

X6-MTH-ORN

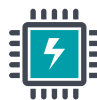
Nvidia Orin NX powered by Intel Core Ultra Processor
Edge AI Box

KEY FEATURES



Nvidia Edge AI engine

Nvidia ORIN NX up to 100 TOPS



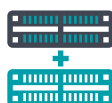
Control engine by Intel Core Ultra

Remote control by Intel Core Ultra processor



Remote BIOS update and OTA

Support Remote management by DFI OOB



Multiple Expansions

4 M.2 B, E, M key expansion slots



Rich I/O

Audio, COM ports, CAN bus, 8 USB 3.2, HDMI, VGA, PoE LANs



IoT Solutions
Alliance



PANEL



Front View



Rear View

SPECIFICATION

SYSTEM	Processor	Intel® Core™ Ultra 7 155U (2 P-Cores x 1.7 GHz, 8 E-Cores x 1.2 GHz, 12 MB cache, 15W) Intel® Core™ Ultra 5 125U (2 P-Cores x 1.3 GHz, 8 E-Cores x 0.8 GHz, 12 MB cache, 15W)
	Memory	Two 260-Pin SO-DIMM up to 64GB Dual Channel DDR5 5600MHz
	BIOS	AMI SPI
GRAPHICS	Controller	Intel® Iris® Xe Graphics
	Feature	DX12, Open GL 4.6, Vulkan 1.2 HW Decode: HEVC/VP9/AV1/AVC/H.265/MJPEG HW Encode: HEVC/VP9/AV1/AVC/H.265/MJPEG
	Display	Stacked type VGA and HDMI from COMe eDP HDMI from Jetson module ITE IT6564FN DP HDMI/VGA converter from eDP
AI ACCELERATOR	Interface	Nvidia Orin NX, up to 100 TOPS Nvidia Orin Nano, up to 40 TOPS
STORAGE	External	1 x 64GB/128GB/256GB/512GB/1024GB on board SSD (available upon request on MTH968) Optional M.2 M key SSD Optional 2x 2.5" SATA tray kit, RAID 0/1 supported
	Internal	M.2 2242/2280 M key on Jetson module (PCIe x4)
EXPANSION	Interface	COMe: 1 x M.2 Key E 2230 slot (USB 2 + PCIe x1 signal) for Wi-Fi 6E 1 x M.2 Key B 3042/3052 slot (USB3 signal) for 5G/LTE with Nano SIM 1 x M.2 2242/2280 M key (SATA 3and PCIe gen3 x1 for NVMe) Jetson Orin: 1 x M.2 Key E 2230 slot (USB 2 + PCIe x1 signal) for Wi-Fi 6E (or 1 x M.2 Key B 3042/3052 slot (USB3 signal) for 5G/LTE with Nano SIM) 1 x M.2 2242/2280 M key (SATA 3and PCIe gen3 x1 for NVMe)
ETHERNET	Controller	1 RJ45 GbE from Intel i210 2x2 stacked RJ45 GbE ports from 4x Intel i210 Optional 2x 15W PoE via X103-PE30-48
LED	Indicators	1 x Power Status 1 x HDD activity
FRONT I/O	Ethernet	1 x GbE (COMe MTH968) 2x2 stacked RJ45 GbE (Jetson)
	USB	2 x USB 3.2 from Type 6 COMe MTH968 2 x USB 3.2 4 x USB 3.0 from Jetson module
	Display	1 x VGA 1 x HDMI port with screw hole
	DC in	1 x 2-pin power terminal block
REAR I/O	Serial	1 x DB-9 RS232 port (COMe) 1 combo DB-9 RS232/ CAN bus (Jetson)
	USB	1 x micro USB from Jetson module
	Display	2 x HDMI port
FLANK I/O	Antenna	6 x antenna holes
INTERNAL I/O	OOB	Support DFI OOB module
SECURITY	TPM	TPM 2.0 on COMe
POWER	Type	9-36V DC
	Connector	1x 2-pin terminal block
	RTC Battery	Rechargeable battery
OS SUPPORT	Microsoft	Windows 10, 11
	Linux	Ubuntu 22.04
MECHANISM	Construction	Aluminum + SGCC
	Mounting	Wall mount (mounting brackets and screws) DIN mount by optional
	Dimensions (W x H x D)	250 x 65 x 150 mm
	Weight	< 3.5 kg
ENVIRONMENT	Operating Temperature	-20°C to 60°C (sku dependent)
	Storage Temperature	-40°C to 85°C
	Relative Humidity	5 to 95% RH (non-condensing)

SPECIFICATION

STANDARDS AND CERTIFICATIONS	Shock	Operation IEC 60068-2-27 Test Ea: Shock test Half-sine, 3G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times) Non- Operation IEC 60068-2-27 Test Ea: Shock test Half-sine, 5G @ 11ms, 18 Shock ±X, ±Y, ±Z (each axis 3 times)
	Vibration	Operation IEC 60068-2-64 Test Fh: Vibration board-band random test Random,2Grms @ 5~500 Hz, 30min. Non- Operation IEC 60068-2-6 Test Fc: Vibration Sinusoidal Test Sweep sine, 3Grms @ 10~500Hz, 30min.
	Certficiation	CE, FCC Class A, RoHS, UL 62368-1, UKCA
	IP Rating	IP20