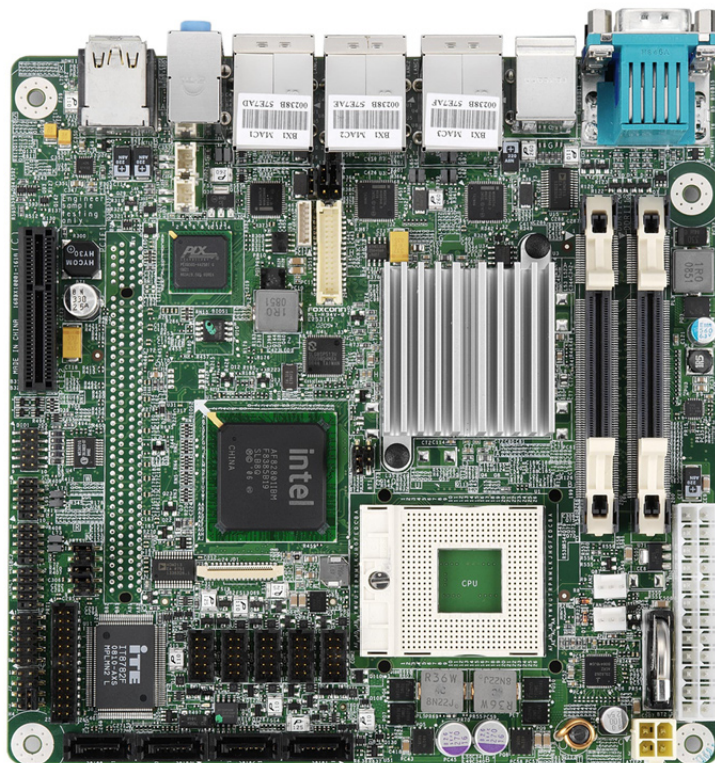


KEMX-4030

Industrial Motherboard in Mini-ITX form factor
with Intel® GM45/ ICH9M



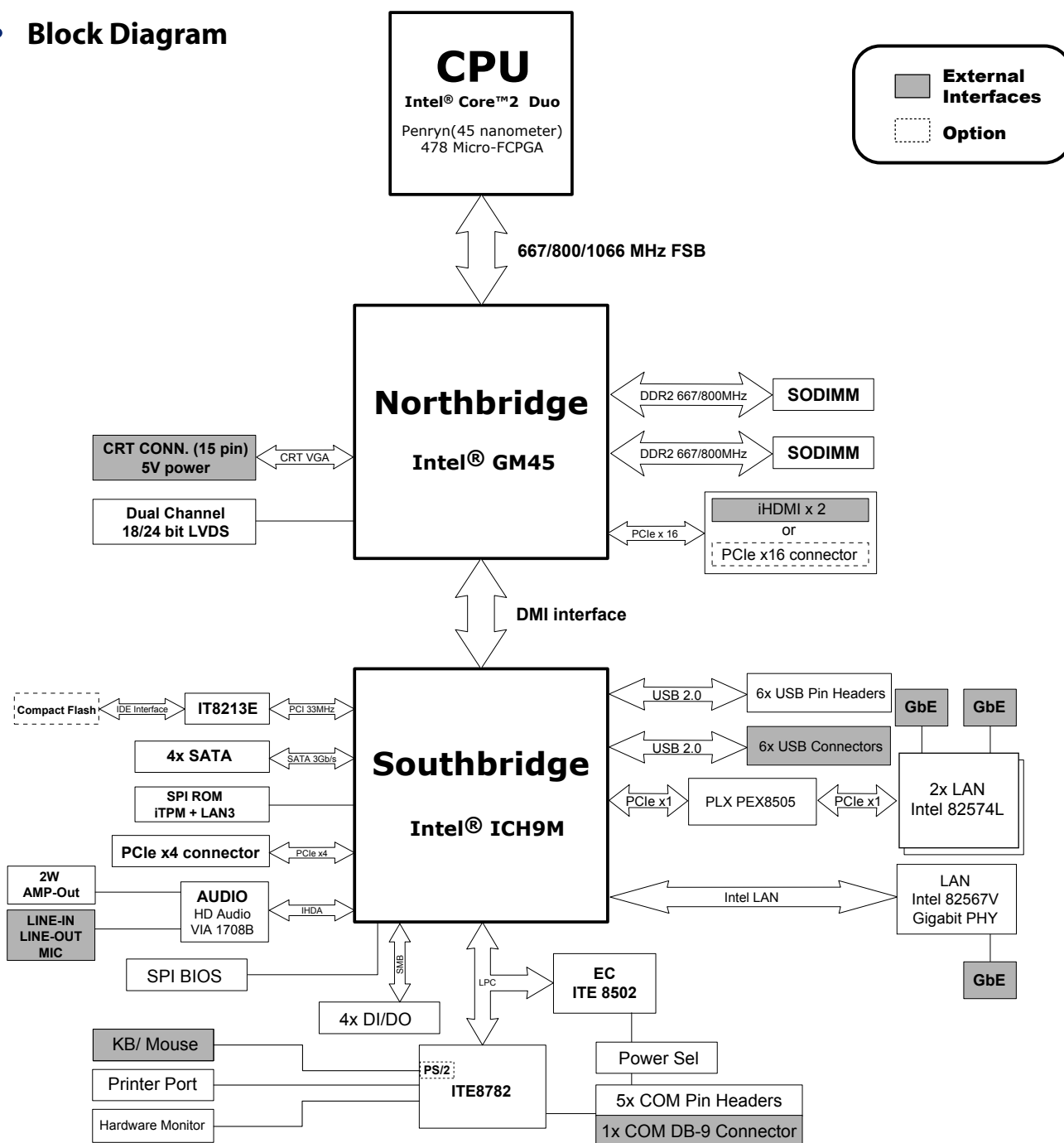
- Intel® Core 2 Duo 45nm processor support
- Intel® GM45/ ICH9M chipset
- Intel® Gen 5.0 Integrated Graphics engine supports DirectX 10, MPEG2, WMV9, and H.264
- VGA, 18/24-bits dual channel LVDS, Dual HDMI (optional with PCIe x16 slot)
- Two DDR2 SO-DIMMs up to 4GB
- 4x SATA 3 Gb/s, PCIe x4 slot
- 3 x GbEs, 12 x USB2.0, 6 x COMs, 1 x LPT, HD audio with 2W amplifier onboard
- Watchdog Timer, Hardware Monitor, TPM 1.2

Product Overview

The new KEMX-4030 is a Mini-ITX form factor industrial motherboard combining the high performance Intel® Core 2 Duo 45nm processor with the high integration of the Intel® GM45/ ICH9M chipset. Featured are DDR2-667/800 SODIMM up to 4GB, Intel® Gen 5.0 Integrated Graphics engine supports DirectX 10, MPEG2, WMV9(VC-1), H.264(AVC), 18/ 24-bit dual-channel LVDS, HDMI, Gigabit

Ethernet, SATA 3 Gb/s, PCIe x4 expansion slot, 12x USB 2.0, 6 COM ports with voltage support, HD audio, and keyboard/mouse. The KEMX-4030 is a compact, high performance industrial motherboard that is ideal for multimedia, gaming, digital signage and medical applications.

