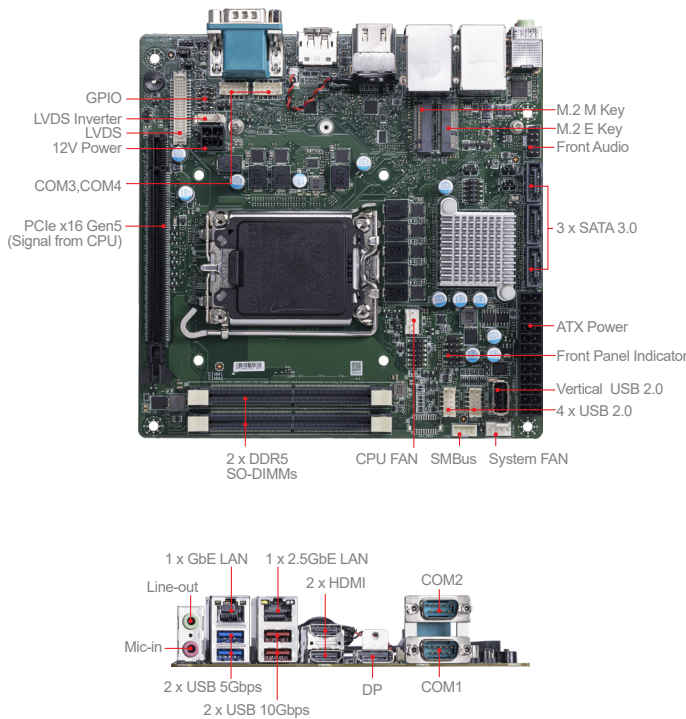


MS-CF23

Mini-ITX with 15th Gen Intel® Arrow Lake-S Core Ultra 9/7/5 Series Processor, & Intel® H810 for Mainstream Solution

NEW


Features

- Intel® 15th Gen Arrow Lake-S Core Ultra 9/7/5 Series with H810
- 2 DDR5 5600 MT/s SODIMM&CSODIMM slots up to 96GB
- Triple independent displays: DP, HDMI, LVDS
- 1 2.5GbE LAN with RJ-45, 1 GbE LAN with RJ-45
- 1 PCIe x16 (Gen 5)
- 1 M.2 E Key Slot
- 1 M.2 M Key, 3 SATA 3.0 for storage
- 2 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 5 USB 2.0, 4 COM (1 RS-485), GPIO, Audio, System FAN
- Onboard TPM 2.0
- SMBus
- ATX Power

Ordering Information

Part Number	Description
916-CF23-001	MS-CF23/606-CF23-010, 10/801-CF23-004, RL-S, H810, 2*CSOD-DR5, HDMI*2+DP+LVDS, 1*M.2 M key, 1*PCIe x16, 1*2.5GbE LAN, 1*1.0GbE LAN, 3*SATA 3.0, 2*USB 3.2 Gen2, 2*USB3.2 Gen1, 5*USB2.0, 4*COM, TPM2.0 SINGLE 12PCS/BOX
916-CF23-101	MS-CF23/606-CF23-010, 10/801-CF23-102, RL-S, H810, 2*CSOD-DR5, HDMI*2+DP+LVDS, 1*M.2 M key, 1*PCIe x16, 1*2.5GbE LAN, 1*1.0GbE LAN, 3*SATA 3.0, 2*USB 3.2 Gen2, 2*USB3.2 Gen1, 5*USB2.0, 4*COM, TPM2.0 BULK 20PCS

Packing List

Part Number	Description	Quantity
E21-CF23010-C22	I/O SHIELDING, 159.2*44.9mm, FOR HDMI*2+DP	1

Specifications

Processor	CPU	15th Gen Intel® Arrow Lake-S Core Ultra 9/7/5 Series Processor, Max. TDP-65W
	Frequency	Depends on CPU
	L2 Cache	Depends on CPU
	CPU Type	Socket (LGA 1851)
	Chipset	Socket LGA1851
Memory	BIOS	AMI UEFI
	Technology	Dual-channel DDR5 Non-ECC 5600 MT/s
	Max. Capacity	Up to 96GB
	Socket	2 x 262-pin DDR5 SO-DIMMs
Display	Controller	Intel® UHD Graphics
	Graphic Memory	Depends on CPU
	LVDS	1 x Dual channel 18/24-bit
	eDP	N/A
	VGA	N/A
	DVI	N/A
	HDMI	2
	DisplayPort	1
	Multiple Display	3 independent displays
	Display Interface	HDMI up to 4096 x 2160 @30Hz DP up to 4096 x 2304 @60Hz LVDS up to 1920 x 1200 @60Hz
Ethernet	Controller	1 x Intel® I219-LM GbE LAN PHY 1 x Intel® I226-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® SLB 9672VU2.0
I/O Interface	USB	2 x USB 10Gbps (rear) 2 x USB 5Gbps (rear) 5 x USB 2.0 (5 x Internal with one Vertical Type-A)
	Serial	4 x COM ports COM1: RS-232/422/485, Auto-flow Control COM2~4: RS-232
	Parallel	N/A
	PS/2	N/A
	GPIO	8-bits (4 x GPI; 4 x GPO), 5V
	PCIe x 16	1 x PCIe x16 (Gen 5)
Expansion Slot	M.2	1 x M key (PCIe x4 NVMe), 2280/2242 1 x E key (PCIe x1 & USB 2.0), 2230
	Mini-PCIe	N/A
	SATA	3 x SATA 3.0 (AHCI Mode Supported)
Storage	mSATA	N/A
	DC	N/A
Power Supply	ATX	ATX-Power 24P, 12V-8P
	Operating Temperature	0 ~ 60°C Note: Thermal Test w/ Airflow:0.7m/s
Environment	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
	Dimensions	170 x 170 mm (Mini-ITX)
Form Factor	Weight	0.40 kg
Certification	EMC	CE, FCC Class B, BSMI, RCM, VCCI, UKCA
Software Platform	OS Support	Windows 10 IoT Enterprise LTSC (64-bit) Windows 11 IoT Enterprise LTSC (64-bit) Linux (Support by request)

Block Diagram

