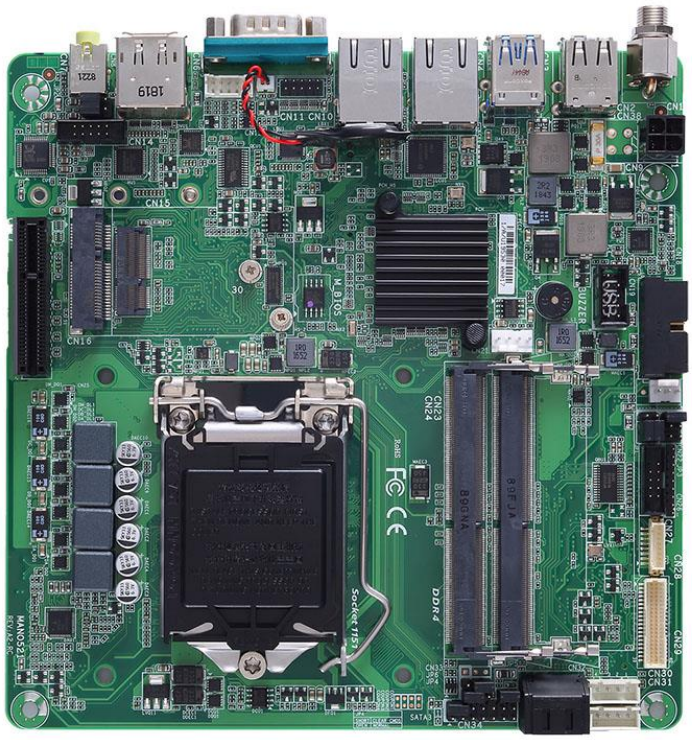
MBU3118

Industrial Motherboard Series



Industrial Computers
A brand of Kontron UK

POSSIBILITIES START HERE kontron S&T Group

MBU3118

PRODUCT HIGHLIGHTS

- Intel 8th/9th Gen Intel® Core™ with Intel® Q370
- 2 DDR4 SODIMM up to 64Gb
- Multiple expansion: 1 x PCIe x4, 1 x M.2 Key E (2230)
- 3 display ports: HDMI + DP++ + LVDS
- Rich I/O: 2 Intel GbE, 2 COM, 4 USB 3.0, 4 USB 2.0
- 15-Year CPU Life Cycle Support Until Q3' 34 (Based on Intel IOTG Roadmap)



