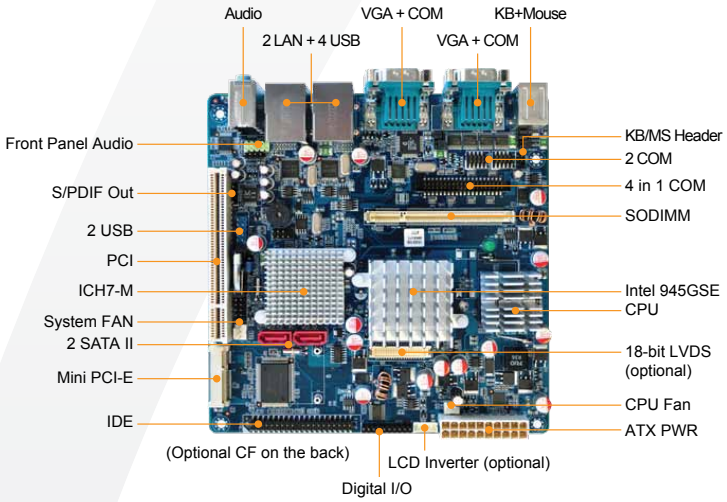
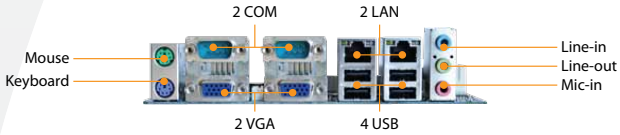
IX945GSE3

Intel® 945GSE with Atom™ N270 Processor Mini-ITX Motherboard





Features

- Onboard Intel® with Atom™ N270 Processor
- Intel® 945GSE + ICH7-M Chipset
- One 200-pin SODIMM up to 2GB Single Channel DDR2 533 SDRAM, non-ECC
- Intel® Graphics Media Accelerator 950
- Dual VGA Display
- Realtek ALC888, 5.1 + 2 Channel HD Audio
- Dual Realtek RTL8111C Gigabit LAN
- 1 PCI,1 Mini PCI-E
- 8 COM RS-232, 6 USB 2.0, 2 SATA II, 1 IDE

Dual Display	Dual VGA	18-bit LVDS (optional)	LVDS Backlight (optional)
Mini PCI-E	8 COM	Powered COM	CF (optional)
TPM (optional)	3 W + 3 W AMP (optional)	5.1 + 2 CH HD Audio	Dual GbE LAN

Specifications

System

CPU	Onboard Intel® FCBGA8 45nm Atom™ N270 Processor
FSB	533 MHz
BIOS	Award 16 Mb Flash ROM BIOS
System Chipset	Intel® 945GSE + ICH7-M
I/O Chip	Winbond W83627DHG-A
System Memory	One 200-pin SODIMM up to 2GB single channel DDR2 533 SDRAM, non-ECC
SSD	Optional, one CompactFlash Type I/II socket
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 (PCI Rev. 2.3 compliant), 1 Mini PCI-E
Power State	S1, S3, S4, S5
TPM	Onboard TPM 1.2 by Infineon SLB9635 (optional)
Wake up on LAN or Ring	LAN (PXE)
SmartFan Control	Yes

I/O

MIO	1 IDE, 2 SATA II, 8 COM RS-232, 1 PS/2 Keyboard, 1 PS/2 Mouse
USB	6 USB 2.0
GPIO	PCA9555 supports 16-bit General Purpose I/O for 8-bit DI and 8-bit DO

Display

Chipset	Intel® 945GSE integrated Graphics Media Accelerator 950
Display Memory	Intel® DVMT 3.0 supports 224MB video memory
Max. Resolution	VGA 1 : Supports up to QXGA (2048 x 1536) VGA 2 : Supports up to WUXGA (1920 x 1200) LVDS : Supports up to UXGA (1600 x 1200)
Dual Display	Dual VGA, VGA + LVDS with Clone/ Extend Mode
VGA 1	On board GMA 950 supports CRT resolution up to QXGA
VGA 2	Chrontel CH7317A/B supports resolution up to WUXGA
LVDS	Optional, 18-bit dual channel LVDS resolution up to UXGA
LVDS Backlight	5V and 12V (optional)

