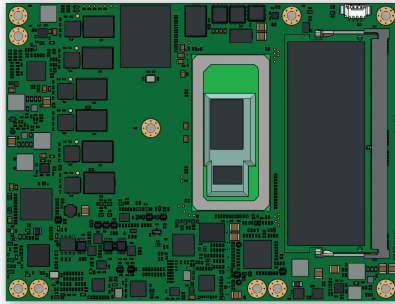




CALLISTO

COM Express® 3.1 Type 6 Basic Module with 13th Gen Intel® Processors (Raptor Lake-P)

Intensive video processing and AI-based analytics for edge devices in challenging environments



HIGHLIGHTS



CPU
13th Gen Intel® Processors targeted for IoT Applications



GRAPHICS
Embedded Intel® Iris® Xe graphics with up to 96 execution units

Available in Industrial Temperature Range



CONNECTIVITY
1x NBase-T 2.5GbE; 2x USB4.0 Gen2; 4x USB3.2 Gen 2; 8x USB 2.0; 8x PCI-e x1 Gen3; PEG x8 Gen4 and 2x PEG x4 Gen4



MEMORY
Two DDR5 SO-DIMM Slots supporting DDR5-4800 IBECC Memory, up to 64GB



MAIN FIELDS OF APPLICATION



Automation



Biomedical/
Medical
devices



Digital
Signage -
Infotainment



Edge
Computing



Gaming



HMI



Industrial
Automation
and Control



Info Kiosks



Robotics



Server - High
Performance
Computing



Surveillance



Transportation

FEATURES

Processor	13th Generation Intel® Processors (Raptor Lake-P) • Intel® Core™ i7 13800HRE, 14 Core 6P+8E, 45W TDP • Intel® Core™ i5 1250PRE, 12 Core 4P+8E, 28W TDP • Intel® Core™ i3 1315URE, 6 Core 2P+4E, 15W TDP • Intel® Core™ i7 13800HE, 14 Core 6P+8E, 45W TDP • Intel® Core™ i5 1350PE, 12 Core 4P+8E, 28W TDP • Intel® Core™ i3 1315UE, 6 Core 2P+4E, 15W TDP • Intel® Processor U300E, 5 Core 1P+4E, 15W TDP	PCI-e	Up to 8x PCI-e x1 Gen3 lanes 1x PCI-express Graphics (PEG) x8 Gen4 Up to 2x PCI-express Graphics (PEG) x4 Gen4
		Audio	HD audio and Soundwire/i2S audio interfaces
Memory	Two DDR5 SO-DIMM slots supporting DDR5-4800, IBECC modules memory, up to 64GB	Serial Ports	2x UARTs
Graphics	Integrated Gen12 UHD Graphics • Intel® Core™ i7: Iris® Xe with 96 Execution Units • Intel® Core™ i5: Iris® Xe with 80 Execution Units • Intel® Core™ i3: Iris® Xe with 64 Execution Units • Intel® Processor U300E: Iris® Xe with 48 Execution Units Improved image (IPU6EP) and video processing (AV1/GNA 3.0) Support up to 4 independent displays @ 4K	Other Interfaces	SPI, I2C, SM Bus, Thermal Management, FAN management Optional eSPI or LPC bus (factory alternatives) Optional TPM 2.0 on-board LID#/SLEEP#/PWRBTN#, Watchdog 4 x GPI, 4 x GPO
		Power Supply	+12VDC ± 10%, +5VSB (optional), +3VRTC (optional)
Video Interfaces	Up to 3x Digital Display Interfaces (DDIs), supporting DVI, DP 1.4, HDMI 2.1 1x VGA (factory option) 1x eDP 1.3 or single/dual-channel 18-/24-bit LVDS interface (factory alternatives)	Operating System	Microsoft® Windows 10 Linux Ubuntu
		Operating Temperature*	0°C to +60°C (commercial version) -40°C to +85°C (industrial version)
Video Resolution	HDMI and DP up to 8K @ 60Hz via TCSS with Hayden Bridge eDP 1.4b up to 5K @ 120Hz (HBR3 with VDS1.1) LVDS up to 1920x1200 @ 60Hz	Dimensions	125 x 95 mm (COM Express® Basic Form factor, Type 6 pinout)
Mass Storage	2x SATA Gen3 channels Up to 128 GB on-board NVMe SSD (factory alternative to one PCI-express Graphics (PEG) x4 Gen4)	*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.	
Networking	1x NBase-T Ethernet interface with Intel® I225 GbE controller, with TSN and 2.5GbE supported		
USB	Up to 2x USB 4 Gen2 host ports (depending on carrier board retimer implementation) 4x USB 3.2 Gen2 (10Gbps) host ports (depending on carrier board retimer implementation) 8x USB 2.0 host ports		

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BLOCK DIAGRAM