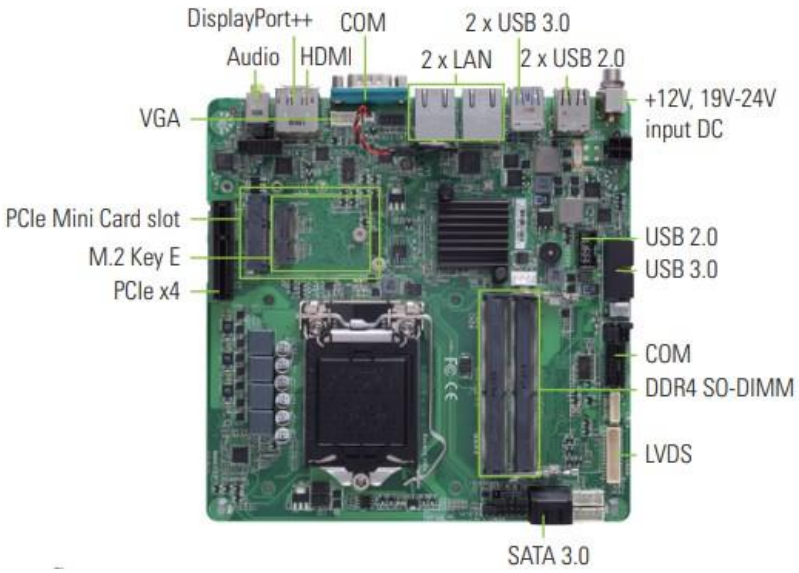
TECHNICAL INFORMATION

SYSTEM	**PROCESSOR**	9th Generation Intel® Core™ Processors, LGA 1151 Socket, TDP up to 95W Intel® Core i9-9900K Processor (Core 8, Max speed 5.0 GHz; TDP 95W) (Non-LTS) Intel® Core i7-9700E Processor (Core 8; Max speed 4.4 GHz; TDP 65W) Intel® Core i7-9700TE Processor (Core 8; Max speed 3.8 GHz; TDP 35W) Intel® Core i5-9500E Processor (Core 6; Max speed 4.2 GHz; TDP 65W) Intel® Core i5-9500TE Processor (Core 6; Max speed 3.6 GHz; TDP 35W) Intel® Core i3-9100E Processor (Core 4; Max speed 3.7 GHz; TDP 65W) Intel® Core i3-9100TE Processor (Core 4; Max speed 3.2 GHz; TDP 35W) 8th Generation Intel® Core™ Processors, LGA 1151 Socket, TDP up to 95W Intel® Core™ i7-8700 Processor (Core 6; Max speed 4.6 GHz; TDP 65W) Intel® Core™ i7-8700T Processor (Core 6; Max speed 4.0 GHz; TDP 35W) Intel® Core™ i5-8500 Processor (Core 6; Max speed 4.1 GHz; TDP 65W) Intel® Core™ i5-8500T Processor (Core 6; Max speed 3.5 GHz; TDP 35W) Intel® Core™ i3-8100 Processor (Core 4; Max speed 3.6 GHz; TDP 65W) Intel® Core™ i3-8100T Processor (Core 4; Max speed 3.1 GHz; TDP 35W) Intel® Pentium G5400 Processor (Core 2; Max speed 3.7 GHz; TDP 58W) Intel® Celeron G4900 Processor (Core 2; Max speed 3.1 GHz; TDP 54W)
	CHIPSET	Intel® Q370 Chipset
	MEMORY	2 x 260-pin DDR4-2666/2400 SO-DIMM, up to 64GB
	BIOS	AMI
GRAPHICS	**CONTROLLER**	Intel® integrated Gfx graphic engine
	MEMORY SIZE	Shares system memory
	DISPLAY	1 x DisplayPort++ 1 x HDMI 1.4b (3840 x 2160 @30Hz) 1 x LVDS; 18/24-bit single/dual channel 1 x VGA (Wafer connector)
	TRIPLE DISPLAYS	Supports Triple Display outputs
EXPANSION	**INTERFACE**	1 x PCIe x4 1 x M.2 Key E (22 x 30) 1 x Full-size PCI Express Mini Card slot
AUDIO	**AUDIO CODEC**	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
ETHERNET	**CONTROLLER**	1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM
REAR I/O	**ETHERNET**	2 x GbE (RJ-45)
	USB	2 x USB 3.0 & 2 x USB 2.0
	SERIAL	1 x COM port
	PS/2	N/A
	DISPLAY	1 x HDMI & 2 x DP++
	AUDIO	1 x Line-out, 1 x Mic-in
	POWER	DC Power Jack connector: ATX 2 x 2-pin vertical/horizontal (optional) connector support 12V, 19 to 24 VDC input AT Auto Power On function supported

TECHNICAL INFORMATION (CONTINUED)

INTERNAL I/O	**SERIAL**	1 x RS-232
	USB	2 x USB 3.0 2 x USB 2.0
	AUDIO	N/A
	SATA	2 x SATA 3.0 Supports RAID 0/1
	DIO	1 x 8-bit DIO
	LPC	N/A
	SMBUS	N/A
	OUTPUT & INTERVAL	System Reset, Programmable via Software from 1 to 255 Seconds
	SECURITY TPM	N/A
	TYPE	DC Power Jack connector
	CONNECTOR	ATX 2 x 2-pin vertical/horizontal (optional) connector support 12V, 19 to 24 VDC input AT Auto Power On function supported
OS SUPPORT		Windows 10 Pro Windows 10 IoT Enterprise 64-bit Linux
ENVIRONMENT	**TEMPERATURE**	0°C to +60°C (+32°F to +140°F)
	HUMIDITY	10% to 95% relative humidity, non-condensing
	HARDWARE MONITORING	Detects CPU/system temperature, voltage and fan speed
MECHANICAL	**DIMENSIONS**	Mini-ITX Form Factor 170mm (6.7") x 170mm (6.7")
	HEIGHT	PCB: 1.6mm
CERTIFICATIONS		CE

MOTHERBOARD LAYOUT



Company Address

Kontron UK Limited
Units 3, 4, 5, 9 & 10 New Bury Park
Marsh Lane, Easthampnett, UK
TEL: +44 (0) 1243 380780
uksales@kontron.com
www.industrial-computers.com