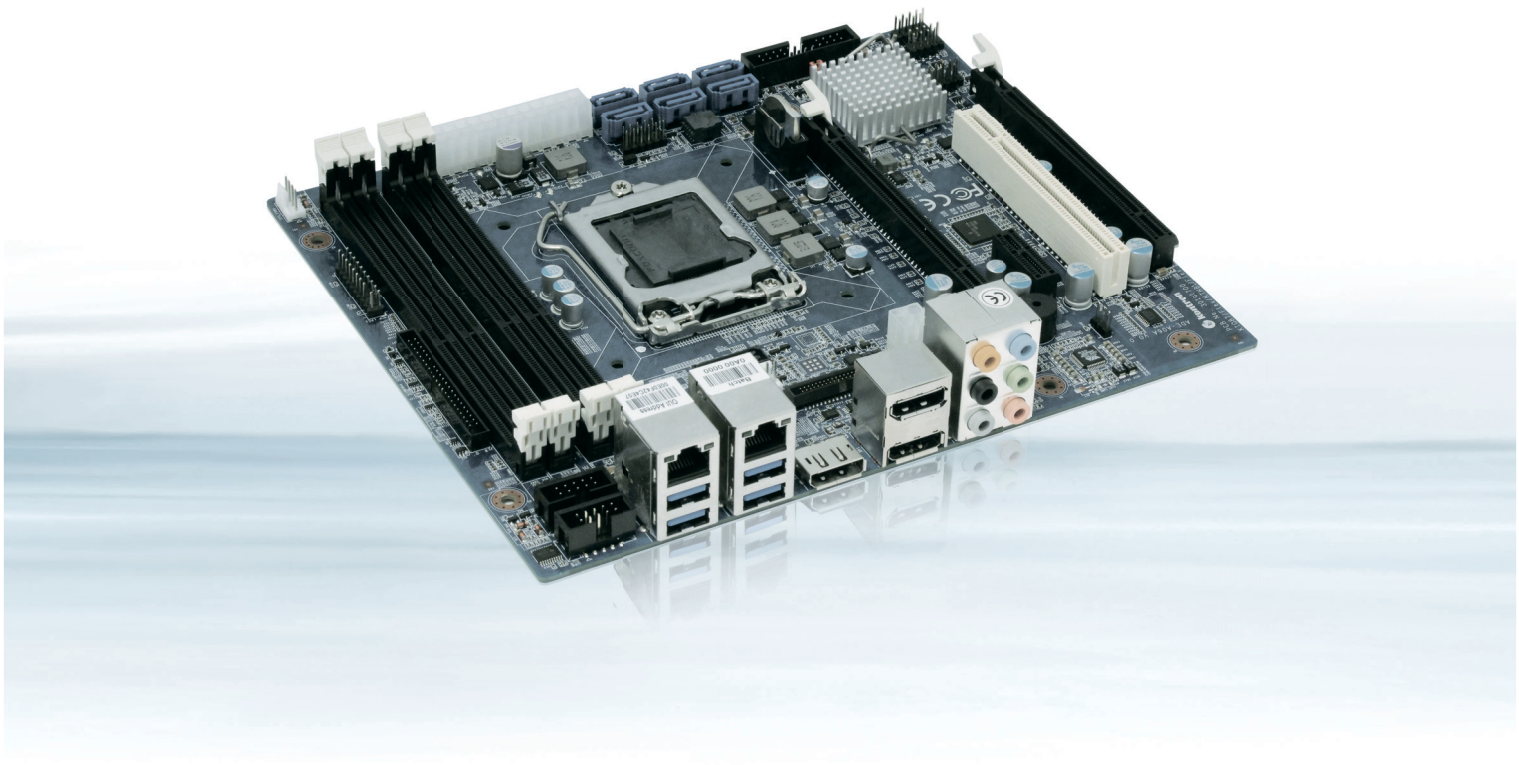
KTQ87/Flex



EMBEDDED FLEX MOTHERBOARD WITH Intel® Q87 CHIPSET AND 4th GENERATION Intel® i7/i5/i3 Dual AND Quad Core™ CPUs

- 4th Generation Intel® 22 nm Dual and Quad Core™ i7, i5, i3, Pentium & Celeron® CPUs with Intel® Q87 Lynx Point PCH
- Long term available Embedded Flex motherboard
- High performance CPU, graphics, and media performance supporting 3 independent displays pipes

kontron

AN S&T COMPANY

KTQ87/Flex

- **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 DisplayPort and LVDS



TECHNICAL INFORMATION

FORM FACTOR	Flex 229 x 191 mm (7.5" x 9.0")
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 DisplayPort revision 1.2 in Rear IO 1x 18/24Bit dual Link LVDS interface in internal header, Note: LVDS interface share one DisplayPort
MEMORY	Up to 8 GByte DDR3L/DDR3, 4x DIMM (max. 32 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	6x SATA interfaces SATA 1.5/3/6 Gbit/s w. RAID 0/1/5/10
USB	4x USB 3.0 & 8 USB 2.0. (4x USB3.0/USB2.0 Rear IO, 8x USB2.0 Internal Header)
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 x4 PCIe, 1x x1 PCIe, 1x PCI rev 2.3, 2x COM (RS232)
REAR I/O	Audio stacked 2x 3 mini Jack tower, 4x USB, 3x DisplayPort, 2x RJ45 LAN
SPECIAL FEATURE	AMT 9.0, TPM 1.2, Intel® AES security, Kontron embedded feature connector with ADC, DAC up to 160 GPIOs
OS SUPPORT	Win7, Win8 WES8, WES7, Linux, VxWorks
TEMPERATURE	Operating 0 °C to 60 °C (32 °F to 140 °F)
ADDITIONAL	Up to 7 years availability

ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
KTQ87/FLEX	810582-4500	Flex board based on Intel® Shark Bay platform
CPUS		
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
CPU, CORE i3	1055-5247	CPU, Core i3-4330 GT2 3.5G 2C 4M, 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

GLOBAL HEADQUARTERS

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