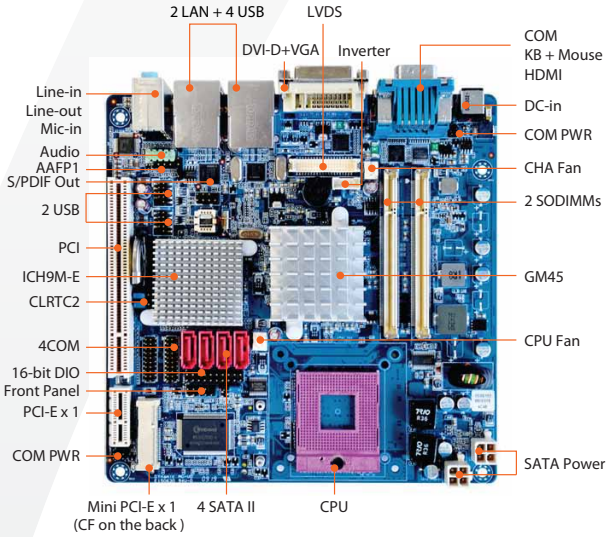
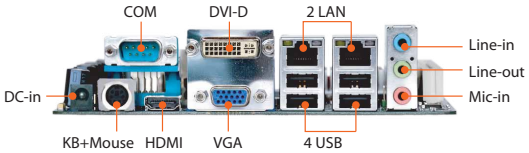
Mini-ITX Motherboard

IX45GM

Intel® GM45 Socket P Core™2 Quad Mini-ITX Motherboard





Features

- Supports Intel® Socket P Core™2 Quad/ Core™2 Duo/ Celeron® M 45nm CPU
- Intel® GM45 + ICH9M-E Chipset
- Two 200-pin SODIMMs up to 4GB dual channel DDR2 800MHz SDRAM
- Intel Integrated Graphics 4500MHD supports 1080P High Definition video applications
- Multiple Display I/O supports versatile Dual Display Functions : VGA/DVI/HDMI/LVDS
- Realtek ALC888, 5.1 + 2 CH with 2 independent HD Streaming Audio
- Intel 82567LM GbE LAN, Intel 82574L PCI-E GbE LAN for 2nd LAN
- 1 Mini PCI-E, 1 PCI-E x 1, 1 CF socket, 1 PCI 2.3
- 5 COM, 8 USB, 4 SATA II
- TMP 1.2, AMT 4.0 & GPIO functions embedded

Intel GMA 4500	Dual Display	HDMI	LVDS
DVI	Dual Intel GbE LAN	Mini PCI-E	PCI-E x 1
5.1 + 2 CH HD Audio	TPM 1.2	AMT 4.0	GPIO

Specifications

System

CPU	Intel® Socket P supports Core™2 Quad/ Core™2 Duo/ Celeron® M with 45nm process technology
FSB	1066/800/667 MHz
BIOS	AMI 32Mb SPI BIOS
System Chipset	Intel GM45 + ICH9M-E
I/O Chip	Winbond W83627DHG-A
System Memory	Two 200-pin SODIMM sockets support up to 4GB dual channel DDR2 800MHz SDRAM
SSD	One Compact Flash Type I/II Socket (optional)
Watchdog Timer	Reset : 1 to 255 sec/min per step
H/W Status Monitor	Monitoring CPU temperature, voltage and cooling fan status. Auto throttling control when CPU overheats
Expansion	1 Mini PCI-E, 1 PCI-E x 1, 1 PCI 2.3
TPM	Intel Integrated TPM 1.2
Power State	S1, S3, S4, S5
Wake up on LAN or Ring	LAN (PXE)
SmartFan Control	Yes

I/O

MIO	4 SATA II, 5 COM RS-232, 1 PS/2 Keyboard+Mouse
USB	8 USB 2.0
GPIO	PCA9555 supports 16-bit General Purpose I/O for 8-bit DI and 8-bit DO

Display

Chipset	Intel GM45 Integrated Graphics 4500MHD
Display Memory	Intel DVMT 5.0 supports up to 512MB video memory
Resolution	2048 x 1536 @ 75Hz
Dual Display	VGA+HDMI, LVDS+HDMI, VGA+DVI, LVDS+DVI
HDMI	ASMedia AS1442T supports HDMI
LVDS	Dual channel 24-bit LVDS
DVI	TI SN75DP139 supports DVI-D
LVDS Backlight	5V and 12V

