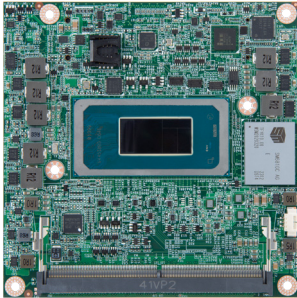


EmCOMe-i96U0

Intel® Arrow Lake Core™ Ultra 2 Processor
COM Express® Type 6 Compact CPU Module



Features

- Soldered onboard Intel® Core™ Ultra 2 Processor Series
- Intel® AI Boost - Integrated NPU accelerator
- Dual Channels DDR5 5600MT/s up to 96GB SO-DIMM
- Multiple I/O 2.5GbE Ethernet, PCIe Gen4, USB3.2, SATA3.0
- Support Max. 4 independent displays
- 8.5V~20V Wide Range Voltage Input
- **Wide Range Operating Temp.: 0 ~ 60°C**

System

CPU	Soldered onboard Intel® Core™ Ultra Processor - Core Ultra 7 255H 2.0GHz / 5.1GHz (Turbo) - Core Ultra 5 225H 1.7GHz / 4.9GHz (Turbo) - Core Ultra 7 255U 2.0GHz / 5.0GHz (Turbo) - Core Ultra 5 225U 1.5GHz / 4.8GHz (Turbo)
Memory	2 x DDR5 SO-DIMM sockets
BIOS	AMI UEFI BIOS
Watchdog Timer	1~255 levels reset
I/O	
USB Port	11 x USB ports: - 8 x USB 2.0 ports - 3 x USB 3.0 ports
Serial Port	2 x UART ports (RX/TX only)
Expansion Bus	1 x PCIe8 lanes (H series only) 2 x PCIe4 lanes 8 x PCIe1 lanes (or 1 x PCIe4 + 4 x PCIe1) I ² C, GPIO, SMBUS, LPC Interface
Storage	2 x SATA ports with 600MB/s HDD transfer rate 1 x NVMe SSD (Share With PEG 1 x PCIe4 lanes)
Ethernet Chipset	1 x Intel® i226 series PCIe 2.5GbE Ethernet controller
Audio	HD audio link
TPM	Supports TPM 2.0

Display

Graphic Chipset	Integrated Intel® Arc™ or Iris Xe Graphics (depends on CPU SKU)
Graphic Interface	1 x Dual Channel 24-bit LVDS (default) or eDP 1 x Analog RGB port 3 x DDI ports

OS support

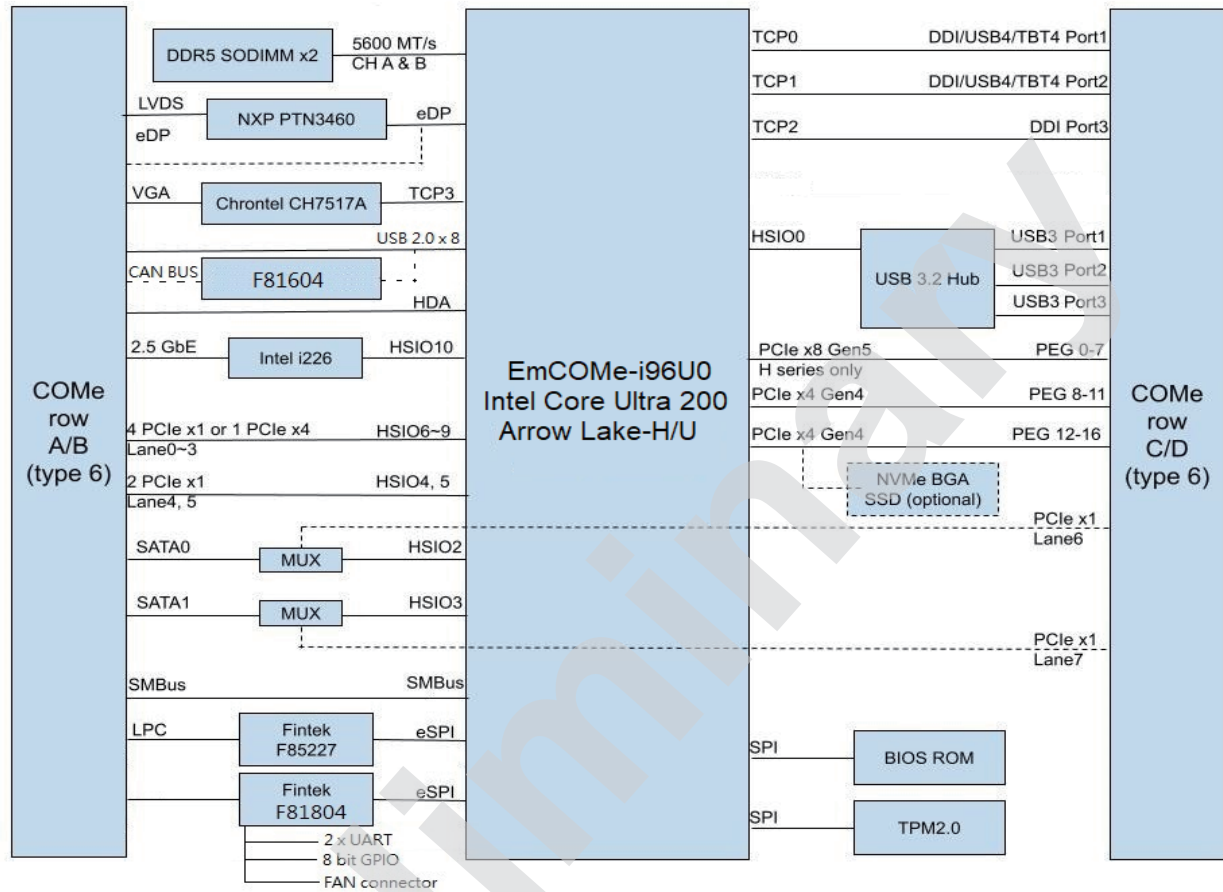
Windows 10 64-bit
Windows 11 64-bit
Linux: Ubuntu

Mechanical & Environmental

Power Requirement	8.5V~20V wide range voltage input, +5VSB
Power Consumption	TBD
Operating Temp.	0 ~ 60°C (32 ~ 140°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing)
Dimensions (L x W)	95 x 95 mm (3.7" x 3.7")



Block Diagram



Ordering Information

EmCOMe-i96U0-255H	Intel® Core™ Ultra 7 255H COMe Compact Type 6 CPU module, 0 ~ 60°C
EmCOMe-i96U0-225H	Intel® Core™ Ultra 5 225H COMe Compact Type 6 CPU module, 0 ~ 60°C
EmCOMe-i96U0-255U	Intel® Core™ Ultra 7 255U COMe Compact Type 6 CPU module, 0 ~ 60°C
EmCOMe-i96U0-225U	Intel® Core™ Ultra 5 225U COMe Compact Type 6 CPU module, 0 ~ 60°C

Optional Accessories

HS-96U0-C1	Heat sink with Fan (95 x 95 x 37.6 mm)
HS-96U0-F1-T	Heat spreader, threaded standoffs (bore hole) (95 x 95 x 11 mm)
HS-96U0-F1-NT	Heat spreader, non-threaded standoffs (bore hole) (95 x 95 x 11 mm)
PBE-1705	COM Express® type 6 carrier board (ATX form factor)
CBK-03-1705-00	Cable kit
	1 x SATA cable
	2 x COM Flat cables