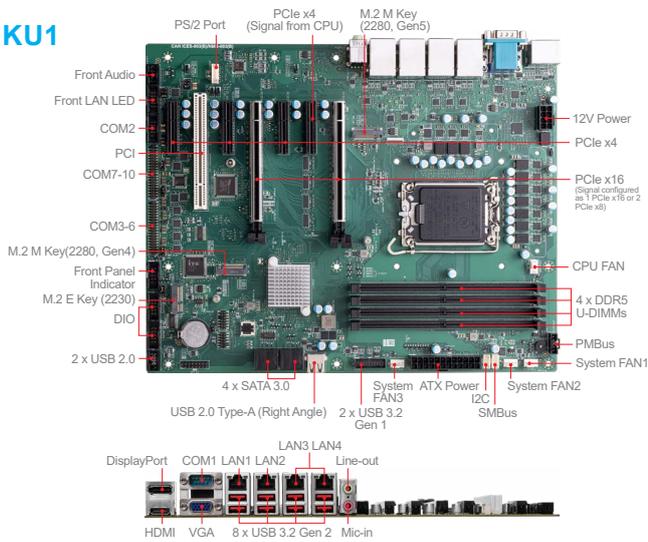


MS-CF20

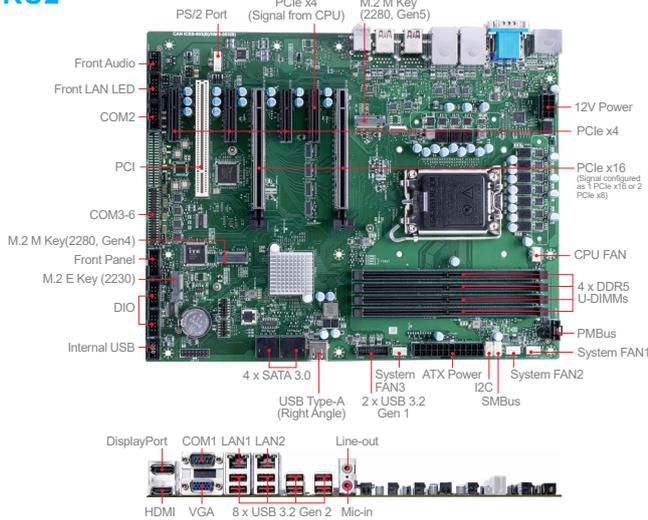
ATX with Intel® Arrow Lake-S , Core™ U9/U7/U5 & Intel® W880 for High-Performance Solution

NEW

SKU1



SKU2



Features

- Intel® Arrow Lake-S Series with W880
- 4 DDR5 5600 MT/s ECC/non-ECC UDIMM slots up to 192GB
- Triple independent displays: VGA, DP, HDMI
- 4 2.5GbE LAN with RJ-45
- 1 PCIe x16 (Gen 5) Slot or 2 PCIe x8 (Gen 5), 4 PCIe x4 (Gen 4, 1 signal from CPU, 3 signal from PCH), 1 PCI slot, 1 M.2 E key slots
- 2 M.2 M key, 4 SATA 3.0 for storage
- SATA RAID 0/1/5/10
- 8 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 3 USB 2.0, 10 COM (2 RS-485 / 8 RS-232), GPIO, PS/2, Audio, 3 System FAN
- Onboard TPM 2.0
- SMBus, I2C, PMBus, iAMT 19.x, Chassis Intrusion
- ATX Power

Packing List

Part Number	Description	Quantity
K1B-3008012-E06	USB2.0 cable, 330mm	1
K1D-1008261-V03	SATA Cable, 500mm	2
E21-CF05010-C22	IO shielding for SKU1 (4 LAN)	1
E21-CF05020-C22	IO shielding for SKU2 (2 LAN)	

