Important milestone for the COM-HPC integration

Utilizing COM-HPC for the design-in of 11th Gen Intel® Core™ processors provides immediate benefits for developers: PCIe Gen4 compliant connectivity, full USB 4.0 bandwidth, 2.5 GbE, SoundWire, and MIPI-CSI. Those who expect to need more or higher-performance PCIe or Ethernet interfaces with up to 25 GbE should also give preference to COM-HPC. Besides, developers who want to scale their high-performance systems up to edge and fog server performance with only one standard are given a good argument for implementing everything in COM-HPC. Finally, the prospect of being able to use modules that offer more comprehensive remote management functions is yet another reason to buy and try the new evaluation platform for the COM-HPC standard.

The feature set in detail

Designed for evaluation purposes, the ATX compliant carrier board conga-HPC/EVAL-Client for COM-HPC includes all R&D interfaces required for programming, firmware flashing and reset. The new COM-HPC carrier board also incorporates all interfaces specified by the new COM-HPC Client standard and supports the extended temperature range from -40°C to +85°C. The board supports the COM-HPC sizes A, B and C and comes with a variety of LAN data bandwidths, data transfer methods and connectors. It is offered in different flavors to provide maximum flexibility for customers, including Ethernet KR, up to 2x 10 GbE, 2.5 GbE and 1GbE support. The board further features 2 massively performant PCIe Gen4 x16 connectors for latest high-performance extension cards. Over mezzanine cards, the carrier can run even higher-performance interfaces up to 4x25 GbE making this eval platform a perfect fit for massively connected edge devices.

The cooling solution for the brand new COM-HPC modules is available in 3 different variants and fits the entire configurable 12-28W TPD range of the 11th Gen Intel® Core™ processors. The new COM-HPC modules are available in the following processor configurations:

Processor	Cores/Threads	Frequency at 28/15/12W TDP, (Max Turbo) [GHz]	Cache [MB]	Graphics Execution Units	Ext. Temperature range
Intel® Core™ i7-1185G7E	4/8	2.8/1.8/1.2 (4.4)	12	96	-
Intel® Core™ i7-1185GRE	4/8	2.8/1.8/1.2 (4.4)	12	96	yes
Intel® Core™ i5-1145G7E	4/8	2.6/1.5/1.1 (4.1)	8	80	-
Intel® Core™ i5-1145GRE	4/8	2.6/1.5/1.1 (4.1)	8	80	yes
Intel® Core™ i3-1115G4E	2/4	3.0/2.2/1.7 (3.9)	6	48	-
Intel® Core™ i3-1115GRE	2/4	3.0/2.2/1.7 (3.9)	6	48	yes
Intel® Celeron® 6305E	2/4	1.8 (n/a)	4	48	yes