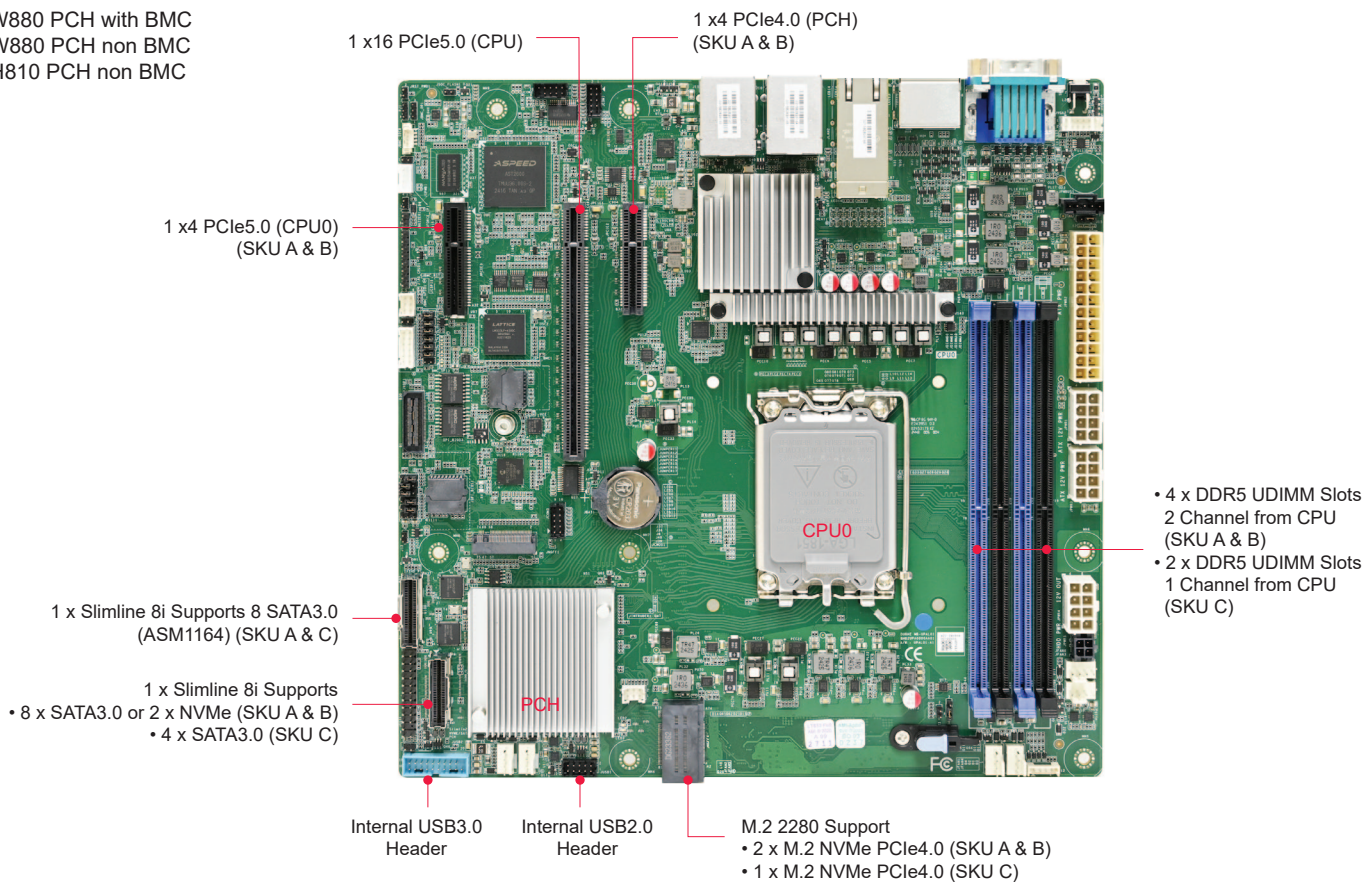
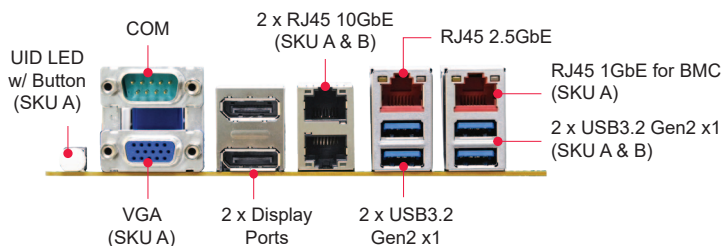




