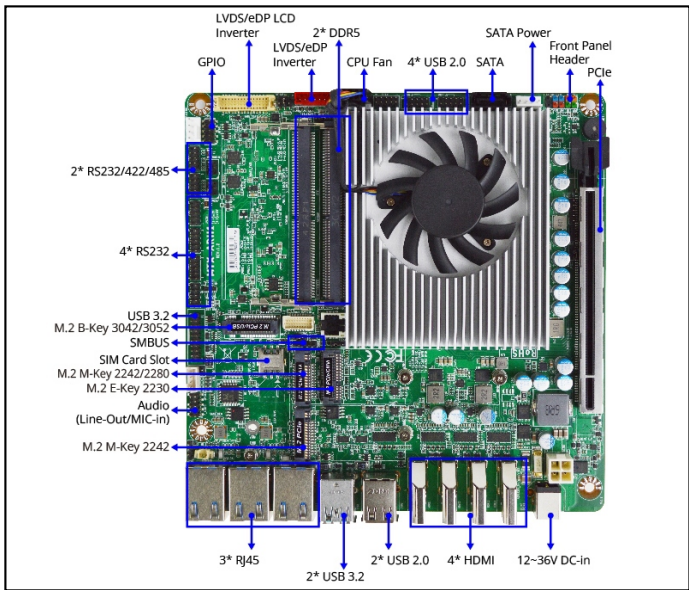


MTX-ARH1-225H0020



Mini-ITX

Thin Mini-ITX with Intel® Core™ Ultra 5 Processor Intel® SoC



Features

- **Powered by Onboard Intel® Core™ Ultra 5 Processor 225H for AI Boost(formerly Arrow Lake-H, TDP 28W)**
- **High-Capacity Memory: 2 x DDR5 6400MT/s SO-DIMM, up to 96GB**
- **Quad Display Support: Comes with 1x LVDS/eDP, 4 x HDMI® 2.1 TMDS, supporting 4K, 8K displays**
- **Triple LAN: 3 x 2.5GbE for high-speed, reliable networking**
- **Flexible Storage Expansion: 1 x M-Key 2242 (PCIe 4.0 x4), 1 x M-Key 2242/2280 (PCIe 4.0 x4 + SATAIII), and 1 x SATAIII**
- **Enhanced Expansion Options: 1 x E-Key 2230 (USB 2.0/PCIe) with CNVi support, 1 x B-Key (PCIe/USB2.0) for 4G/5G module, and 1 x PCIe x8 (Gen 5)**
- **Wide Range Power Input: DC-in 12–36V for robust industrial flexibility**