Specifications

		SKU1	SKU2
Processor	CPU	Intel® Arrow Lake-S Core™ Ultra 9/7/5, Max 125W	
	Frequency	P-Core 1.4GHz~5.6GHz (Depends on CPU) E-Core 1.2GHz~4.6GHz (Depends on CPU)	
	L2 Cache	3MB~36MB (Depends on CPU)	
	CPU Type	Socket (LGA1851)	
	Chipset	Intel® W880	
	BIOS	AMI UEFI	
Memory	Technology	Dual-channel DDR5 (ECC/non-ECC) 5600 MT/s (ECC support will depend on CPU)	
	Max. Capacity	Up to 192GB	
	Socket	4 x 288-pin UDIMMs	
	Controller	Intel® UHD Graphics	
Display	Graphic Memory	Depends on CPU	
	VGA	1	
	HDMI	1	
	DisplayPort	1	
	Multiple Display	3 independent displays	
	Display Interface	VGA up to 1920 x 1200 @60Hz HDMI up to 4096 x 2160 @60Hz DP up to 4096 x 2304 @60Hz	
		4 x Intel® I226-LM 2.5GbE LAN	2 x Intel® I226-LM 2.5GbE LAN
Ethernet	Controller	Realtek® ALC897 Audio Codec	
Audio Super I/O	Controller	FINTEK F81967D-I	
	Watchdog Timer	256-level Watchdog Timer	
H/W Monitor	Smart Fan	Yes	
TPM	Controller	Infineon® SLB9672VUJ2.0	
I/O Interface	USB	8 x USB 3.2 Gen 2 x1 (8 x rear) 2 x USB 3.2 Gen 1 (2 x internal) 3 x USB 2.0 (3 x internal with one Right Angle Type-A Connector)	
		10 x COM ports (1 x rear, 9 x internal)	6 x COM ports (1 x rear, 5 x internal)
	Serial	COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control (Default set to Ring)	COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control (Default set to Ring)
		COM3~6: RS-232, 0V/5V/12V	COM3~6: RS-232, 0V/5V/12V
		COM7~10: RS-232, 0V/5V/12V	COM7~10: RS-232, 0V/5V/12V
PS/2	1 x PS/2 port by Y-cable for keyboard and mouse		
GPIO	16-bits (8 x GPI; 8 x GPO), 5V		
Expansion Slot	PCIe x16	2 (Signal configured as 1 PCIe x16 or 2 PCIe x8)	
	PCIe x4	4	
	PCI	1	
Storage	M.2	1 x M key (Signal from CPU) 2280, 1 x M key (Signal Shared by PCIe Slots) 2280 1 x E key (PCIe x1), 2230	
	SATA	4 x SATA 3.0 (RAID 0/1/5/10)	
Power Supply	ATX	ATX-Power 24P, 12V-8P	
Environment	Operating Temperature	0 ~ 60°C	
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
Form Factor	Dimensions	305 x 244 mm (ATX)	
	Weight	0.777 Kg	0.744 Kg
Certification	EMC	CE, FCC Class B, BSMI, RCM, VCCI, UKCA, CN	
Software Platform	OS Support	Windows 10 IoT Enterprise 2021 LTSC (64-bit) Windows 11 IoT Enterprise 24H2 LTSC (64-bit) Linux (Support by request)	
		Noted : All driver base on Intel & chip vendor supported	

Ordering Information

Part Number	Description
916-CF20-001	MS-CF20/606-CF20-010,10/806-CF20-001 MS-CF20 10 ARL-S,W880, 4*DDR5,HDMI+DP+VGA,2*M.2 M key,1*M.2 E key,1*PCIe x16,1*PCIe x8,4*PCIe x4, 1*PCI,4*2.5GbE LAN,4*SATA 3.0,8*USB 3.2,10*COM,TPM2.0,ATX SINGLE,5pcs/box
916-CF20-002	MS-CF20/606-CF20-010,10/806-CF20-003 MS-CF20 10 ARL-S,W880, 4*DDR5,HDMI+DP+VGA,2*M.2 M key,1*M.2 E key,1*PCIe x16,1*PCIe x8,4*PCIe x4, 1*PCI,4*2.5GbE LAN,4*SATA 3.0,8*USB 3.2,10*COM,TPM2.0,ATX SINGLE,2pcs/box
916-CF20-003	MS-CF20/606-CF20-020,10/806-CF20-002 MS-CF20 10 OPTA ARL-S,W880, 4*DDR5,HDMI+DP+VGA,2*M.2 M key,1*M.2 E key,1*PCIe x16,1*PCIe x8,4*PCIe x4, 1*PCI,2*2.5GbE LAN,4*SATA 3.0,8*USB 3.2,6*COM,TPM2.0,ATX SINGLE, 5pcs/box
916-CF20-004	MS-CF20/606-CF20-020,10/806-CF20-004 MS-CF20 10 OPTA ARL-S,W880, 4*DDR5,HDMI+DP+VGA,2*M.2 M key,1*M.2 E key,1*PCIe x16,1*PCIe x8,4*PCIe x4,1*PCI,2*2.5GbE LAN,4*SATA 3.0,8*USB 3.2,6*COM,TPM2.0,ATX SINGLE,2pcs/box

Block Diagram

