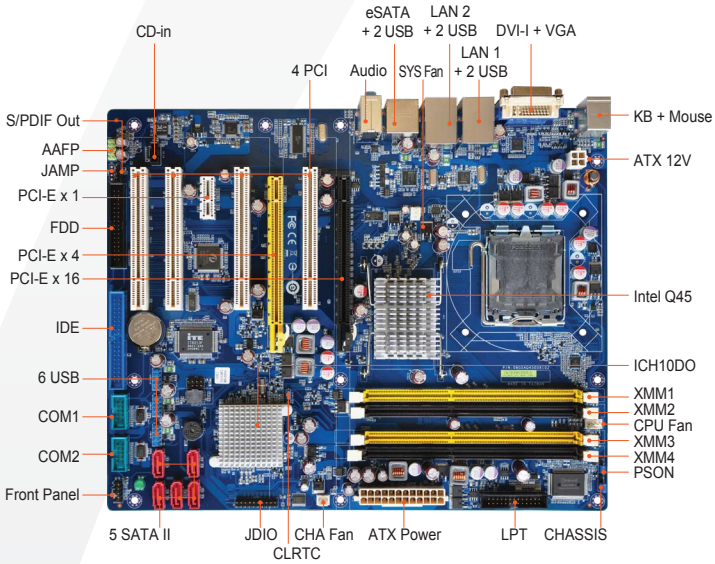
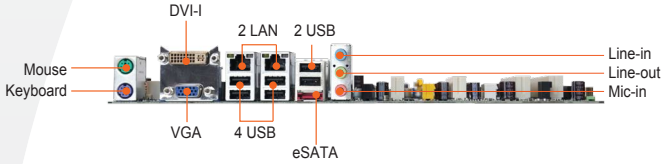
ATX Motherboard

AX45Q3

Intel® Q45 with Core™2 Quad/ Core™2 Duo ATX Motherboard





Features

- Socket 755 supports Core™2 Quad CPU
- FSB 800/1066/1333 MHz (95W TDP)
- Intel® Q45 + ICH10DO Chipset
- Four 240-pin DDR3 DIMM 800/1066 MHz up to 8GB
- Realtek ALC888, 5.1 + 2 Channel with Multiple Streaming HD Audio
- Dual Intel Gigabit LAN support iAMT 5.0
- 1 PCI-E x 16, 1 PCI-E x 4 (physical with PCI-E x 16 slot), 1PCI-E x 1, 4 PCI 2.3
- 1 VGA, 1 DVI-I, 2 COM RS-232
- 12 USB 2.0, 6 SATA II (1 eSATA, 5 SATA for RAID 0, 1, 5,10)
- 16-bit GPIO (DIO), S/PDIF Out, 6W Amp.

Intel GMA X4500	PCI-E x 16	PCI-E x 1	PCI
Dual Display	DVI	eSATA	Dual GbE LAN
Intel SATA RAID	TPM	Intel iAMT 5.0	GPIO

Specifications

System

CPU	Intel® LGA775 socket supports Core™2 Quad/ Core™2 Duo/ Celeron® with 45nm process technology
FSB	1333/1066/800 MHz
BIOS	AMI 32Mb SPI BIOS
System Chipset	Intel® Q45 + ICH10DO Chipset
I/O Chip	Winbond W83627DHG-A
System Memory	Four 240-pin DDR3 DIMM sockets support DDR3 Memories 800/1066MHz up to 8GB
Watchdog Timer	Reset : 1 to 255 sec/min per step
H/W Status Monitor	Monitoring temperature, voltage and cooling fan status. Auto throttling control when CPU overheats
Expansion	1 PCI-E x 16, 1 PCI-E x 4 (physical with PCI-E x 16 Slot), 1 PCI-E x 1, 4 PCI slots (PCI 2.3 compliant)
TPM	Intergrated iTPM 1.2
Power State	S1, S3, S4, S5
Wake up on LAN or Ring	LAN (PXE)
SmartFan Control	Yes (CPU, SYS & PWR Fan)

I/O

MIO	1 IDE, 5 SATA II, 1 eSATA, 2 COM RS-232 (5V/12V), 1 LPT, 1 PS/2 Keyboard, 1 PS/2 Mouse
USB	12 USB 2.0
GPIO	PCA 9555 supports 16-bit General Purpose I/O for 8-bit DI and 8-bit DO

