

# EMBEDDED COM EXPRESS® TYPE 6

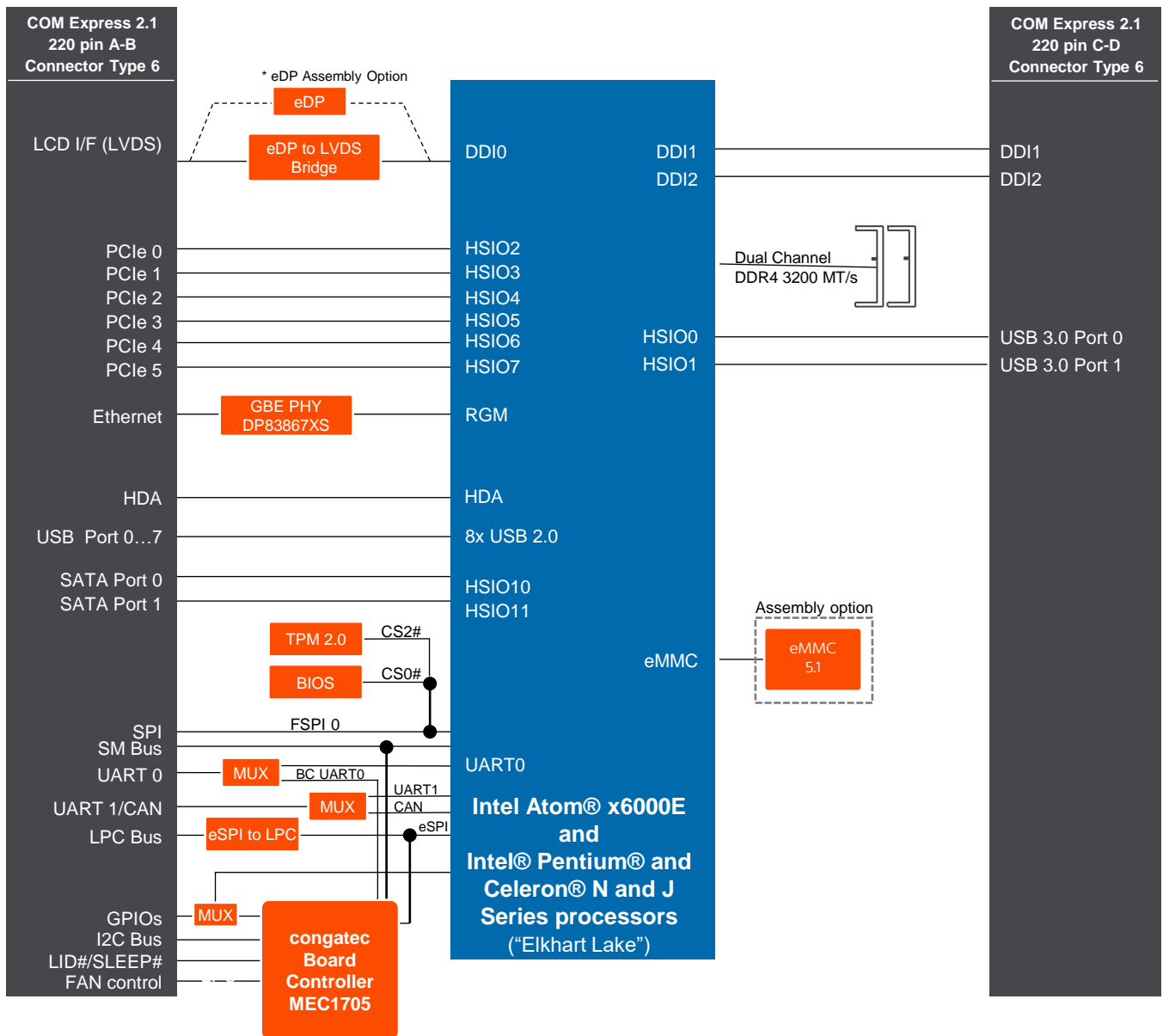
## conga-TCA7



- COM Express Type 6 Compact based on Intel® Atom® x6000E Series and Intel® Pentium® and Celeron® J and N Series processors
- High performance Intel® UHD Graphics (Gen11)
- Options for Industrial Temperature Range -40°C to 85°C
- Options for Time Sensitive Networking and Time Coordinated Computing for improved Realtime Capability
- 3.200 MT/s DDR4 SODIMM Memory Support

