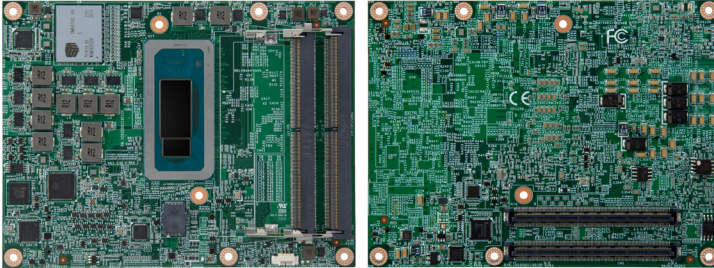


EmCOMe-i94M0

13th Generation Intel® Core™ i7-13800HE/ i5-13600HE/ i3-13300HE Processor COM Express® Basic Type 6 CPU Module



Features

- 13th Gen Intel® Raptor Lake Core™ i7 / i5 / i3 processor
- Up to 6x performance core + 8x efficient core and up to 96x graphic execution units
- Dual Channels DDR5 memory up to 64GB, 4800MT/s
- Supports NVMe for up to 512GB
- Support Max. 4 independent displays
- 8.5V~20V Wide Range Voltage Input

System

CPU	Soldered onboard 13 th Generation Intel® Core™
	- i7-13800HE 4.0GHz(E-core)/ 5.0GHz (P-core)
	- i5-13600HE 3.6GHz(E-core)/ 4.8GHz (P-core)
	- i3-13300HE 3.4GHz(E-core)/ 4.6GHz (P-core)
	- i7-1370PE 3.7GHz(E-core)/ 4.8GHz(P-core)
	- i5-1350PE 3.4GHz(E-core)/ 4.6GHz(P-core)
- i3-1320PE 3.3GHz(E-core)/ 4.5GHz(P-core)	
Memory	2 x DDR5 SO-DIMM 4800MHz up to 64GB
BIOS	AMI UEFI BIOS
TPM	Supports TPM 2.0
Watchdog Timer	1~255 levels reset

I/O Interface

Storage	2 x SATA Gen3 ports
	1 x BGA NVMe SSD (Optional) (Share PCIe x 4)
Serial Port	2 x UART ports (RX/TX only)
Others	I ² C, GPIO, SMBUS, LPC Interface
USB Port	8 x USB 2.0 ports
	4 x USB 3.0 ports
Expansion Bus	1 x PCIe8 lanes
	2 x PCIe4 lanes
	8 x PCIe1 lanes (or 1 x PCIe4 + 4 x PCIe1)
Ethernet Chipset	1 x Intel®i226 series PCIe 2.5GbE Ethernet controller
Audio	Intel® High Definition Audio

Display

Graphic Chipset	Integrated Intel® Iris Xe or UHD Graphics (depends on CPU SKU)
	1 x Dual Channel 24-bit LVDS (default) or eDP
Graphic Interface	1 x Analog RGB port
	3 x DDI ports
Graphic Interface	VGA : up to 1920x1200 @ 60Hz
	DVI : up to 1920x1200 @ 60Hz
	LVDS: up to 1920x1200 @ 60Hz (dual channel 24-bit)
	DP: up to 3840x2160 @ 60Hz

OS support

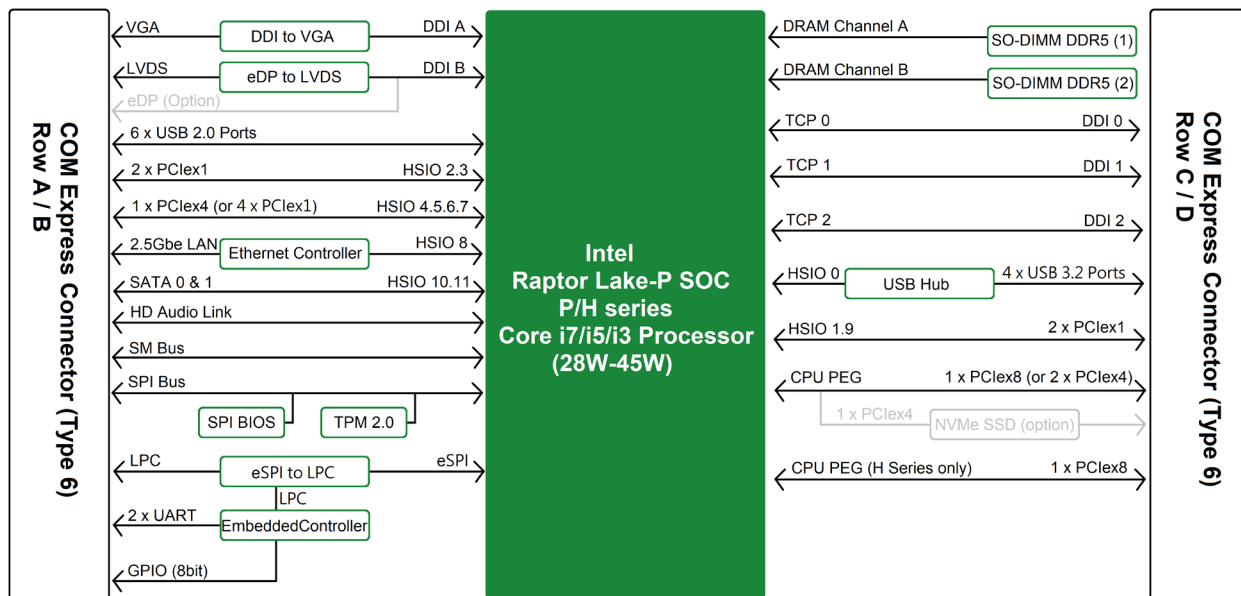
Windows 10 64-bit
Windows 11 64-bit
Linux: Ubuntu

