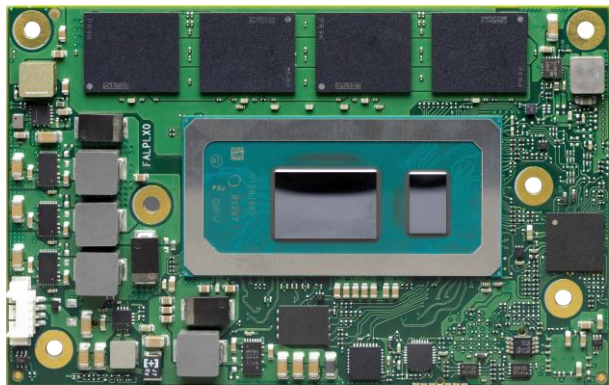


13TH GEN INTEL® CORE™ PROCESSORS

conga-HPC/mRLP



COM+HPC®

- Embedded/Industrial use condition
- Extended temperature options available
- PCI Express Gen 4
- Options with Integrated high performance Iris X^e graphics architecture with up to 96 EU
- AI/DL Instruction Sets including VNNI

Form Factor	COM-HPC Mini					
CPU	Processor	Cores/Threads	P-Cores Base Frequency/max. Turbo	Base TDP	Graphics	Intel Use Condition
	Core™ i7-1365URE	10C/12T	1.7 GHz / 4.9 GHz	15W	96EU	Industrial
	Core™ i5-1345URE	10C/12T	1.4 GHz / 4.6 GHz	15W	80EU	Industrial
	Core™ i3-1315URE	6C/8T	1.2 GHz / 4.5 GHz	15W	64EU	Industrial
	Core™ i7-1370 PRE	14C/20T	1.9 GHz / 4.8 GHz	28W	96EU	Industrial
	Core™ i5-1350 PRE	12C/16T	1.8 GHz / 4.6 GHz	28W	80EU	Industrial
	Core™ i3-1320 PRE	8C/12T	1.7 GHz / 4.5 GHz	28W	48EU	Industrial
	Processor U300E	5C/6T	1.1 GHz / 4.3 GHz	15W	48EU	Embedded
DRAM	Up to 64 GB LPDDR5x max. 6400MT/s SDRAM soldered down dual channel IB ECC on industrial SKUs					
Graphics	Integrated Iris® X ^e graphics architecture with up to 96 EUs or Intel® UHD Graphics with 48 EUs					
Display	Up to 2x DP/DP++ 1x eDP					
Ethernet	2x 2.5 GbE with TSN support via Intel® i226 Ethernet controller series					
I/O Interfaces	2x 4 PCIe Gen4 up to 8x PCIe Gen3 Up to 1x USB 4.0 up to 4x USB 3.2 Gen2x1 up to 8x USB 2.0 Up to 2x SATA III SPI 2x UART 12x GPIO 2x MIPI-CSI					
Audio	HDA or I2S (option)					
Storage	NVMe SSD with up to 1 TB capacity (option)					
congatec Board controller	Multi-stage Watchdog non-volatile User Data Storage Manufacturing and Board Information Board Statistics I ² C bus (fast mode, 400 kHz, multi-master) Power Loss Control Hardware Health Monitoring POST Code redirection					
Embedded BIOS Feature	AMI Aptio® UEFI firmware 32 Mbyte serial SPI with congatec Embedded BIOS feature OEM Logo OEM CMOS Defaults LCD Control Display Auto Detection Backlight Control Flash Update					
Security	TPM 2.0 with AES bulk encryption					
Power Management	Modern standby					
Operating Systems	Microsoft® Windows 10 Microsoft® Windows 10 IoT Enterprise Linux Yocto RTS Hypervisor					
Temperature Range	Embedded:		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	
Humidity	Operating:		10 to 90% r. H. non cond.			
	Storage		5 to 95% r. H. non cond.			
Size	95 x 70 mm ²					