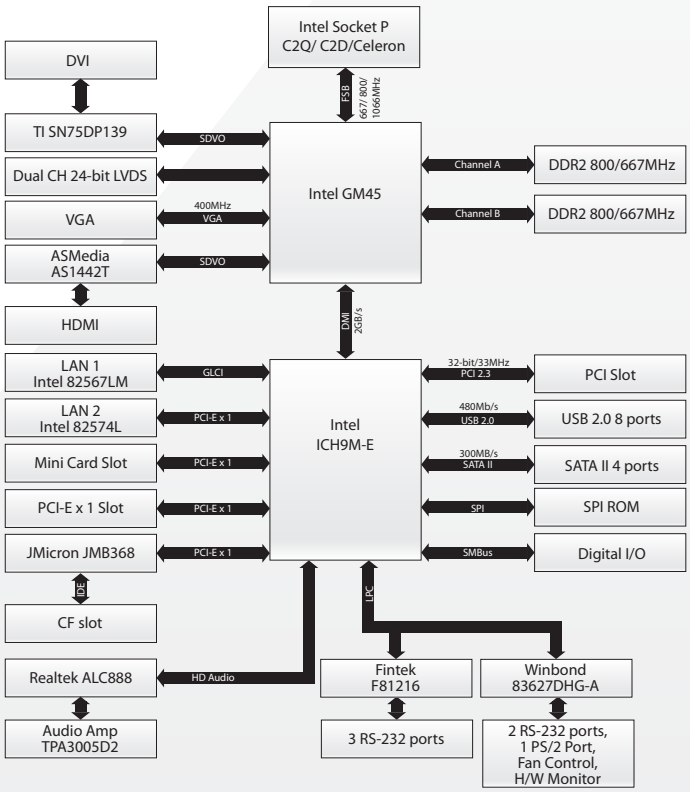
Audio

Audio Codec	Realtek ALC888, 5.1 + 2 CH HD Audio
Audio Interface	Line-in, Line-out, Mic-in
Audio Amplifier (W)	3 + 3W, TPA3005D2 Stereo

Ethernet

LAN 1	Intel 82567LM Gigabit LAN
LAN 2	Intel 82574L PCI-E Gigabit LAN for 2nd LAN (Optional)

Block Diagram



Ordering Information

IX45GM
90I-GM4501- M0000B2
IX45GM Mini-ITX Motherboard

Product Offering

until 2016

Packing List

2 Port COM Cable	x 1
SATA Data Cable	x 2
2 Port SATA Power Cable	x 1
I/O Shield	x 1
Driver CD	x 1
Startup Manual	x 1

Optional Accessory

14GS0300020V04	USB Cable w/ Bracket
14GS0000063V04	USB Cable w/o Bracket
14GS0000073V04	COM Port Cable

Back Panel I/O Port

1 PS/2 Keyboard+Mouse (Through Y-Cable)
1 COM RS-232 with 5V/12V Power
1 VGA port
1 DVI port
1 HDMI port
4 USB 2.0/1.1
2 LAN RJ45 ports
Audio I/O (3 jacks)
1 DC-in

Internal I/O Connector

2 USB Connectors support 4 USB Ports
4 COM Port Header (no box),1 with 5V/12V Power
4 SATA Connectors
1 Audio Amplifier Connector
1 Front Audio
1 Front Panel
1 S/PDIF Out
1 LVDS Connector
1 Inverter Power Connector
1 CPU Fan Connector
1 System Fan Connector
1 Digital I/O Header

Mechanical & Environmental

Power Requirement	3A@19V (with Core 2 Duo T7100 1.8GHz & 1GB DDR2 SDRAM)
Power Type	16V to 24V DC-in
Operating Temperature	0 to 60°C (32 to 140°F)
Operating Humidity	0% to 90% relative humidity, non-condensing
Size (L x W)	6.69" x 6.69" (170 mm x 170 mm)
Weight	0.88lbs (0.4Kg)

** The product information and specifications are subject to change without prior notice.
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