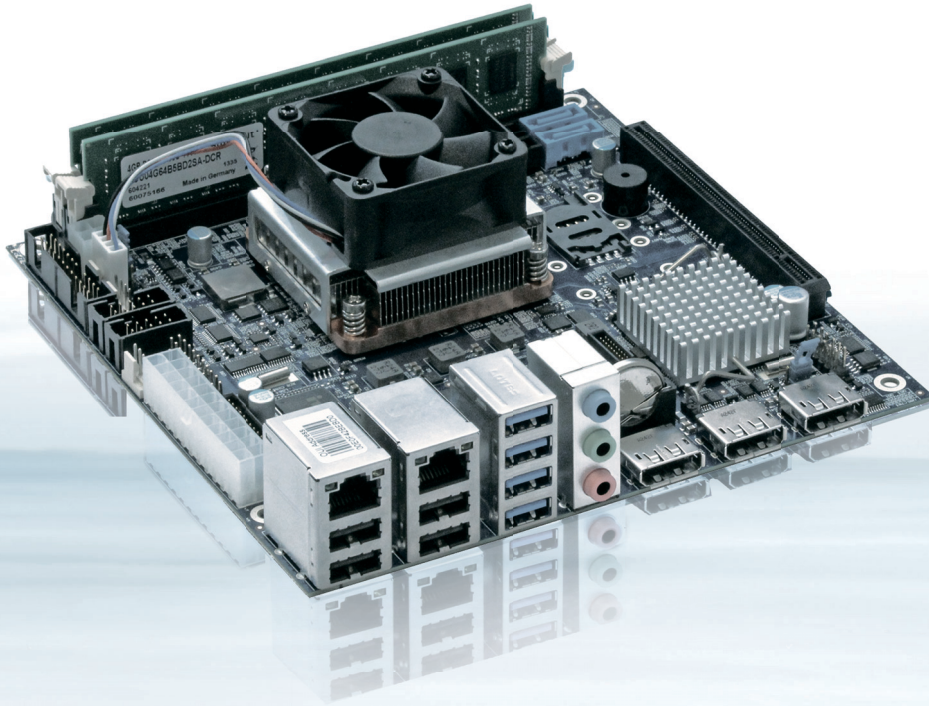


# KTQ87/mITX

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## 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

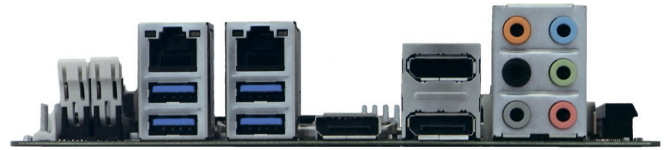
POSSIBILITIES START HERE



**kontron**

# 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

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

## ▶ ORDERING INFORMATION

| ARTICLE             | PART NO.    | DESCRIPTION   |
|---------------------|-------------|---|
| KTQ87/mITX          | 810580-4500 | Q87, mITX, 4x USB 3.0/2.0 ports in Rear-IO, 5x 3/6Gb/s SATA with RAID 0,1,5 & 10, 2x GByte LAN one supporting AMT 9.0, 3x Display Ports |
| <b>CPUS</b>         |             |   |
| <b>CPU, CORE i5</b> | 1054-9757   | CPU, Core I5-4570S GT2 2.9G 4C 6M LGA1150   |
| <b>CPU, CORE i7</b> | 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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