Block Diagram

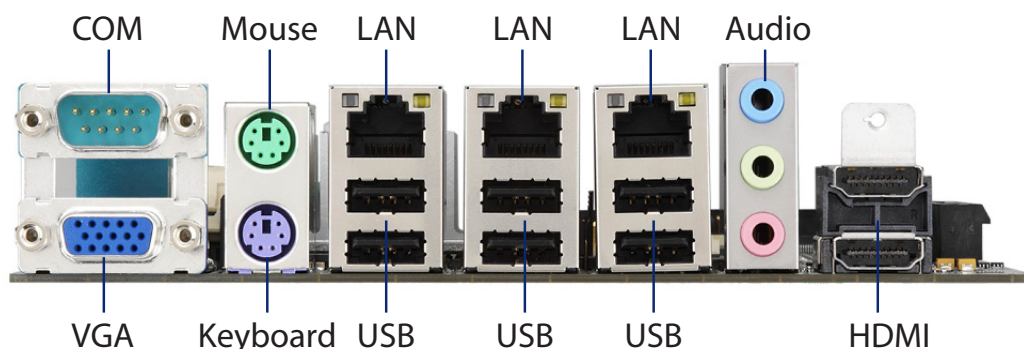


Technical Information

CPU Support	Intel® Core 2 Duo (Socket P, Penryn Core)
Chipset	Intel® GM45 + ICH9M
Memory	2x DDR2 667/800 SO-DIMM Socket, up to 4GB
BIOS	AMI PnP 4MB Flash
Display	Intel® Gen 5.0 Integrated Graphics engine supports DirectX 10 18/24-bit dual-channel LVDS 2x HDMI (KEMX-4030/4032) 1x VGA
LAN	3x RJ-45, Gigabit Ethernet (2x Intel® 82574 + 1x Intel® 82567)
Audio	Intel® HD Audio Codec, supports Line-in, Line-out & Microphone (VIA 1708B) Speak-out with AMP. 2x 2W
Peripheral Support	4x SATA 3Gb/s 6x COMs with +5V or +12V support (1x RS-232/422/485, 5x RS-232) 12x USB 2.0 1x Parallel port (Box Header) 1x PS/2 Keyboard connector 1x PS/2 Mouse connector 4x DI/DO

TPM	TPM 1.2
Power Connector	ATX-24P + ATX-4P
Expansion	1x PCIe x4 slot, 1x PCIe x16 slot (KEMX-4031) 1x CompactFlash Slot (KEMX-4032)
Watchdog Timer	1-255 step, can be set with software on Super I/O
Hardware Monitor	Operating voltage, CPU temperature and fan speed
Dimensions	Mini-ITX (170 x 170 mm)
Environmental Factors	Operation Temp: 0°C - 60°C Storage Temp.: -10°C - 85°C Humidity: 0% - 90%
Certifications	CE, FCC Class A

KEMX-4030 Rear I/O



Ordering Information

Article	Part No.	Description
KEMX-4030	BMMX4030-000000T	Mini-ITX motherboard, GM45/ICH9M, 3x GbE, 24-bit LVDS, 6x COMs, 4x SATAs, TPM1.2, PClex 4, 2x HDMI
KEMX-4031	BMMX4030-010000T	Mini-ITX motherboard, GM45/ICH9M, 3x GbE, 24-bit LVDS, 6x COMs, 4x SATAs, TPM1.2, PClex 4, PClex 16
KEMX-4032	BMMX4030-020000T	Mini-ITX motherboard, GM45/ICH9M, 3x GbE, 24-bit LVDS, 6x COMs, 4x SATAs, TPM1.2, PClex 4, 2x HDMI, CF

Optional Accessories

Article	Part No.	Description
SATA Cable *	0C501ATA0746000L	SATA cable, 7-pin connector with lock, L=46cm
COM Port Cable *	0C5030002500010L	COM Port Cable, 2x 10-pin 2.0mm to 2x DB-9 connector with bracket, L=25cm
I/O Shield *	0F0000000000020L	KEMX-4032 I/O Shield, H=8mm
I/O Shield*	0F00000000000110L	KEMX-4030/4031 I/O Shield, H=5mm
USB Cable	0C5020003000010L	USB Cable, 10-pin 2.0mm to 2x USB connectors with bracket, L=30cm
LPT Port Cable	0C5020002000010L	LPT port cable, 2.00mm 26-pin to DB25 connector with bracket, L=20cm
DIO Cable	0C5020000000070L	DIO Cable, DB9 Female connector to 2x5-pin pitch:2.0mm connecotr, L=30cm
CPU Cooler	0H05XX000000590L	Socket type CPU Cooler Fan, 50mm(L) x 50mm (W) x 23mm (H)

* The item has been included in standard package.