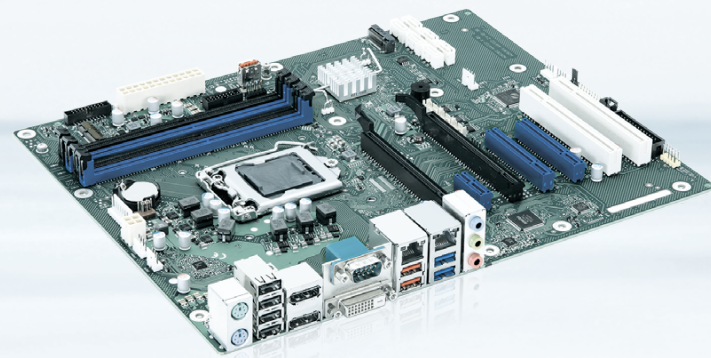


ATX MOTHERBOARDS



ATX MOTHERBOARDS

ATX (Advanced Technology eXtended) motherboard is a well accepted PC standard for all types of PC systems. It can have complete flexibility in the layout of rear panel I/O interfaces because of its large size. In addition, it contains more space for memory and expansion slots for a variety of devices, such as NIC cards, I/O expansion cards, motion control card, television tuners, radio tuners, video cards, sound cards and other possible functional cards depending on industrial applications and requirements. Kontron offers a variety of ATX motherboards from Core™ desktop based solution to Xeon® server based solutions to use in industrial applications. They come up with an availability of up to 7 years from the release date, based on embedded key components. Furthermore, Kontron offers many value-added services like detailed documentation, a professional life-cycle management and customizing tools.

SPECIAL FEATURES

The motherboards components of the industrial series are designed for long-term, continuous operations (24/7) in an extended temperature range and high system load. Industrial motherboards are specified for a temperature range between 0 and 60 ° Celsius.

▶ LONG LIFECYCLE

Availability up to 7 years

▶ ENHANCED HARDWARE FEATURE SET

24/7 continuous operation at 60°C

▶ EXTENSIVE POWERFUL SOFTWARE TOOLS

Customization of Motherboards

About Kontron – Member of the S&T Group

Kontron is a global leader in IoT/Embedded Computing Technology (ECT). As a part of technology group S&T, Kontron offers a combined portfolio of secure hardware, middleware and services for Internet of Things (IoT) and Industry 4.0 applications. With its standard products and tailor-made solutions based on highly reliable state-of-the-art embedded technologies, Kontron provides secure and innovative applications for a variety of industries. As a result, customers benefit from accelerated time-to-market, reduced total cost of ownership, product longevity and the best fully integrated applications overall.

For more information, please visit: www.kontron.com

About the Intel® Partner Alliance

From modular components to market-ready systems, Intel and the over 1,000+ global member companies of the Intel® Partner Alliance provide scalable, interoperable solutions that accelerate deployment of intelligent devices and end-to-end analytics. Close collaboration with Intel and each other enables Alliance members to innovate with the latest IoT technologies, helping developers deliver first-in-market solutions.

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ATX MOTHERBOARDS



D3598-B ATX



D3598-G ATX



D3646-S ATX



ATX-KBL-S



ATX-SKL-S

BASEBOARD	DIMENSIONS	9.6" x 12" (243.8 x 304.8 mm)
	CHIPSET	Intel® C422
CPU SUPPORT	PROCESSOR	Intel® Xeon® W-21xx/-22xx Processors Future Intel® Xeon® W Processors
	PROCESSOR SOCKET	Intel LGA2066
	MAX. PROCESSOR POWER CONSUMPTION	165 W
	CPU TDP LIMITING OPTION	-
	HIGH EFFICIENCY CORE VOLTAGE REGULATOR	yes
MEMORY	MAX. CAPACITY/ NUMBER OF SOCKETS	512 GByte/8 ECC Support
	RAM SPEED	DDR4 2666/2933
GRAPHICS	ONBOARD GRAPHICS	-
	GRAPHICS INTERFACES	-
ETHERNET	ONBOARD LAN CONTROLLER	Intel® i219LM Intel® i210AT
	IAMT/VPRO	yes/-
AUDIO	TYPE	5.1 Multich.
	ONBOARD CONTROLLER	Realtek ALC671
	BUZZER/SPEAKER/S/PDIF HEADER	yes/yes/-
EXTENSION SLOTS	PCIe X16/X8/X4/X1/PCI	2/5/-/-/-
	MINI-PCIe/MSATA	yes/-
	M.2 SSD (PCIe AND/OR SATA) (2280)	PCIe @ 4lanes; Key-M
	M.2 WLAN (KEY-E)	-
EXTERNAL/ INTERNAL CONNECTORS	USB PORTS 3.2 GEN2/ 3.2 GEN1/2.0/ STICK SOCKET	2/10/2/yes
	SATA PORTS/SATA RAID	8/yes
	COM PORT INT. HEADER/ EXT. // PARALLEL PORT INT. HEADER	1/- // -
POWER SUPPLY OPTIONS	EXTERNAL SUPPLY	-
	INTERNAL SUPPLY	ATX PSU
MISCELLANEOUS	FAN SPEED CUSTOMIZING	yes
	TPM V2.0	yes (Infineon)
	CHASSIS INTRUSION SUPPORT	yes
	HW WATCHDOG	yes
	MISCELLANEOUS	Intel® VROC Support USB 3.1 Gen2 Type-C, Win7 & Win10 Support 2x PCIe x16 (@16 Lanes) 1x USB Type-C (Rear)

