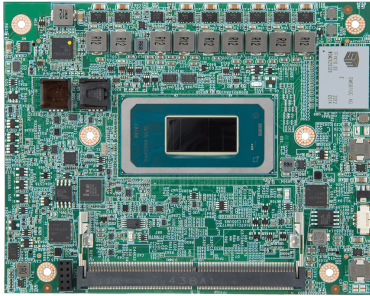




COMX-A300

Intel® Core™ Ultra Processors Series 2 (Arrow Lake U/H) CPU, COM-HPC Client Size A Module



Features

- COM-HPC® Client Size A Module
- Intel® Core™ Ultra Processors Series 2 (Arrow Lake U/H)
- Intel® Xe LPG graphic up to 128EU, 4 independent 4K display
- Dual-CH DDR5 up to 128GB 6400 MT/s SO-DIMM
- Support Max. 4 independent displays
- Wide-range voltage Input: 8V ~ 20V
- Multiple I/O expansion: 2.5GbE, PCIe Gen5, USB4 & USB3.2 Gen2, SATA3.0 and MIPI CSI

System

CPU	Onboard Intel® Core™ Ultra Processors Series 2 Core™ Ultra 7 255H/255U Core™ Ultra 5 225H/225U
Memory	2 x 262-pin DDR5 SO-DIMM sockets, supporting up to 128GB 6400 MT/s
Graphics	Intel® ARC (H only) Xe LPG+ graphics
Graphic Interface	3 x DDI ports and 1 x eDP
SATA	2 x SATA (share with PCIe)
LAN	2 x Intel® I226LM 2.5GbE controllers
Watchdog Timer	1~255 levels reset
TPM	dTPM 2.0

I/O

Serial Port	GPIO: 12 bit GPIO (default 6 input / 6 output) I²C Baud Rate: 400KHz SMBus Baud Rate: 100KHz 2 x UART TX/RX signal only 2 x MIPI CSI 1 x Debug Port
USB	2 x USB4 2 x USB 3.2 Gen2 8 x USB 2.0
LAN	2 x Ethernet with TSN & WOL support
Audio Bus	Supports HD link or I²S or 2 Soundwire
Expansion Bus	4 x PCIe x1 Gen4 (Lane 0-3), configurable to x1, x2, x4 2 x PCIe x4 Gen4 (Lane 4-7, 8-11) 1 x PCIe x4 Gen4 (Lane 12-15) shared with optional onboard NVMe 4 x PCIe x1 Gen4 (Lane 16-19), *BOM optional and configurable to x1, x2, x4 1 x PCIe x8 Gen5 (Lane 32-39), Processor H only

OS support

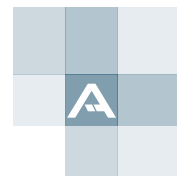
System	Windows® 10 IoT Enterprise 64-bit Windows® 11 IoT Enterprise 64-bit Linux (Ubuntu 20.04)
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Mechanical & Environmental

Power Requirement	8V~20V wide range voltage input, +5VSB
Operating Temp.	-20 ~ 60°C (-4 ~ 140°F)
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 60°C (non-condensing)
Dimensions	95 x 120 mm (3.74" x 4.72")

Ordering Information

COMX-A300-255H	Intel Core Ultra 7 processor 255H COM-HPC Client Size A CPU Module
COMX-A300-225H	Intel Core Ultra 7 processor 225H COM-HPC Client Size A CPU Module
COMX-A300-255U	Intel Core Ultra 5 processor 255U COM-HPC Client Size A CPU Module
COMX-A300-225U	Intel Core Ultra 5 processor 225U COM-HPC Client Size A CPU Module
HS-A300-F1-T	Heat spreader; 95*120*13mm, W/THREADED, W/PAD, OEM request
HS-A300-F1-NT	Heat spreader; 95*120*13mm, THROUGH HOLE, W/PAD
HS-A300-C1	Heat sink 95*120 mm, W/FAN+PAD
PBH-1200	COM-HPC Client evaluation carrier board in ATX or AT form factor



Block Diagram