- **SKU A** : W880 PCH with BMC
- **SKU B** : W880 PCH non BMC
- **SKU C** : H810 PCH non BMC



I/O View



Dimensions

mm : 243.84 x 243.84 / inches : 9.6 x 9.6

Dubhe supports single Intel® Arrow Lake-S family processors with up to 24 CPU cores and TDP up to 125W. It supports up to 192G DDR5 ECC/Non-ECC UDIMMs with 4 memory slots and memory speeds up to 5600MT/s.

The high-speed expansion I/O includes 1 x PCIe Gen5 x16 and 1 x PCIe Gen5 x4 (PCH W880, SKU A & B) linked to the CPU, 1 x PCIe Gen4 x4, 2 x M.2 2280 PCIe Gen4 (PCH W880 SKU A & B), and up to 2 Slimline 8i connectors, support up to 16 SATA3.0 or 2 NVMe + 8 SATA3.0 (SKU A).

Features

- Supports single Intel® Core Family Processors for highest every performance and improved power efficiency
- Supports 4 x DDR5 DIMM slots for maximum memory performance
- Supports DDR5 ECC/Non-ECC UDIMMs (5600MHz)
- Supports up to 20 lanes of PCIe5.0 from CPU, including 1 x16 + 1 x4 slots (PCH W880 SKU A & B)
- SKU A (W880): 2 x Slimline 8i support 8 SATA3.0 (by ASM1164) + 8 SATA3.0 or 2 NVMe G4 x 4 (from PCH)
- SKU B (W880): 1 x Slimline 8i supports 8 SATA3.0 or 2 NVMe G4 x 4 (from PCH)
- SKU C (H810): 1 x Slimline 8i support 8 SATA3.0 (by ASM1164) + 4 SATA3.0 (PCH)
- 1 x Slimline 8i supports 8 x SATA3.0 or 2 x NVMe (W880 SKU) or 4 x SATA3.0 (H810 SKU)
- Supports 2 x RJ45 10GbE (SKU A & B)

Specifications

System	Processor Support	Single Intel® Arrow Lake S CPU
	CPU TDP	125W
	Socket Type	Socket LGA 1851
	System Memory	• DDR5 ECC (SKU A & B) /non-ECC UDIMM - 5600MHz (1SPC 1R/2R) - 4800MHz (2SPC 2R) - 4400MHz (2SPC 2R) • Total 4 memory slots; 2 slots per channel (2SPC) (SKU A & B) - Total 2 memory slots; 1 slot per channel (1SPC) (SKU C) * Supports up to 192G (SKU A & B) - Supports up to 96G (SKU C)
Expansion Slots	Total support 32 lanes of PCIe (PCH W880) : 20 lanes of PCIe (PCH H810) • PCIe slots - 1 x16 PCIe5.0 (CPU0) - 1 x4 PCIe5.0 from CPU0 (SKU A & B) - 1 x4 PCIe4.0 from PCH (SKU A & B) • M.2 2280 support - 2 x M.2 NVMe PCIe4.0 (SKU A & B) - 1 x M.2 NVMe PCIe4.0 (SKU C) • Slimline 8i for SATA /NVMe support - SKU A : Slimline support 16 x SATA3.0 or 8 x SATA 3.0 + 2 x NVMe - SKU B : 1 Slimline support 8 x SATA3.0 or 2 x NVMe - SKU C : Slimline support 12 x SATA3.0 • 2 x USB double-stack Type-A connector supports two USB3.2 Gen2 x1 devices (SKU A & B) • 1 x USB double-stack Type-A connector supports two USB3.2 Gen2 x1 devices (SKU C) • 1 x USB pin header supports two USB3.0 Gen1 devices • 1 x USB pin header support two USB2.0 devices	
System BIOS	BIOS Type	AMI UEFI BIOS (64M ROM size)
	BIOS Features	• ACPI • PXE • WOL • AC loss recovery • IPMI 2.0 KCS mode interface • SRIOV • SMBIOS • TPM • Serial console redirection • PCIe hotplug