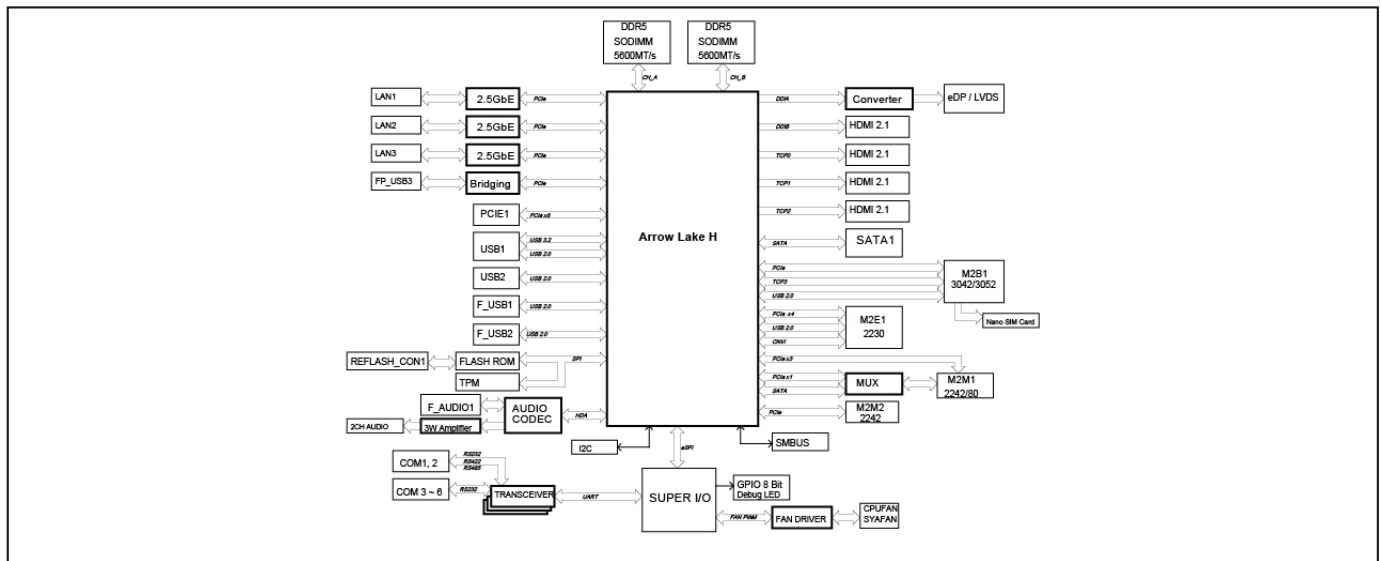
Packing List

PART NUMBER	DESCRIPTION	QTY
F04-MB-109-F	I/O Shield	1
F01-SP-A-BK-3F	Jumper	1
G01-COM-H2M22-1F	COM Cable	2
G01-PW4PS2S-322-1F	Y-Power Cable	1
G01-SATA3-BL-1F	SATA Cable	1
F05-JMTX28W-F	CPU Cooler	1

Specifications

SYSTEM	
MB FORM FACTOR	Thin Mini-ITX
CPU	Onboard Intel® Core™ Ultra 5 Processor 225H (Formerly Arrow Lake-H, TDP 28W)
CHIPSET	Intel® SoC
MEMORY	2 x DDR5 6400MT/s, Dual Channel SO-DIMM, up to 96GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (dTPM)
RTC BATTERY	Lithium Battery
DIMENSION (W X D)	170.0 (W) x 170.0 (D) mm (6.7" x 6.7")
OS SUPPORT	Windows® 11 (64bit) Windows® 10 (64bit) Linux
POWER	
POWER REQUIREMENT	DC-in 12-36V
POWER ON MODE	AT / ATX (Default) Mode
CONNECTOR	DC Jack
DISPLAY	
GPU	Intel® Arc™ Graphics
LVDS	1 x 24-bit Dual Channel LVDS (Max. Resolution: 1920 x 1200 @60Hz, Co-lay eDP)
HDMI®	4 x HDMI® 2.1 TMDS (Max Resolution:3840 x 2160@60Hz), Conditionally Supports 8K Resolution
MULTIPLE DISPLAY	Support 4 Displays
AUDIO	
CODEC	Realtek Audio Codec
Line-out	Internal Header for Line-Out
MIC-in	Internal Header for MIC-In
AMPLIFIER	3W
LAN	
ETHERNET	1 x RJ45 for Intel® I226-LM 2.5GbE 2 x RJ45 for Intel® I226-V 2.5GbE
USB PORT	
USB	2 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2) 2 x USB 2.0 Internal Header for 2 x USB 3.2 Internal Header for 4 x USB 2.0
SERIAL PORT	
COM	Internal Header for 4 x RS-232 Internal Header for 2 x RS-232/422/485
INTERNAL I/O	
GPIO	8-Bit
SMBUS	Yes
I2C	Yes
FAN	1 x 4-pin Connector for System Fan (PWM Mode)
ADDITIONAL	1 x Chassis intrusion 1 x AT/ATX Mode Selection
STORAGE	
SATA	1 x SATA3 1 x SATA Power Connector
RAID	RAID 0/1
EXPANSION	
M.2	1 x M-Key 2242 (PCIe 4.0 x4) Support NVMe 1 x M-Key 2242/2280 (PCIe 4.0 x4 / SATAIII) Support NVMe 1 x B-Key 3042/3052 (PCIe Gen.3 x1/USB3.2 Gen.2/USB2.0 interface) support 4G/5G Module 1 x E-Key 2230 (USB 2.0/PCIe x1) Support CNVi
PCIe	1 x PCIe x8 (Gen.5)
SIM	1 x Nano SIM Card Slot
ENVIRONMENT & CERTIFICATION	
SHOCK	15G, 11ms duration
VIBRATION	1 Grms/ 5~ 500Hz/ Operation
OPERATING TEMPERATURE	-20°C ~ 60°C (-4°F ~ 140°F)
STORAGE TEMPERATURE	-20°C ~ 85°C (-4°F ~ 185°F)
OPERATING HUMIDITY	10 ~ 90% relative humidity, non-condensing
CERTIFICATION	CE/FCC Class A
ESG DECLARATION	EU RoHS China RoHS

Block Diagram



Dimension

Unit: mm