conga-HPC/mRLP | Order Information

Article	PN	Description
conga-HPC/mRLP-i7-1365URE-32G NVMe128	045600	COM-HPC Mini module based on Intel® Core™ i7-1365URE processor with 2 P-cores 1.7GHz up to 4.9GHz and 8 E-cores 1.2GHz up to 3.7GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs 32GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (U-Series)
conga-HPC/mRLP-i5-1345URE-16G NVMe128	045601	COM-HPC Mini module based on Intel® Core™ i5-1345URE processor with 2 P-cores 1.4GHz up to 4.6GHz and 8 E-cores 1.1GHz up to 3.4GHz 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs 16GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (U-Series)
conga-HPC/mRLP-i3-1315URE-16G NVMe128	045602	COM-HPC Mini module based on Intel® Core™ i3-1315URE processor with 2 P-cores 1.2GHz up to 4.5GHz and 4 E-cores 0.9GHz up to 3.3GHz 10MB Intel® Smart Cache Intel® UHD Graphics with 64EUs 16GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (U-Series)
conga-HPC/mRLP-U300E-16G NVMe128	045603	COM-HPC Mini module based on Intel® processor U300E with 1 P-core 1.1GHz up to 4.3GHz and 4 E-cores 0.9GHz up to 3.2GHz 8MB Intel® Smart Cache Intel® UHD Graphics with 48 EUs 16GB onboard LPDDR5x memory 128GB onboard NVMe Intel® code name Raptor Lake-P (U-Series)
conga-HPC/mRLP-i7-1370PRE-32G NVMe128	045604	COM-HPC Mini module based on Intel® Core™ i7-1370PRE processor with 6 P-cores 1.9GHz up to 4.8GHz Turbo and 8 E-cores 1.2GHz up to 3.7GHz Turbo 24MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 96 EUs 32GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (P-Series)
conga-HPC/mRLP-i5-1350PRE-16G NVMe128	045605	COM-HPC Mini module based on Intel® Core™ i5-1350PRE processor with 4 P-cores 1.8GHz up to 4.6GHz Turbo and 8 E-cores 1.3GHz up to 3.4GHz Turbo 12MB Intel® Smart Cache Intel® Iris® Xe Graphics architecture with 80 EUs 16GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (P-Series)
conga-HPC/mRLP-i3-1320PRE-16G NVMe128	045606	COM-HPC Mini module based on Intel® Core™ i3-1320PRE processor with 4 P-cores 1.7GHz up to 4.5GHz Turbo and 4 E-cores 1.2GHz up to 3.3GHz Turbo 12MB Intel® Smart Cache Intel® UHD Graphics with 48EUs 16GB onboard LPDDR5x memory 128GB onboard NVMe Industrial grade temperature range from -40°C to +85°C Intel® code name Raptor Lake-P (P-Series)
conga-HPC/mRLP-CSA-B	049250	Standard active cooling solution for COM-HPC module conga-HPC/mRLP with 25mm overall heat sink height and integrated 12V fan. All standoffs are with 2.7mm bore hole.
conga-HPC/mRLP-CSA-T	049251	Standard active cooling solution for COM-HPC module conga-HPC/mRLP with 25mm overall heat sink height and integrated 12V fan. All standoffs are M2.5mm threaded.
conga-HPC/mRLP-CSP-B	049252	Standard passive cooling solution for COM-HPC module conga-HPC/mRLP with 24.2mm overall heat sink height. All standoffs are with 2.7mm bore hole.
conga-HPC/mRLP-CSP-T	049253	Standard passive cooling solution for COM-HPC module conga-HPC/mRLP with 24.2mm overall heat sink height. All standoffs are M2.5mm threaded.
conga-HPC/mRLP-HSP-B	049254	Standard heatspreader for COM-HPC module conga-HPC/mRLP. All standoffs are with 2.7mm bore hole.
conga-HPC/mRLP-HSP-T	049255	Standard heatspreader for COM-HPC module conga-HPC/mRLP. All standoffs are M2.5mm threaded.