Mechanical & Environmental

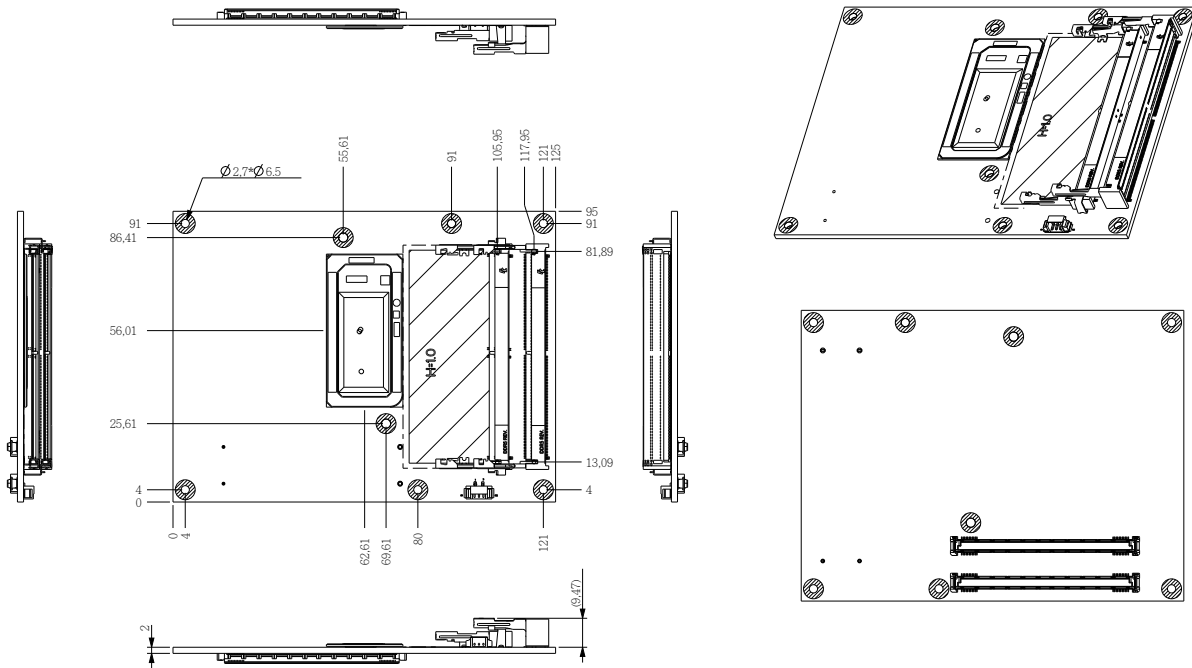
Power Requirement	8.5V~20V wide range voltage input, +5VSB
Operating Temp.	-40 ~ 60°C (-40 ~ 140°F)
Operating Humidity	10 ~ 95% @ 85°C (non-condensing)
Dimensions (L x W)	95 x 125 mm (3.7" x 4.9")



Block Diagram



Dimension (Unit: mm)



Ordering Information

EmCOMe-i94M0-13800HE	13th Gen Intel Core i7-13800HE COMe Basic Type 6 CPU Module, -40~60°C
EmCOMe-i94M0-13600HE	13th Gen Intel Core i5-13600HE COMe Basic Type 6 CPU Module, -40~60°C
EmCOMe-i94M0-13300HE	13th Gen Intel Core i3-13300HE COMe Basic Type 6 CPU Module, -40~60°C
EmCOMe-i94M0-1370PE	13th Gen Intel Core i7-1370PE COMe Basic Type 6 CPU Module, -40~60°C
EmCOMe-i94M0-1350PE	13th Gen Intel Core i5-1350PE COMe Basic Type 6 CPU Module, -40~60°C
EmCOMe-i94M0-1320PE	13th Gen Intel Core i3-1320PE COMe Basic Type 6 CPU Module, -40~60°C
HS-93M0-C1	Heat sink 95*125mm, W/ FAN+PAD
PBC-1705	COM Express type 6 evaluation carrier board (ATX form factor)
CBK-03-1705-00 (Cable Kit)	1 x SATA cable / 2 x COM Flat cables