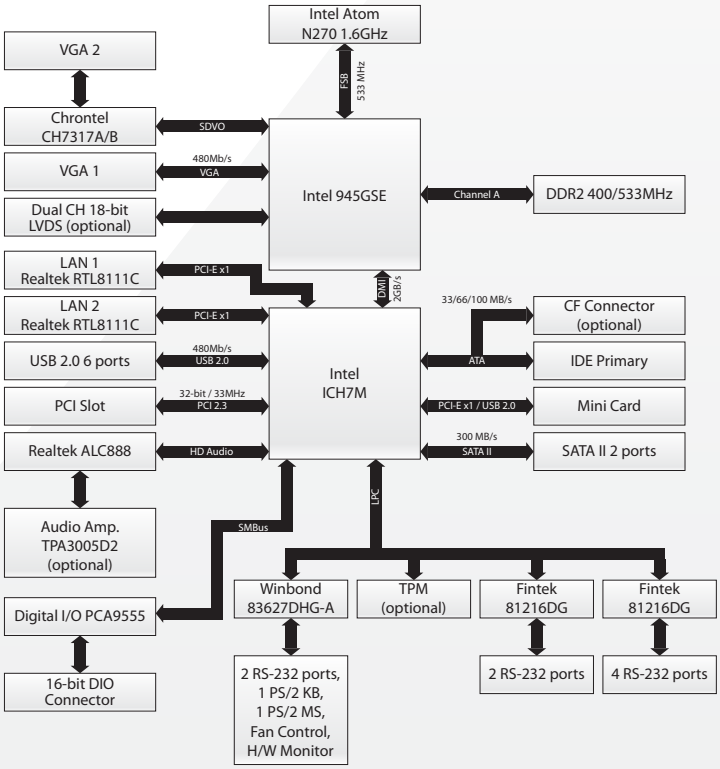
Audio

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

Ethernet

LAN 1	Realtek RTL8111C Gigabit LAN
LAN 2	Realtek RTL8111C Gigabit LAN

Block Diagram



Ordering Information

IX945GSE3
90I-945S12-M0000B2
IX945GSE3 Mini-ITX Motherboard w/ TPM
90I-945S12-M0001B2
IX945GSE3 Mini-ITX Motherboard w/o TPM, CF, LVDS, AMP

Product Offering

until 2016

Packing List

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

Optional Accessory

14GS0000072V04	2 Port COM Cable w/ Bracket
14GS0000073V04	2 Port COM Cable w/o Bracket
14GS1400013V04	4 Port COM Cable w/o Bracket
14GS0300034V04	2 Port USB Cable w/o Bracket

Back Panel I/O Port

1 PS/2 Keyboard
1 PS/2 Mouse
2 VGA Ports
2 COM RS-232 Ports w/ Power
2 LAN RJ45 Ports
4 USB 2.0 Ports
Audio I/O (3 jacks)

Internal I/O Connector

2 COM RS-232 Ports w/ Power
4 COM RS-232 Ports w/o Power
1 CPU Fan Connector
1 Chassis Fan Connector
1 USB Connector supports 2 USB Ports
1 18-bitLVDS Connector (optional)
1 LVDS Inverter Connector (optional)
1 IDE Connector
2 SATA II Connectors
1 Digital I/O Header
1 Front Panel Header
1 S/PDIF Out Connector
1 Front Audio Connector
1 Mini PCI-E
1 PS/2 KB+MS Header

Mechanical & Environmental

Power Requirement	+12V 0.96A	+5V 0.77A	+3.3V 0.48A	5VSB 0.44A
Power Type	ATX			
Power Connector	1 20-pin ATX Power Connector			
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	0.88 lbs (0.4 Kg)			

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