DIMENSIONS	9.6" x 12" (243.8 x 304.8 mm)
CHIPSET	Intel® X299
PROCESSOR	Intel® Core™ i7-78xxX/-98xxX processors Intel® Core™ i9-79xxX/-98xxX/-99xxX/-109xxX Processors Future Intel® Core™ X-Series Processors
PROCESSOR SOCKET	Intel LGA2066
MAX. PROCESSOR POWER CONSUMPTION	165 W
CPU TDP LIMITING OPTION	-
HIGH EFFICIENCY CORE VOLTAGE REGULATOR	yes
MAX. CAPACITY/ NUMBER OF SOCKETS	128 GByte/8
RAM SPEED	DDR4 2666/2933
ONBOARD GRAPHICS	-
GRAPHICS INTERFACES	-
ONBOARD LAN CONTROLLER	Intel® i219LM Intel® i210AT
IAMT/VPRO	-/-
TYPE	5.1 Multich.
ONBOARD CONTROLLER	Realtek ALC671
BUZZER/SPEAKER/S/PDIF HEADER	yes/yes/-
PCIe X16/X8/X4/X1/PCI	2/5/-/-/-
MINI-PCIe/MSATA	yes/-
M.2 SSD (PCIe AND/OR SATA) (2280)	PCIe @ 4lanes; Key-M
M.2 WLAN (KEY-E)	-
USB PORTS 3.2 GEN2/ 3.2 GEN1/2.0/ STICK SOCKET	2/10/2/yes
SATA PORTS/SATA RAID	8/yes
COM PORT INT. HEADER/ EXT. // PARALLEL PORT INT. HEADER	1/- // -
EXTERNAL SUPPLY	-
INTERNAL SUPPLY	ATX PSU
FAN SPEED CUSTOMIZING	yes
TPM V2.0	yes (Infineon)
CHASSIS INTRUSION SUPPORT	yes
HW WATCHDOG	yes
MISCELLANEOUS	Intel® VROC Support USB 3.1 Gen2 Type-C, Win10 Support 2x PCIe x16 (@16 Lanes) 1x USB Type-C (Rear)

DIMENSIONS	9.6" x 12" (243.8 x 304.8 mm)
CHIPSET	Intel® C246
PROCESSOR	Intel® Core™ 8th/9th Gen & Xeon® Processor Series
PROCESSOR SOCKET	Intel LGA1151
MAX. PROCESSOR POWER CONSUMPTION	95 W
CPU TDP LIMITING OPTION	yes
HIGH EFFICIENCY CORE VOLTAGE REGULATOR	yes
MAX. CAPACITY/ NUMBER OF SOCKETS	64 GByte/4
RAM SPEED	DDR4 2400/2666 ECC support
ONBOARD GRAPHICS	Intel® UHD Graphics; DX 12
GRAPHICS INTERFACES	DVI-D/2x DP V1.2 Optional VGA-Ext. D3653
ONBOARD LAN CONTROLLER	Intel® i219LM Intel® i210AT
IAMT/VPRO	yes/yes
TYPE	5.1 Multich.
ONBOARD CONTROLLER	Realtek ALC671
BUZZER/SPEAKER/S/PDIF HEADER	yes/yes/yes
PCIe X16/X8/X4/X1/PCI	2/2/-/1/2
MINI-PCIe/MSATA	-/-
M.2 SSD (PCIe AND/OR SATA) (2280)	PCIe @ 4lanes; Key-M
M.2 WLAN (KEY-E)	yes
USB PORTS 3.2 GEN2/ 3.2 GEN1/2.0/ STICK SOCKET	2/4/6/yes
SATA PORTS/SATA RAID	6/yes
COM PORT INT. HEADER/ EXT. // PARALLEL PORT INT. HEADER	3/1 // yes
EXTERNAL SUPPLY	-
INTERNAL SUPPLY	ATX PSU
FAN SPEED CUSTOMIZING	yes
TPM V2.0	yes (Infineon)
CHASSIS INTRUSION SUPPORT	yes
HW WATCHDOG	yes
MISCELLANEOUS	GPI0 (8Bit) 4x COM

