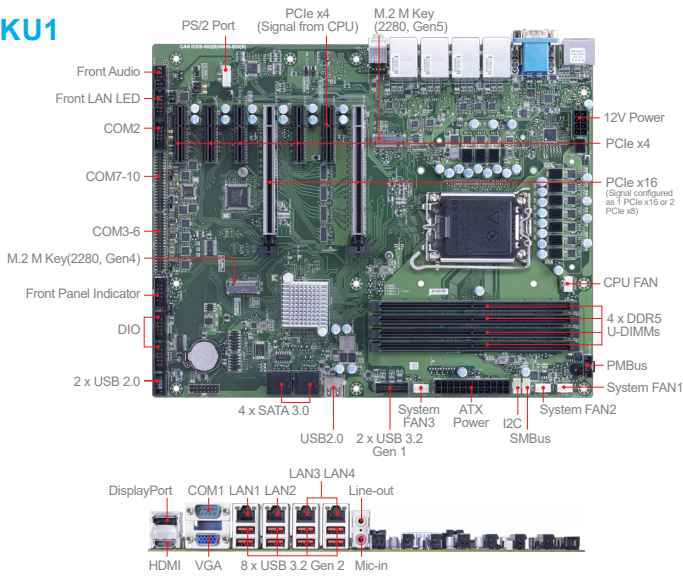


# MS-CF20 V2.0

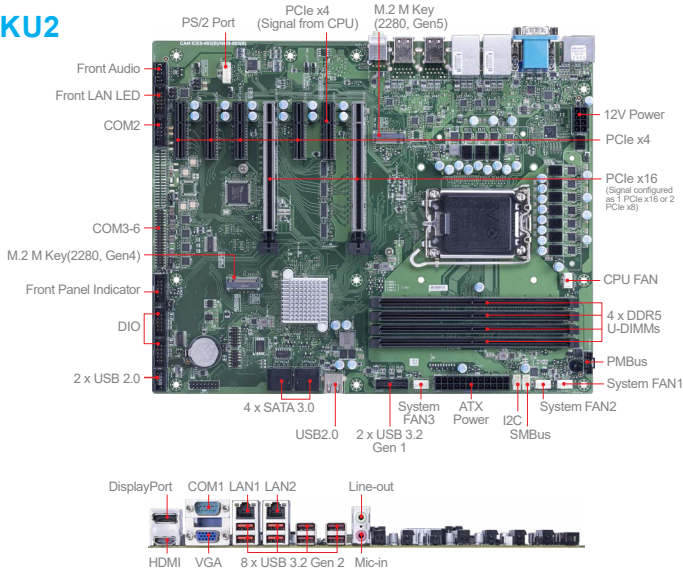
ATX with Intel® Arrow Lake-S , Core™ U9/U7/U5 & Intel® W880 for High-Performance Solution

**NEW**

## SKU1



## SKU2



## Features

- Intel® Arrow Lake-S Series with W880
- 4 DDR5 5600 MT/s ECC/non-ECC UDIMM slots up to 256GB
- Triple independent displays: VGA, DP, HDMI
- 2 or 4 2.5GbE LAN with RJ-45
- 1 PCIe x16 (Gen 5) Slot or 2 PCIe x8 (Gen 5), 5 PCIe x4 (Gen 4, 1 signal from CPU, 4 signal from PCH)
- 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)	1

## Specifications

		SKU1	SKU2	
<b>Processor</b>	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		
<b>Memory</b>	Technology	Dual-channel DDR5 (ECC/non-ECC) 5600 MT/s (ECC support will depend on CPU)		
	Max. Capacity	Up to 256GB		
	Socket	4 x 288-pin UDIMMs		
	Controller	Intel® UHD Graphics		
<b>Display</b>	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		
<b>Ethernet</b>	Controller	4 x Intel® I226-LM 2.5GbE LAN	2 x Intel® I226-LM 2.5GbE LAN	
	Controller	Realtek® ALC897 Audio Codec		
<b>Audio Super I/O</b>	Controller	FINTEK F81967D-I		
	Watchdog Timer	256-level Watchdog Timer		
<b>H/W Monitor</b>	Smart Fan	Yes		
	Controller	Infineon® SLB9672VU2.0		
<b>I/O Interface</b>	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)		
		Serial	10 x COM ports (1 x rear, 9 x internal) COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control (Default set to Ring) COM3~6: RS-232, 0V/5V/12V, Auto-flow Control (Default set to Ring)	6 x COM ports (1 x rear, 5 x internal) COM1~2: RS-232/422/485, Ring/0V/5V/12V, Auto-flow Control (Default set to Ring) COM3~6: 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	
		PCIe x16	2 (Signal configured as 1 PCIe x16 or 2 PCIe x8)	
		PCIe x4	5	
	<b>Expansion Slot</b>	PCIe x4	N/A	
		M.2	1 x M key (Signal from CPU) 2280, 1 x M key (Signal Shared by PCIe Slot5) 2280	
	<b>Storage Power Supply</b>	SATA	4 x SATA 3.0 (RAID 0/1/5/10)	
		ATX	ATX-Power 24P, 12V-8P	
<b>Environment</b>	Operating Temperature	0 ~ 60°C		
	Operating Humidity	10 ~ 90%, non-condensing		
	Storage Temperature	-20 ~ 80°C		
	Storage Humidity	10 ~ 90%, non-condensing		
<b>Form Factor</b>	Dimensions	305 x 244 mm (ATX)		
	Weight	0.766 kg	0.738 kg	
<b>Certification</b>	EMC	CE, FCC Class B, BSMI, RCM, VCCI, UKCA, CN		
<b>Software Platform</b>	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-CF20-005	MS-CF20/606-CF20-030,20/806-CF20-001 MS-CF20-00 ARL-S, W880, 4*DDR5,HDMI+DP+VGA, 2*M.2 M key, 1*PCIe x16, 1*PCIe x8, 5*PCIe x4, 4*2.5GbE LAN, 4*SATA 3.0, 8*USB 3.2, 10*COM, TPM2.0, ATX SINGLE, 5pcs/box
916-CF20-006	MS-CF20/606-CF20-040,20/806-CF20-002 MS-CF20-00 OPT.A ARL-S,W880, 4*DDR5, HDMI+DP+VGA, 2*M.2 M key, 1*PCIe x16, 1*PCIe x8, 5*PCIe x4, 4*2.5GbE LAN, 4*SATA 3.0, 8*USB 3.2, 6*COM, TPM2.0, ATX SINGLE, 5pcs/box
916-CF20-007	MS-CF20/606-CF20-030,20/806-CF20-001 MS-CF20-00 ARL-S, W880, 4*DDR5, HDMI+DP+VGA, 2*M.2 M key, 1*PCIe x16, 1*PCIe x8, 5*PCIe x4, 4*2.5GbE LAN, 4*SATA 3.0, 8*USB 3.2, 10*COM, TPM2.0, ATX SINGLE, 2pcs/box
916-CF20-008	MS-CF20/606-CF20-040,20/806-CF20-002 MS-CF20-00 OPT.A ARL-S, W880, 4*DDR5, HDMI+DP+VGA, 2*M.2 M key, 1*PCIe x16, 1*PCIe x8, 5*PCIe x4, 4*2.5GbE LAN, 4*SATA 3.0, 8*USB 3.2, 6*COM, TPM2.0, ATX SINGLE, 2pcs/box