innodisk

INTEL CORE ULTRA SERIES 3 REFERENCE KIT

AXMB-D160

HIGHLIGHT FEATURES

- Features Intel Core Ultra X7 Processor 358H, delivering 180 TOPS for edge AI computing
- Equipped with Intel Core Ultra Series 3 platform-certified components:
  - Innodisk 4TG2-P series 512GB PCIe Gen 4 x4 M.2 SSD
- Mini-ITX form factor (170 x 170mm)
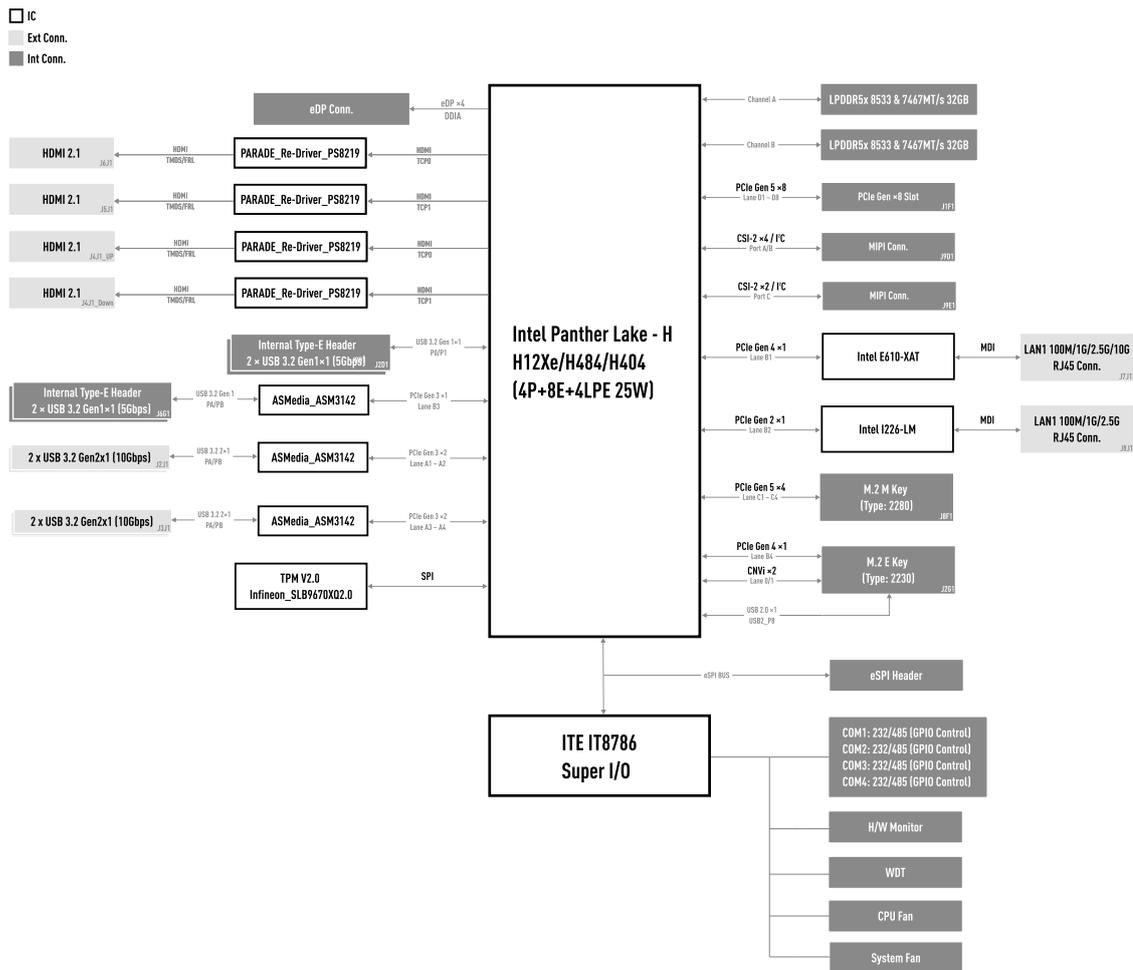
SPECIFICATIONS

Platform	Intel CPU	Core Ultra X7 Processor 358H
	Cores (P+E+LPE)	16C (4P + 8E + 4LPE)
	Threads	16
	Max. Frequency	4.8GHz
	Cache	18MB
	CPU TDP	25W
	BIOS	Insyde SPI 256Mbit
AI accelerator	AI Engine	Intel AI Boost up to 180 TOPS via (CPU+GPU+NPU)
Memory	Technology	LPDDR5x 8533 & 7467MT/s
	Max. Capacity	64GB (BGA populated)
Graphics	Controller	Intel Arc B390
	Graphic Engine	Hardware Decode: HEVC/VP9/AV1 8K60 8/10/12-bit 420/422/444, VVC 8K60 8/10-bit 420, AVC 4K60 8/10-bit 420/422 Hardware Encode: HEVC 8K30 8/10-bit 420/422/ 444, VP9 8K30 8/10-bit 420/ 444, AV1 8K30 10-bit 420/422/444, AVC/VP8 4K60 8-bit 420
Displays	HDMI 2.1 (8K@60Hz)	4 (support 4x 4K@60Hz or 2x 8K@60Hz)
	eDP (4K@60Hz)	1
Ethernet	LAN (Intel E610 10Gbps)	1
	LAN (Intel I226 2.5Gbps)	1
Expansion Slots	M.2 2280 M Key	1 x (PCIe Gen 5 x4); 512GB Gen 4 x4 M.2 SSD pre-installed
	M.2 2230 E Key	1 x (PCIe Gen 4 x1/USB 2.0/CNVi)
External I/O	USB 3.2 Gen 2x1 (10Gbps)	4
Internal I/O	USB 3.2 Gen 1x1 (5Gbps)	4
	COM1	RS232/485
	COM2	RS232/485
	COM3	RS232/485
	COM4	RS232/485
	MIPI CSI Connector	2 (x4 Lane)
Power	Power Input Voltage	Standard ATX power
	Power Connector Type	24-pin ATX power connector + 8 pin power connector
Environment	Operating Temperature	0°C~60°C
	Storage Temperature	-40 °C ~85 °C
	Operating Humidity	90% at 40 °C Relative humidity, non-condensing

Watchdog Timer	Interval	Programmable from 1 to 255 Seconds
Security	TPM 2.0	dTPM2.0 (Hardware, Infineon:SLB9670XQ2.0)
Physical Characteristics	Dimension L x W (mm)	170 x 170
	Net Weight/Gross Weight (KG)	0.4/ 1.4
Operating System	Microsoft Windows 11 IoT Enterprise 2021 LTSC	
Regulation	Safety	CE/FCC Compliance

ORDER INFORMATION

Part No.	Intel CPU	COM	LAN	USB	Display	M.2	Operating Temp.	Power Cord
AXMB-D160-AXX	Core Ultra X7 Processor 358H	4	2	4 x USB 3.2 Gen 2x1 4 x USB 3.2 Gen 1x1	4 x HDMI 2.1 1 x eDP	2 (M+E)	0℃~60℃	1

Block Diagram

□ IC
▨ Ext Conn.
▨ Int Conn.

PACKING LIST

Part Number	Description	Q'ty
AXMB-D160-Axx	AXMB-D160 motherboard	1
9Z0000000240	CPU cooler	1
7APA11000L109S01	AXMB-D160 IO Bracket	1
7SW1-M20035I1SN	M.2 screw	2
9Z9000000080	500W PSU	1
7W8000000070/90	Power Cord, Standards(UK/US) 1.8m	1

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