

Toucan-QM57

COM Express Module

Intel® Core™ i7 Processor



Features

Intel Core i7 Processor, 2.53 GHz max.

8 GB DDR3 ECC RAM maximum. Supports ruggedized XR-DIMM™ modules.

2 DisplayPorts, LVDS (dual channel)

1 x Gigabit LAN

8 x USB 2.0 host ports

4 x SATA with RAID support

Specifications

Board Format	COM Express (Type 2, Rev. 2.0) 95.00 x 125.00 mm
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Processor	Intel Core i7 processor i7 – 620UE, 1.06 GHz, Dual Core i7 – 610E, 2.53 GHz, Dual Core
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Chipset	Mobile Intel QM57 Express
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RAM	8 GB DDR3 ECC RAM maximum - 4 GB soldered - 4 GB XR-DIMM™ module optional
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RAM Clock	i7-610E: DDR3-1066 i7-620UE: DDR3-800
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Graphics	Intel HD Graphics 2560 x 1920 pixels
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VGA	Yes
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DisplayPort	2 (see note)
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SDVO	Configurable (see note)
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LVDS	18, 24 bit Dual channel, up to 1600 x 1200 px Interleave modus: 1900 x 1200
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USB	8x USB 2.0 hosts
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Ethernet	Gigabit LAN - Integrated in chipset, with 82577 PHY
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SATA	4 ports Support for RAID 0, 1, 5, 10
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PATA	1 UDMA6 port, via JMB368
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Audio	Intel HD Audio, external Codec required
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Watchdog	Yes (LEMT)
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PCI Express Bus	- 6 x1 lanes (PCIe 1.0a) - 1 x16 lane, configurable as 2 x8 lanes (see note) (2.5Gbit/s, PCIe 2.0 compliant)
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PCI Bus	Yes, 3.3 V
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LPC Bus	Yes
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SPI Bus	Yes
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SMB Bus	Yes
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Status LED	Power, power mode, SMC activity, watch-dog
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Power Supply	5 ... 14 V only
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Power Consumption	25 – 45 watts, depending on processor type
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Cooling	Active (Passive for i7-620UE processor) Heatspreader available
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MTBF	t.b.d.
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Operating temperature	0°C...+60°C (commercial, all versions) -20°C...+60°C (industrial, all versions) -40°C...+85°C (extended, optional)
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BIOS	Phoenix BIOS BIOS parameters are saved in Flash
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LEMT	Yes, Condition Monitoring
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Supported OS	Windows, Linux
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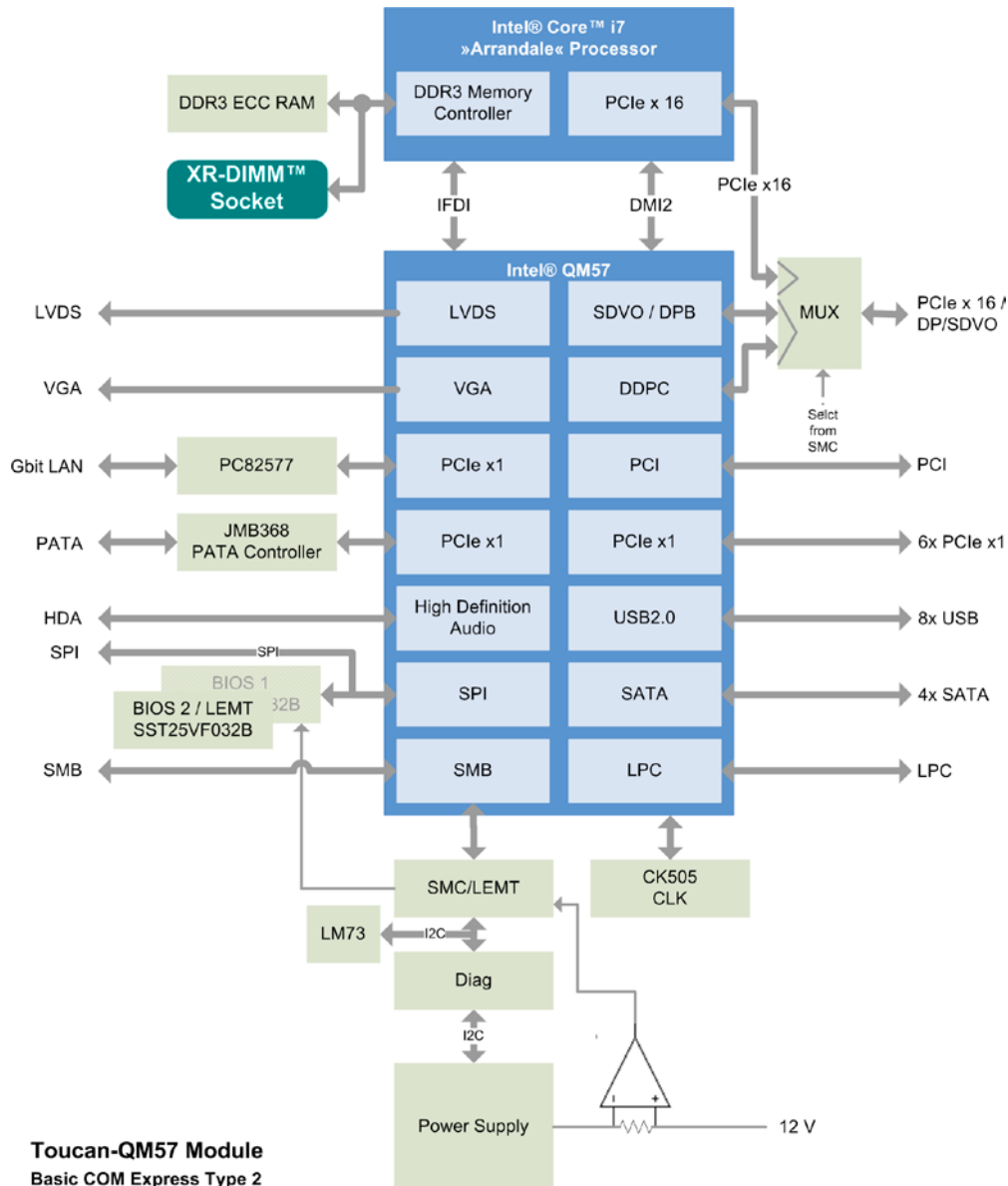
NOTE: SDVO & DP1 are alternatives to PCIe x16

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Block Diagram



Toucan-QM57 Module
Basic COM Express Type 2

Ordering Information

Ordering Number	Description
t09-0014-10	COM Express board with Intel 610E, 2.53 GHz, 2 GB ECC RAM, incl. heat spreader
t09-0015-10	COM Express board with Intel 620UE, 1.06 GHz, 2 GB ECC RAM, incl. heat spreader

Note: t denotes the temperature range. Use 7 for commercial, 8 for industrial and 9 for extended temperature range
Other processor and memory configurations are available on request.

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