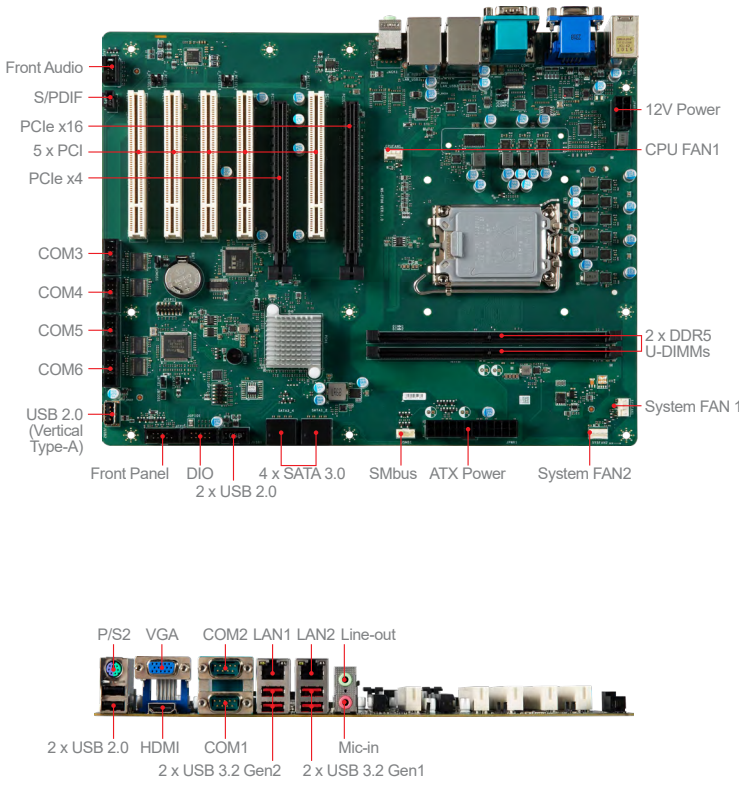


MS-CF06

ATX with 13th/12th Gen Intel® Raptor Lake-S/Alder Lake-S, Core™ i9/i7/i5/i3, Pentium®, Celeron® Processor & Intel® H610E for Mainstream Solution

NEW

Industrial Computer
COM Express Board
Pico-ITX Board
3.5" Board
EPIC Board
Mini-ITX Board
Micro-ATX Board
ATX Board
Peripheral



Features

- Intel® 13th/12th Gen Raptor Lake-S/Alder Lake-S Series with H610E
- 2 DDR5 4800 MHz non-ECC UDIMM slots up to 64GB
- Dual independent displays: VGA, HDMI
- 1 2.5GbE LAN with RJ-45, 1 GbE LAN with RJ-45
- 1 PCIe x16 (Gen 5), 1 PCIe x4 (Gen3), 5 PCI
- 4 SATA 3.0 for storage
- 2 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 5 USB 2.0, 6 COM (1 RS-485), GPIO, PS/2, Audio, 2 System FAN
- Onboard TPM 2.0
- SMBus, Chassis Intrusion
- ATX Power

Ordering Information

Part Number	Description
911-CF06-101	MS-CF06\601-CF06-010\801-CF06-101 VER 1.0 STD Intel Intel Alder Lake-S, Raptor Lake-S, H610E, 2*DDR5,HDMI+VGA,1*PCIe x16,1*PCIe x 4,5*PCI,1*G-be,1*2.5GbELAN,4*SATA 3.0, 4*USB 3.2,5*USB 2.0,4*COM,TPM2.0, ATX

Packing List

Part Number	Description	Quantity
K1D-1008261-V03	SATA Cable, 500mm	2
E21-CF06010-C22	I/O SHIELDING	1

Specifications

Processor	CPU	13th Gen Intel® Raptor Lake-S i9/i7/i5/i3/ Pentium®/Celeron® IOTG Series Processor, Max 65W 12th Gen Intel® Alder Lake-S i9/i7/i5/i3/ Pentium®/Celeron® IOTG Series Processor, Max 65W
	Frequency	P-Core 1.1GHz~5.0GHz (Depends on CPU) E-Core 0.9GHz~3.8GHz (Depends on CPU)
	L2 Cache	4MB~30MB (Depends on CPU)
	CPU Type	Socket (LGA1700)
	Chipset	Intel® H610E Express
Memory	BIOS	AMI UEFI
	Technology	Dual-channel DDR5 (non-ECC) 4800 MHz
	Max. Capacity	Up to 64GB
	Socket	2 x 288-pin UDIMMs
Display	Controller	Intel® UHD Graphics
	Graphic Memory	Depends on CPU
	LVDS	N/A
	eDP	N/A
	VGA	1
	DVI	N/A
	HDMI	1
	DisplayPort	N/A
	Multiple Display	2 independent displays
	Display Interface	VGA up to 1920 x 1200 @60Hz HDMI up to 4096 x 2160 @24Hz
Ethernet	Controller	1 x Intel® I219LM GbE LAN PHY 1 x Intel® I225-V 2.5GbE LAN
Audio	Controller	Realtek® ALC897 Audio Codec (Co-lay ALC888S)
Super I/O	Controller	FINTEK F81966D-I
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Infineon® SLB9672VU2.0
I/O Interface	USB	2 x USB 3.2 Gen 2 x1 Ports (2 x Rear) 2 x USB 3.2 Gen 1 x1 Ports (2 x Rear) 5 x USB 2.0-Ports (2 x Rear, 3 x Internal with one Vertical Type-A)
	Serial	6 x COM-Ports for COM1 ~ 6 (2 Rear, 4 x Internal) COM1 RS-232/422/485 0V/5V/12V, Auto-flow Control Supported COM2/3/4/5/6 RS-232, COM2 0V/5V/12V
	Parallel	N/A
	PS/2	1 x PS/2 port by Y-cable for keyboard and mouse
	GPIO	8-bits (4 x GPI; 4 x GPO), 5V
	PCIe x16	1
Expansion Slot	PCIe x4	1
	PCIe x1	N/A
	PCI	5
	M.2	N/A
	Mini-PCIe	N/A
Storage	SATA	4 x SATA 3.0
	IDE	N/A
	eSATA	N/A
	CFast	N/A
	mSATA	N/A
Power Supply	CompactFlash	N/A
	DC	N/A
Environment	ATX	ATX-Power 24P, 12V-8P
	Operating Temperature	0 ~ 60°C
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
Form Factor	Storage Humidity	10 ~ 90%, non-condensing
	Dimensions	305 x 244mm (ATX)
Certification	Weight	0.728 Kg
	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 22H2 (64-bit) Linux (Support by request) Noted : All driver base on Intel & chip vendor supported