Display

Chipset	Intel® Q45 integrated Graphics Media Accelerator X4500
Display Memory	Intel® DVMT 4.0 supports up to 352MB Memory
Max. 3D Resolution	2048 x 1536 (@75Hz)
Dual Display	DVI + VGA
VGA	On board
LVDS	Yes, through ADD2 card
DVI	On board DVI-I
HDMI	Yes, through ADD2 card

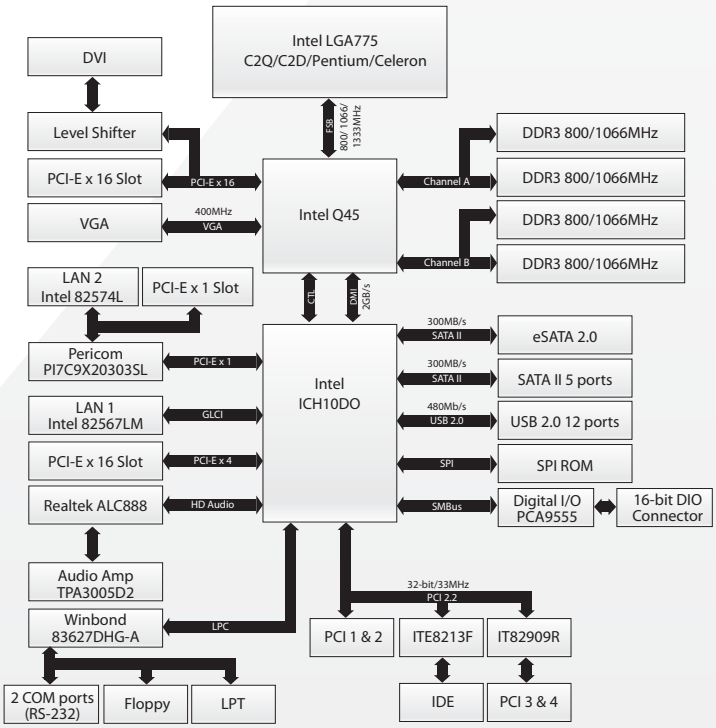
Audio

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 supports iAMT 5.0
LAN 2	Intel 82574L Gigabit LAN

Block Diagram



Ordering Information

AX45Q3
90A-Q45006-M0000B2
AX45Q3 R10 ATX LGA775 STD PCK

Product Offering

until 2016

Packing List

SATA Data Cable	x 2
SATA Power Cable	x 2
Driver CD	x 1
Startup Manual	x 1

Optional Accessory

14GS0300020V04	USB Cable w/ Bracket
14GS0300021V04	USB Cable w/o Bracket
14GS0000072V04	COM Cable w/ Bracket

Back Panel I/O Port

1 PS/2 Keyboard
1 PS/2 Mouse
1 VGA + DVI-D Double Stack
2 LAN RJ45 Ports
6 USB Ports
1 eSATA
Audio I/O (3 jacks)

Internal I/O Connector

1 FDD Connector
1 IDE Connector
5 SATA Connectors
3 USB Connectors support 6 USB Ports
2 COM Header (w/ 5V or 12V Power)
1 CPU Fan Connector
1 System Fan Connector
1 Power Fan Connector
1 Front Audio Connector
1 Audio Amplifier Pin Header
1 S/PDIF Connector
1 CD-in Connector
1 Front Panel Header
1 LPT Connector
1 16-bit DIO Connector (PH=2.54mm)
1 AT/ATX Mode Power Jumper (3p, 2.54mm)

Mechanical & Environmental

Power Requirement	+12V 3.18A	+5V 1.77A	+3.3V 2.85A	5VSB 0.56A
Power Type	AT / ATX			
Power Connector	1 24-pin ATX Power Connector 1 4-pin ATX 12V Power Connector			
Operating Temperature	0 to 60°C (32 to140°F)			
Operating Humidity	0% to 90% relative humidity, non-condensing			
Size (L x W)	12" x 9.6" (304.8 mm x 243.84 mm)			
Weight	1.32 lbs (0.6 Kg)			

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