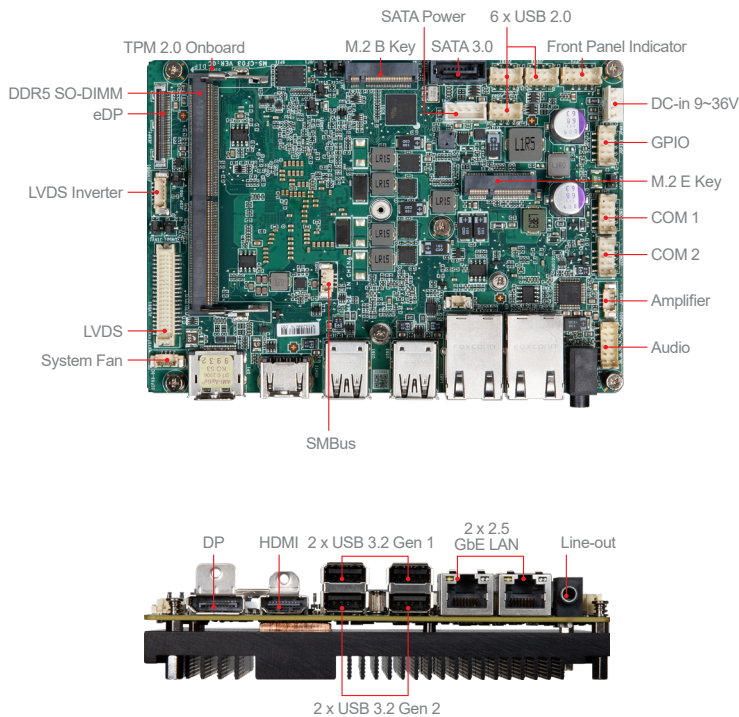


MS-CF03

3.5" SBC with Intel® Alder Lake-N & Twin Lake-N for Fanless, Ultra Low-Power, Wide Voltage Range & High-Performance Solution

NEW



Features

- Intel® Alder Lake-N & Twin Lake-N PC Client & Embedded Series SoC
- DDR5 4800 MT/s SODIMM Slot up to 16GB
- Triple independent displays: DP, HDMI, LVDS, eDP
- 2 2.5 GbE LAN with RJ-45
- 1 M.2 B Key, 1 M.2 E Key Slot
- SATA 3.0 for storage
- 2 USB 3.2 Gen 2, 2 USB 3.2 Gen 1, 6 USB 2.0, 2 COM (1 RS-485), GPIO, Audio, Amplifier-6W
- Wide Voltage DC-IN 9~36V

Ordering Information

Part Number	Description
911-CF03-008	MS-CF03\601-CF03-160\801-CF03-017 10 OPT:K, Intel ADL-N Core i3-N305, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch
911-CF03-009	MS-CF03\601-CF03-170\801-CF03-018 10 OPT:M, Intel ADL-N Atom x7425E, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch
911-CF03-010	MS-CF03\601-CF03-180\801-CF03-019 10 OPT:N, Intel ADL-N N200, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch
916-CF03-001	MS-CF03\606-CF03-270\806-CF03-002 10 Intel TWL N150, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch
916-CF03-002	MS-CF03\606-CF03-280\806-CF03-003 10 Intel TWL Core 3 N355, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch
916-CF03-006	MS-CF03\606-CF03-330\806-CF03-007 10 OPT:H, Intel ADL-N N97, 1*DDR5 SO-DIMM, 1*DP+1*HDMI+1*LVDS+1*eDP, 1*M.2 E key, 1*M.2 B key, 2*2.5GbE LAN, 1*SATA 3.0, 4*USB 3.2, 6*USB 2.0, 2*COM, TPM2.0, DC 9-36V, 3.5 inch

Optional Item

Part Number	Description
E31-0807460-K08	Heatspreader

Specifications

System Processor	CPU	Intel® Alder Lake-N Processor N97, QC, 12W Intel® Alder Lake-N Processor N200, QC, 6W Intel® Alder Lake-N Core i3-N305, OC, 9W up to 15W Intel® Alder Lake-N Atom x7425E, QC, 12W Intel® Twin Lake-N Processor N150, QC, 6W Intel® Twin Lake-N Core 3 N355, OC, 9W up to 15W
	Frequency	N97, 2.0GHz, up to 3.6GHz N200, 1.0GHz, up to 3.7GHz i3-N305, 1.8GHz, up to 3.8GHz x7425E, 1.5GHz, up to 3.4GHz N150, 0.8GHz, up to 3.6GHz N355, 1.9GHz, up to 3.9GHz
	L2 Cache	6MB
	CPU Type	BGA
	Chipset	Integrated in SoC
Memory	BIOS	AMI
	Technology	Single Channel for DDR5 4800MT/s
	Max. Capacity	Up to 16GB
	Socket	1 x 262-pin SO-DIMM
Display	Controller	Intel® UHD Graphics
	Graphic Memory	Depends on CPU
	LVDS	1 x Dual Channel 18/24-bit
	eDP	1 x eDP
	VGA	N/A
	DVI	N/A
	HDMI	1
	Display Port	1
	Multiple Display	3 independent displays
	Display Interface	LVDS up to 1920 x 1200 @60Hz eDP up to 1920 x 1080 @ 60Hz; up to 4K @ 60Hz is supported only with Alder Lake-N N97 and Twin Lake Series. HDMI up to 3840 x 2160 @30Hz DP up to 4096 x 2304 @60Hz
Ethernet	Controller	2 x Intel® I226-V 2.5 GbE LAN
Audio	Controller	Realtek® ALC897 HD Audio Codec
Super I/O	Controller	Fintek F81966AB-I
H/W Monitor	Watchdog Timer	256-level Watchdog Timer
	Smart Fan	Yes
TPM	Controller	Infineon SLB9672VU2.0
I/O Interfaces	USB	6 x USB 2.0 (internal) 2 x USB 3.2 Gen 2 (rear) 2 x USB 3.2 Gen 1 (rear)
	Serial	2 x COM ports (internal) COM1: RS-232/422/485, 0V/5V/12V COM2: RS-232
	Parallel	N/A
	PS/2	N/A
	GPIO	8-bit (4 x GPI; 4 x GPO), 5V
Expansion Slot	M.2	1 x M.2 B key (SATA/PCIe x1), 2242/3042/2280 1 x M.2 E key (PCIe x1, USB 2.0), 2230
	Mini-PCIe	N/A
	SATA	1 x SATA 3.0
Storage	mSATA	N/A
	CompactFlash	N/A
Power Supply	DC Input	DC-in 9~36V
	AC Input	N/A
Environment	Operating Temperature	-10 ~ 60°C Note: Thermal w/ Airflow:0.7m/s
	Operating Humidity	10 ~ 90%, non-condensing
	Storage Temperature	-20 ~ 80°C
	Storage Humidity	10 ~ 90%, non-condensing
Form Factor	Dimensions (W x D x H)	146 x 102 mm (3.5")
	Weight	0.58 kg
Certification	EMC	CE, FCC Class B, BSMI, VCCI, RCM, UKCA
Software Platform	OS Support	Windows 10 IoT Enterprise LTSC (64-bit, 21H2, only for ADL-N) Windows 11 IoT Enterprise LTSC (64-bit, 24H2) Linux (Support by request)

Packing List

Part Number	Description	Quantity
K14-1009062-V03	COM Port Cable, 250mm	1
K1G-3004069-V03	DC Power Cable, 150mm	1
K1D-1012115-V03	SATA Cable with Power, 230mm	1
K1B-3008067-V03	USB Cable, 150mm	1