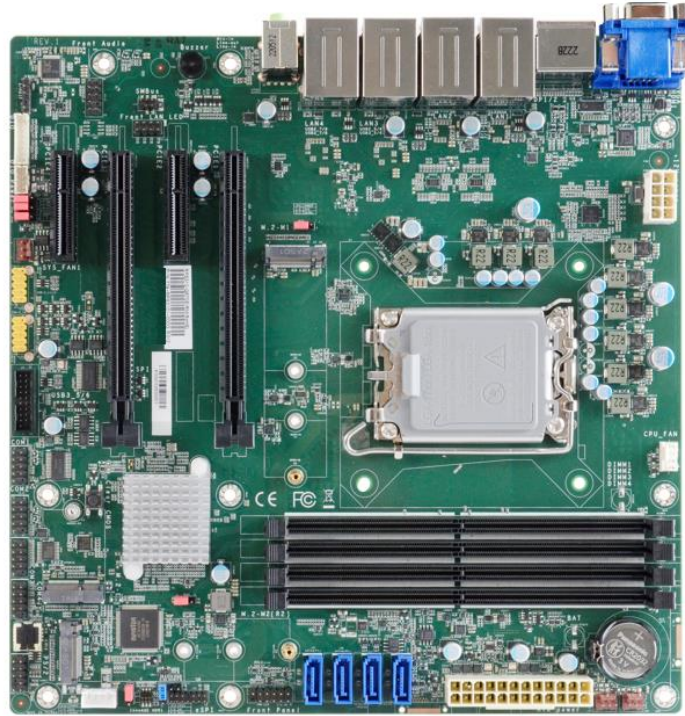




Micro ATX Industrial 12th/13th/14th Generation Motherboard With Intel® R680E Chipset

- Intel 12th/13th/14th Gen Core™ with Intel® R680E
- 4 DDR5 UDIMM up to 128GB
- Multiple expansion: 2 PCIe x16, 2 PCIe x4, 1 M.2 E key, 2 M.2 M key, 4 SATA 3.0
- Quad Displays: VGA, 2 DP++, HDMI
- Rich I/O: 2 Intel GbE, 4 COM, 4 USB 3.2 Gen2, 10 USB 3.2 Gen1, 13 USB 2.0
- 15-Year CPU Life Cycle Support until Q1 '38 (Based on Intel IOTG Roadmap)

