COM-HPC® Client module Size A, with the 11th Gen Intel® Xeon® W-11000E Series, CHPC-D57-CSA COIN-HPC® CHERT Hodgie Size A, that the Lake-H) for FuSa application

Processing power, high performance graphics and top class connectivity in a COM-HPC® modular solution



HIGHLIGHTS

11th Gen Intel® Xeon® Core™ and Celeron® processors

2x USB 4; 2x USB 3.2 Gen 2x2; 8x USB 2.0; 20x PCI-e Gen3 lanes; 20x PCI-e Gen4 lanes; up to 2x 2.5GbE



Intel® Iris Xe Graphics Core Gen12 GPU with up to 32 EU, up to 4 independent displays



Two DDR4 SO-DIMM Slots supporting DDR4-3200 ECC Memory











(A) Available in Industrial Temperature Range







MAIN FIELDS OF APPLICATION



















Avionics & Defense

Biomedical/ Medical devices

Digital Signage -Infotainment

Edge Computing

Gaming

Industrial Automation and Control

Robotics

Smart Vision

Transportation

FEATURES

- 11th Generation Intel® Xeon®, Core™ and Celeron® Processors, also available in industrial temperature range.

 • Intel® Core™ vPRO® **i7-11850HE**, Eight Core @ 2.6GHz
- (up to 4.7GHz in Turbo Boost) with HT, 24MB Cache L3, 45/35W cTDP
- Intel® Core™ vPRO® i5-11500HE, Six Core @ 2.6GHz (up to 4.5GHz in Turbo Boost) with HT, 12MB L3 Cache, 45/35W cTDP
- Intel® Core™ **i3-11100HE**, Quad Core @ 2.4GHz (up to 4.4GHz in Turbo Boost) with HT, 8MB L3 Cache, 45/35W cTDP
- Intel® Celeron® 6600HE, Dual Core @2.6GHz, 8MB L3
- Intel® Xeon® vPRO® W-11865MRE, Eight Core @ 2.6GHz (up to 4.7GHz in Turbo Boost) with HT, 24MB L3 Cache, with ECC, TCC/TSN and Functional Safety Essential Design package, 45/35W cTDP – Industrial (w/ Turbo OFF) Intel® Xeon® vPRO® **W-11555MRE**, Six Core @ 2.6GHz
- (up to 4.5GHz in Turbo Boost) with HT, 12MB L3 Cache, with ECC, TCC/TSN and Functional Safety Essential Design package, 45/35W cTDP - Industrial (w/ Turbo OFF)
- Intel® Xeon® **W-11155MRE**, Quad Core @ 2.4GHz (up to 4.4GHz in Turbo Boost) with HT, 8MB L3 Cache, with ECC and TCC/TSN, 45/35W cTDP – Industrial (w/ Turbo OFF)
- Intel® Xeon® vPRO® W-11865MLE, Eight Core @ 1.5GHz (up to 4.5GHz in Turbo Boost) with HT, 24MB L3 Cache, with ECC and TCC/TSN, 25W TDP
- Intel® Xeon® vPRO® W-11555MLE, Six Core @ 1.9GHz (up to 4.4GHz in Turbo Boost) with HT, 24MB L3 Cache, with ECC and TCC/TSN, 25W TDP
- Intel® Xeon® W-11155MLE, Quad Core @ 1.8GHz (up to 3.1GHz in Turbo Boost) with HT, 24MB L3 Cache, with ECC and TCC/TSN, 25W TDP B Cache, 28/15/12W cTDP - Industrial (w/ Turbo OFF)



Processor

Chipset

Intel® RM590E, HM570E or QM580E PCH



Graphics

Video

2x DDR4-3200 SODIMM Slots with ECC (In-Band Error Correction Code), up to 64GB supported

Integrated Iris Xe Graphics Core Gen12 architecture, with up to 32 Execution Units and up to 2 VDbox

MPEG2, WMV9, AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP9, AV1 HW decoding, up to 8k60. AVC/H.264, HEVC/H.265, JPEG, VP9 HW encoding, up to 8k30

Support up to 4 independent displays.

1x eDP 1.4b or MIPI_DSI 1.3

Video Up to 3x DP++ interface, supporting Display Port 1.4a and Interfaces HDMI 2.0b

Up to 2x Display Port over Type-C (Alternate mode) DP. eDP: Up to 5120x3200 @60Hz 24bpp /

7680x4320@60Hz 30bpp with DSC MIPI-DSI: Up to 3200x2000 @60Hz 24bpp, 5120x3200

@60Hz 24bpp with DSC HDMI 1.4: Up to 4Kx2K 24-30Hz 24bpp Resolution

HDMI 2.0b: Up to 4Kx2K 48-60Hz 24bpp / 4Kx2K 48-60Hz 12bpc (need dedicated redriver on

carrier board)

2 x S-ATA Gen3 Channels

Mass Storage PCI-e x4 port can be used to connect, on the carrier board,

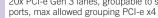
M.2 NVMe drives

Up to 2x NBase-T Ethernet interfaces, supporting 2.5Gb 品 Networking Ethernet connection, managed by as many Intel® i225 2.5GbE

Controllers with TSN 2x USB4 ports

•< USB 2x USB 3.2 Gen 2x2 ports 8 x USB 2.0 Host ports

1x PCI-e x4 Gen 4 port for NVME 16x PCI-e Gen4 lanes, can be used to support 1x PCI-e x16, 2x PCI-e x8 or (1x PCI-e x8 +2x PCI-e x4) root ports PCI-e 20x PCI-e Gen 3 lanes, groupable to support up to 12 root





CHPC-D57-CSA

COM-HPC® Client module Size A, with the 11th Gen Intel® Xeon® W-11000E Series, Core™ vPro® and Celeron® processors (formerly Tiger Lake-H) for FuSa application

FEATURES				
	Audio	SoundWire and I2S Audio Interface		
Okama jo	Serial Ports	2x legacy UARTs, managed by the Embedded Controller	os	
	Other Interfaces	2x 4-lane CSI-2 interfaces, optional SPI, eSPI, SM Bus, 2x I2C, Watchdog timer, Carrier board FAN Control Management signals, ACPI signals, Safety Status signals Deep Sleep / Battery support Optional TPM 2.0 module on-board 12x GPIOs		
	Power Supply	+8V _{DC} +20V _{DC} Main power supply +5V stand-by	any app spe	
777				

Operating System	Windows 10 IoT Enterprise LTSC Linux Kernel LTS Yocto Project 3.0 WindRiver VxWorks 7.0 Android
Operating Temperati	0°C ÷ +60°C (Commercial version) ire* -40°C ÷ +85°C (Industrial Range)
Dimension	ns 120 x 95 mm (COM-HPC® Size A Form factor, Client pinout)

*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.

BLOCK DIAGRAM