On-board Devices	SATA	• 1 x Slimline 8i support (by PCH, in SFF8654-8i, RSTe RAID 0/1) - 8 x SATA3.0 or 2 x NVMe (SKU A & B) - 4 x SATA3.0 (SKU C) • 8 x SATA3.0 (by 2 x ASM1164, Slimline 8i connector) (SKU A & C)
	BMC	ASPEED AST2600
	Network Controller	• Realtek RTL8211FS 1GbE for BMC dedicated management port (NCSI shared NIC - reserved for Broadcom NIC) • Broadcom BCM57416 for dual port 10GbE (NCSI for share NIC) • I226-LM Ethernet Controller for single port 2.5GbE
	Graphics	• Integrated VGA support by ASPEED AST2600 • Resolution up to 1920x1200 @60Hz 32bpp
Additional Information	TPM 2.0 - NUVOTON NPCT760AABYX	
Input/Output	SATA	• 1 x Slimline 8i support (by PCH, in SFF8654-8i, RSTe RAID 0/1) - 8 x SATA3.0 or 2 x NVMe (SKU A & B) - 4 x SATA3.0 (SKU C) • 8 x SATA3.0 (by 2 x ASM1164, Slimline 8i connector) (SKU A & C)
	LAN	• 2 x RJ45 10GbE (SKU A & B) • 1 x RJ45 2.5GbE • 1 x RJ45 GbE connector for BMC management port (SKU A)
	USB	• 2 x USB3.2 Gen2 x1 double-stack Type-A connectors (SKU A & B) • 1 x USB3.2 Gen2 x1 double-stack Type-A connector (SKU C) • 1 x USB pin header supports two USB3.0 Gen1 • 1 x USB pin header supports two USB2.0
	Display	• 1 x DB-15 VGA connector (SKU A) • 2 x Display ports
	Serial Port	1 x COM connector
	Others	• PCIe slots - 1 x16 PCIe5.0 (CPU0) - 1 x4 PCIe5.0 from CPU0 (SKU A & B) - 1 x4 PCIe4.0 from PCH (SKU A & B) • M.2 2280 support - 2 x M.2 NVMe PCIe4.0 (SKU A & B) - 1 x M.2 NVMe PCIe4.0 (SKU C)
Additional Information	Security:	
	• TPM 2.0 onboard	

Ordering Information

MB SKU	Order Info	Description
Dubhe(A)	BMB2UPA0000A	mATX, single processor, Intel Arrow Lake-S, w/W880, 4x DDR5 UDIMM, up to 16x SATAIII, 1x PCIe Gen5 x16, 1x PCIe Gen5 x4, 1x PCIe Gen4 x4, dual 10GbE LAN, 2.5GbE LAN, PCIe Gen4 M.2 2280 x2, RJ45 GbE management port, BMC and IPMI management support
Dubhe(A)	M22-1717-016	Dubhe MB (BMB2UPA0000A) (W880 w/ BMC 10G) with IOS (M06-1788-700), bulk packing with 10 pcs MB & IOS (10 pcs in packing)
Dubhe(A)	M22-1717-017	Dubhe MB (BMB2UPA0000A) (W880 w/ BMC 10G) with IOS (M06-1788-700), single packing
Dubhe(B)	BMB2UPA0000B	mATX, single processor, Intel Arrow Lake-S, w/W880, w/o BMC, 4x DDR5 UDIMM, up to 8x SATAIII, 1x PCIe Gen5 x16, 1x PCIe Gen5 x4, 1x PCIe Gen4 x4, dual 10GbE LAN, 2.5GbE LAN, PCIe Gen4 M.2 2280 x2, RJ45 GbE management port, EC support
Dubhe(C)	BMB2UPA0000C	mATX, single processor, Intel Arrow Lake-S, w/H810, w/o BMC, w/o 10GbE LAN, 2x DDR5 UDIMM, up to 12x SATAIII, 1x PCIe Gen5 x16, PCIe Gen4 M.2 2280 x1, 2.5GbE LAN, EC Support