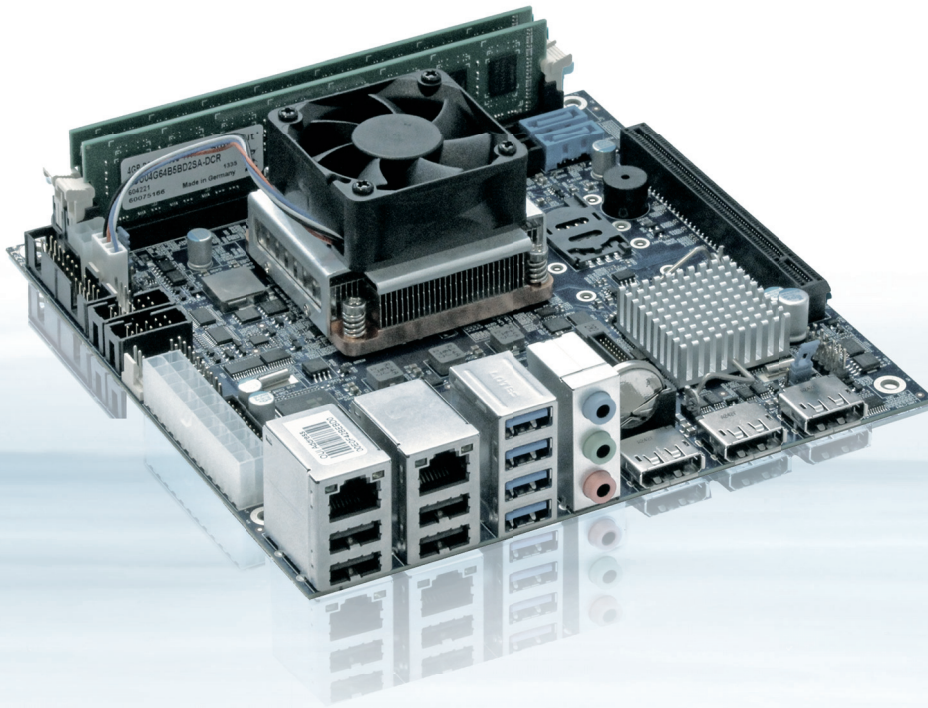


KTQ87/mITX



EMBEDDED Mini-ITX MOTHERBOARD WITH Intel® Q87 CHIPSET AND 4th GEN Intel® I7/I5/I3 DUAL AND QUAD CORE CPUS

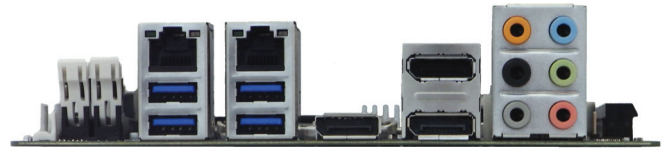
- ▶ 4th Generation Intel® 22nm Dual and Quad Core i7, i5, i3, Pentium & Celeron® CPUs with Intel® Q87 Lynx Point PCH
- ▶ long term available Embedded mITX motherboard
- ▶ high performance CPU, graphics, and media performance supporting 3 independent displays pipes
- ▶ graphics APIs DirectX 11.1, OpenGL 4.x, OpenCL 1.2

POSSIBILITIES START HERE



KTQ87/mITX

- ▶ **Gaming/POS/POI:** High graphics and CPU performance, multi display support
- ▶ **Medical:** High Graphics performance & longevity
- ▶ **Industrial Automation:** Wide range of I/Os & longevity
- ▶ **Future-oriented Devices** Due to Display Port and mSATA/compact SSD support



▶ TECHNICAL INFORMATION

FEATURES	KTQ87 mITX Desktop Motherboards
FORM FACTOR	mini-ITX 170 x 170 mm (6.7" x 6.7")
CPU	Intel® Core i7/i5/i3 2C/4C CPU clock up to 3.1 GHz
GRAPHICS	Integrated into CPU with GT1 or GT2 depending on CPU type
GRAPHIC INTERFACE	3x Display Port revision 1.2 in Rear IO
MEMORY	Up to 8 GByte DDR3L/DDR3, 2x (max. 16 GByte), PC3-10600/PC3-12800 support
CHIPSET	Intel® Embedded Q87
FRONT SIDE BUS	DMI 2.0 support, four lanes in each direction, up to 20 Gb/s each direction, full duplex, DMI interface to PCH is supported
SATA	5x SATA interfaces SATA 1.5/3/6Gbit/s w. RAID 0/1/5/10
USB	4x USB 3.0 & 10 USB 2.0. (4x USB3.0/USB2.0 Rear IO, 4x USB2.0 Internal Header, USB2.0 mPCIe, USB2.0 mSATA)
AUDIO	HD Audio codec VT1708S supporting 7.1 channel surround sound
ETHERNET	2x Intel Gigabit-LAN, one LAN controller supporting Intel® AMT 9.0
AVAILABLE I/OS	PCIe x16 socket with Gen3 and Gen2 support, 1x Mini-PCIe, 1x mSATA 1.5/3/6Gbit/s, 2x COM (RS232)
REAR I/O	Audio stacked 2x3 mini Jack tower, 4x USB, 3x Display port, 2x RJ45 LAN
SPECIAL FEATURE	AMT 9.0, TPM 1.2, Intel® AES security, Kontron embedded feature connector with ADC, DAC up to 160 GPIO
OS SUPPORT	Win7, Win8 WES8, WES7, Linux, VxWorks
TEMPERATURE	Operating 0 °C to 50 °C (32 °F to 122 °F)
ADDITIONAL	Up to 7 years availability

▶ ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
KTH87/mITX	810581-4500	Mini-ITX board based on Intel® Shark Bay platform
CPU		
CPU, CORE I5	1054-9757	CPU, Core I5-4570S GT2 2.9G 4C 6M LGA1150
CPU, CORE I7	1054-9752	CPU, Core I7-4770S GT2 3.1G 4C 8M LGA1150

Further CPUs will be defined in near future.

RECOMMENDED MEMORY MODULES	NEW SKU 04/16*	OLD SKU	SKU NAME**
	1060-2492	1054-3702	DDR3-1333 DIMM 2 GByte
	1060-2494	1054-3703	DDR3-1333 DIMM 4 GByte
	1060-2496	1054-3704	DDR3-1333 DIMM 8 GByte
	1060-2498	1054-3707	DDR3-1600 DIMM 2 GByte
	1060-2500	1054-3708	DDR3-1600 DIMM 4 GByte
	1060-2488	1052-5601	DDR3-1600 DIMM 8 GByte

*SKU changes were caused by administrative issues only, no hardware changes.

**Named are always the min. requirements, the shipped memory can fulfill a higher performance level

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