hardware MPEG-2 decoding WMV9 (VC-1) and H.265 (HEVC) support Blu-ray support @ 40 MBit/s HEVC, VP8, VP9 and VDENC encoding					
LVDS (eDP optional)	Dual channel LVDS transmitter, Supports flat panels 2x24 Bit interface VESA and openLDI colour mappings resolutions up to 1920x1200 Automatic Panel Detection via EDID/EPI					
Digital Display Interface (DDI)	3x DDI (TMDS/DisplayPort 1.2) with support for Multi-Stream Transport (MST) resolutions up to 4k VGA					
congatec Board Controller	Multi Stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics BIOS Setup Data Backup I²C bus (fast mode, 400 kHz, multi-master) Power Loss Control					
Embedded BIOS Features	AMI Aptio® UEFI 2.x firmware 8/16 MByte serial SPI firmware flash					
Security	The conga-TS170 can be optionally equipped with a discrete "Trusted Platform Module" (TPM 1.2 / 2.0). It is capable of calculating efficient hash and RSA algorithms with key lengths up to 2,048 bits and includes a real random number generator. Security sensitive applications such as gaming and e-commerce will benefit also with improved authentication, integrity and confidence levels.					
Power Management	ACPI 4.0 with battery support					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows IoT Enterprise Microsoft® Windows 7 Linux Microsoft® Windows embedded Standard					
Power Consumption	See User's Guide for full details					
Temperature	Operating: 0 .. +60°C Storage: -20 .. +80°C					
Humidity	Operating: 10 - 90% r. H. non cond. Storage: 5 - 95% r. H. non cond.					
Size	95 x 125 mm (3.74" x 4.92")					



conga-TS170 | Block diagram



* See manual for restrictions.