SYSTEM	PROCESSORS	14th Generation Intel® LGA 1700 Socket Processors, TDP support up to 125W Intel® Core™ i9-14900 (24 Cores, 36M Cache, up to 2.0 GHz); 65W Intel® Core™ i9-14900T (24 Cores, 36M Cache, up to 1.1 GHz); 35W Intel® Core™ i7-14700 (20 Cores, 33M Cache, up to 2.1 GHz); 65W Intel® Core™ i7-14700T (20 Cores, 33M Cache, up to 1.3 GHz); 35W Intel® Core™ i5-14500 (14 Cores, 24M Cache, up to 2.6 GHz); 65W Intel® Core™ i5-14500T (14 Cores, 24M Cache, up to 1.7 GHz); 35W Intel® Core™ i3-14100 (4 Cores, 12M Cache, up to 3.5 GHz); 60W Intel® Core™ i3-14100T (4 Cores, 12M Cache, up to 2.7 GHz); 35W Intel® 300T (2 Cores, 6M Cache, up to 3.4 GHz); 35W 13th Generation Intel® LGA 1700 Socket Processors, TDP support up to 125W Intel® Core™ i9-13900E (24 Cores, 36M Cache, up to 5.2 GHz); 65W Intel® Core™ i9-13900TE (24 Cores, 36M Cache, up to 5.0 GHz); 35W Intel® Core™ i7-13700E (16 Cores, 30M Cache, up to 5.1 GHz); 65W Intel® Core™ i7-13700TE (16 Cores, 30M Cache, up to 4.8 GHz); 35W Intel® Core™ i7-13700T (16 Cores, 30M Cache, up to 4.9 GHz); 35W Intel® Core™ i5-13500E (14 Cores, 24M Cache, up to 4.6 GHz); 65W Intel® Core™ i5-13500TE (14 Cores, 24M Cache, up to 4.5 GHz); 35W Intel® Core™ i5-13500T (14 Cores, 24M Cache, up to 4.6 GHz); 35W Intel® Core™ i5-13400E (10 Cores, 20M Cache, up to 4.6 GHz); 65W Intel® Core™ i3-13100E (4 Cores, 12M Cache, up to 3.3 GHz); 60W Intel® Core™ i3-13100TE (4 Cores, 12M Cache, up to 4.1 GHz); 35W Intel® Core™ i3-13100T (4 Cores, 12M Cache, up to 4.2 GHz); 35W 12th Generation Intel® LGA 1700 Socket Processors, TDP support up to 125W Intel® Core™ i9-12900E (16 Cores, 30M Cache, up to 5.0 GHz); 65W Intel® Core™ i9-12900TE (16 Cores, 30M Cache, up to 4.8 GHz); 35W Intel® Core™ i7-12700E (12 Cores, 25M Cache, up to 4.8 GHz); 65W Intel® Core™ i7-12700TE (12 Cores, 25M Cache, up to 4.6 GHz); 35W Intel® Core™ i5-12500E (6 Cores, 18M Cache, up to 4.5 GHz); 65W Intel® Core™ i5-12500TE (6 Cores, 18M Cache, up to 4.3 GHz); 35W Intel® Core™ i3-12100E (4 Cores, 12M Cache, up to 4.2 GHz); 60W Intel® Core™ i3-12100TE (4 Cores, 12M Cache, up to 4.0 GHz); 35W Intel® Pentium® G7400E (2 Cores, 6M Cache, 3.6 GHz); 46W Intel® Pentium® G7400TE (2 Cores, 6M Cache, 3.0 GHz); 35W Intel® Celeron® G6900E (2 Cores, 4M Cache, 3.0 GHz); 46W Intel® Celeron® G6900TE (2 Cores, 4M Cache, 2.4 GHz); 35W Intel® R680E Chipset
	CHIPSET	Intel® R680E Chipset
	MEMORY	Four 288-pin UDIMM up to 128GB (ECC/Non-ECC)
	BIOS	Dual Channel DDR5 up to 4400 MHz
GRAPHICS	CONTROLLER	AMI SPI 256Mbit
	FEATURE	Intel® HD Gen 9 Graphics
	DISPLAY	OpenGL 4.5, DirectX 12, OpenCL 2.1
EXPANSION	QUAD DISPLAYS	HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9
	INTERFACE	HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9
	INTERFACE	1 x VGA: : resolution up to 1920x1200 @ 60Hz
AUDIO	AUDIO CODEC	2 x DP++: resolution up to 4096x2304 @ 60Hz
	CONTROLLER	1 x HDMI 2.0a: resolution up to 4096x2160 @ 24Hz
	CONTROLLER	VGA + 2 x DP++ + HDMI
ETHERNET	CONTROLLER	2 x PCIe x16 (Gen 4) (1 x16 signals or 2 x8 signals)
	CONTROLLER	2 x PCIe x4 (Gen 4)
	CONTROLLER	1 x M.2 2230 E key (opt. PCIe/USB 2.0/Intel CNVi support) (Discrete Wi-Fi 6E support)
REAR I/O	ETHERNET	1 x M.2 2242/2260/2280 M key (PCIe x4 Gen4 NVMe/SATA/Intel Optane Memory support)
	SERIAL	1 x M.2 2242/2260/2280 M key (PCIe x4 Gen4 NVMe/Intel Optane Memory support)
	USB	Realtek ALC888
PS/2	PS/2	1 x Intel® I225LM PCIe (10M/100M/1000Mbps/2.5G) (only Core i9/i7/i5 support iAMT)
	DISPLAY	1 x Intel® I225V PCIe (10M/100M/1000Mbps/2.5G)
	AUDIO	2 x 2.5GbE (RJ-45), Option to add extra 2 x 2.5GbE (RJ-45) ports (opt., MOQ required)
DISPLAY	DISPLAY	N/A
	AUDIO	4 x USB 3.2 Gen 2, 4 x USB 3.2 Gen 1
	AUDIO	N/A
AUDIO	AUDIO	1 x VGA, 2 x DP++, 1 x HDMI
	AUDIO	1 x Line-out, 1 x Mic-in, 1 x Line-in (opt., MOQ required)
	AUDIO	

INTERNAL I/O	SERIAL	2 x RS-232/422/485 2 x RS-232
	USB	2 x USB 3.2 Gen1 4 x USB 2.0 (2.54mm pitch)
	AUDIO	1 x Front Audio Header 1 x S/PDIF
	SATA	4 x SATA 3.0 (up to 6Gb/s, SATA 3) RAID 0/1/5/10
	DIO	1 x 8-bit DIO
	PS/2	1 x PS/2 (2.54mm pitch)
	SMBUS	1 x SMBus
WATCHDOG TIMER	OUTPUT & INTERVAL	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	Nuvoton TPM2.0 (opt., MOQ required)
POWER	TYPE	ATX
	CONNECTOR	8-pin ATX 12V power; 24-pin ATX power
OS SUPPORT	CONSUMPTION	TBD
	RTC, BATTERY	CR2032 Coin Cell
	MICROSOFT	Windows 10 IoT Enterprise 64-bit Windows 11 Pro 64-bit (Motherboard option with TPM/fTPM)
	LINUX	Linux
ENVIRONMENT	TEMPERATURE	Operating: -5 to 65°C Storage: -30 to 60°C with RTC Battery; -40 to 85°C without RTC Battery
	HUMIDITY	Operating: 5 to 95% RH Storage: 5 to 95% RH
	MTBF	TBD
MECHANICAL	DIMENSIONS	microATX Form Factor 244mm (9.6") x 244mm (9.6")
	HEIGHT	PCB: 1.6mm Top Side: TBD Bottom Side: TBD
CERTIFICATIONS		CE, FCC Class B, UKCA

Dimensions