DIMENSIONS	9.6" x 12" (243.8 x 304.8 mm)
CHIPSET	Intel® Q170
PROCESSOR	Intel® Core™ 7th Gen & Celeron® Processor Series
PROCESSOR SOCKET	Intel LGA1151
MAX. PROCESSOR POWER CONSUMPTION	91 W
CPU TDP LIMITING OPTION	-
HIGH EFFICIENCY CORE VOLTAGE REGULATOR	yes
MAX. CAPACITY/ NUMBER OF SOCKETS	64 GByte/4
RAM SPEED	DDR4 2133/2400
ONBOARD GRAPHICS	Intel® HD Graphics 630/610; DX 12
GRAPHICS INTERFACES	HDMI V 1.4/DP V 1.2/DVI-D VGA (by header)
ONBOARD LAN CONTROLLER	Intel® i219LM Intel® i210AT
IAMT/VPRO	yes/-
TYPE	Stereo
ONBOARD CONTROLLER	Realtek ALC8885
BUZZER/SPEAKER/S/PDIF HEADER	yes/yes/-
PCIe X16/X8/X4/X1/PCI	1/-/2/-/4
MINI-PCIe/MSATA	yes/yes
M.2 SSD (PCIe AND/OR SATA) (2280)	-
M.2 WLAN (KEY-E)	-
USB PORTS 3.2 GEN2/ 3.2 GEN1/2.0/ STICK SOCKET	-/6/6/-
SATA PORTS/SATA RAID	4/yes
COM PORT INT. HEADER/ EXT. // PARALLEL PORT INT. HEADER	5/1/-
EXTERNAL SUPPLY	-
INTERNAL SUPPLY	ATX PSU
FAN SPEED CUSTOMIZING	yes
TPM V2.0	yes (Infineon)
CHASSIS INTRUSION SUPPORT	-
HW WATCHDOG	yes
MISCELLANEOUS	DIO (16Bit) Win10 Support

DIMENSIONS	9.6" x 12" (243.8 x 304.8 mm)
CHIPSET	Intel® Q170
PROCESSOR	Intel® Core™ 6th Gen & Celeron® Processor Series
PROCESSOR SOCKET	Intel LGA1151
MAX. PROCESSOR POWER CONSUMPTION	91 W
CPU TDP LIMITING OPTION	-
HIGH EFFICIENCY CORE VOLTAGE REGULATOR	yes
MAX. CAPACITY/ NUMBER OF SOCKETS	64 GByte/4
RAM SPEED	DDR4 1866/2133
ONBOARD GRAPHICS	Intel® HD Graphics 530/510; DX 12
GRAPHICS INTERFACES	HDMI V 1.4/DP V 1.2/DVI-D VGA (by header)
ONBOARD LAN CONTROLLER	Intel® i219LM Intel® i210AT
IAMT/VPRO	yes/-
TYPE	Stereo
ONBOARD CONTROLLER	Realtek ALC8885
BUZZER/SPEAKER/S/PDIF HEADER	yes/yes/-
PCIe X16/X8/X4/X1/PCI	1/-/2/-/4
MINI-PCIe/MSATA	yes/yes
M.2 SSD (PCIe AND/OR SATA) (2280)	-
M.2 WLAN (KEY-E)	-
USB PORTS 3.2 GEN2/ 3.2 GEN1/2.0/ STICK SOCKET	-/6/6/-
SATA PORTS/SATA RAID	4/yes
COM PORT INT. HEADER/ EXT. // PARALLEL PORT INT. HEADER	5/1/-
EXTERNAL SUPPLY	-
INTERNAL SUPPLY	ATX PSU
FAN SPEED CUSTOMIZING	yes
TPM V2.0	yes (TPM 1.2, Infineon)
CHASSIS INTRUSION SUPPORT	-
HW WATCHDOG	yes
MISCELLANEOUS	DIO (16Bit) Win10, Win8, Win7 Support