<b>Form Factor</b>	COM Express® Compact   Type 6   (95 x 95 mm)					
<b>CPU</b>	Processor	TDP	Cores/Threads	Base Frequ./Turbo	Gen 11 Gfx	Intel Use Condition
	J6413	10W	4 / 4	1.8 GHz / 3.0 GHz	16 EU	PC Client
	J6426	10W	4 / 4	2.0 GHz / 3.0 GHz	32 EU	PC Client
	x6211E	6W	2 / 2	1.3 GHz / 3.0 GHz	16 EU	Embedded
	x6413E	9W	4 / 4	1.5 GHz / 3.0 GHz	16 EU	Embedded
	x6425E	12W	4 / 4	2.0 GHz / 3.0 GHz	32 EU	Embedded
	x6212RE	6W	2 / 2	1.2 GHz / ---	16 EU	Industrial
	x6414RE	9W	4 / 4	1.5 GHz / ---	16 EU	Industrial
	x6425RE	12W	4 / 4	1.9 GHz / ---	32 EU	Industrial
<b>DRAM</b>	Support for 2x SO DIMM on socket (dual channel DDR4 3.200 MT/s)   max. 32 GB system capacity					
<b>Ethernet</b>	Intel® GbE with TSN support and Out-Of-Band Management   real-time trigger					
<b>I/O Interfaces</b>	Up to 6x PCIe Gen3   2x USB 3.1 Gen2   up to 8x USB 2.0   2x SATA III   2x UART (UART1 muxed with CAN)   GPIO   I <sup>2</sup> C Bus   SMBus   SPI   LPC					
<b>Mass Storage</b>	Option for onboard eMMC 5.1 flash up to 128 Gbyte					
<b>Audio</b>	Intel® HD Audio					
<b>Graphics</b>	Intel® UHD Graphics (Gen11)					
<b>LVDS</b>	Dual channel 18/24-bit LVDS interface up to 1920x1200@60Hz   shared with eDP up to 3840x2160@60Hz (option)					
<b>Digital Display Interface</b>	2x DisplayPort 1.4 4096x2160@60Hz					
<b>congatec Board controller</b>	Multistage watchdog   non-volatile user data storage   manufacturing and board Information   board statistics   fast mode and multi-master I <sup>2</sup> C bus   power loss control					
<b>Embedded BIOS Feature</b>	AMI Aptio® UEFI firmware   32 MByte serial SPI with congatec Embedded BIOS features   OEM Logo   OEM CMOS Defaults   LCD Control   Display Auto Detection   Backlight Control   Flash Update					
<b>Power Management</b>	ACPI 5.0 compliant   Smart Battery Management					
<b>Operating Systems</b>	Microsoft® Windows 10   Microsoft® Windows 10 IoT Enterprise   Linux (Yocto Project)   Android   RTS Hypervisor					
<b>Power Consumption</b>	Typ. Application: see manual for full details					
<b>Temperature Range</b>	Commercial: Operating Temperature: 0 to +60°C		Storage Temperature: -20 to +80°C			
	Industrial: Operating Temperature: -40 to +85°C		Storage Temperature: -40 to +85°C			
<b>Humidity</b>	Operating Humidity: 10 to 90% r. H. non cond. Storage Humidity: 5 to 95% r. H. non cond.					
<b>Size</b>	95 x 95 mm (approx. 3.74" x 3.74")					

# conga-TCA7 | Block Diagram



**Note:** Assembly options on request only