

IX945GSE3

Intel® 945GSE with 45nm Atom™ N270 Processor
Mini-ITX Motherboard

Startup Manual

Packing List

Before you begin installing your single board, please make sure that the following parts have been shipped.

- 1 x IX945GSE3 Mini-ITX Motherboard
- 1 x CD-ROM contains the followings:
 - User's Manual in PDF file
 - Drivers
- 1 x IDE cable (40-pin)
- 1 x SATA cable kit (SATA/Power)
- 1 x 4 in 1 COM cable
- 1 x COM cable
- 1 x I/O Shield
- 1 x Startup Manual

Disclaimer and Notice



The manufacturer reserves the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. The manufacturer assumes no responsibility or liability for the use of the described product(s), conveys no license or title under any patent, copyright, or masks work rights to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. For the detail product information, please refer to user's manual.

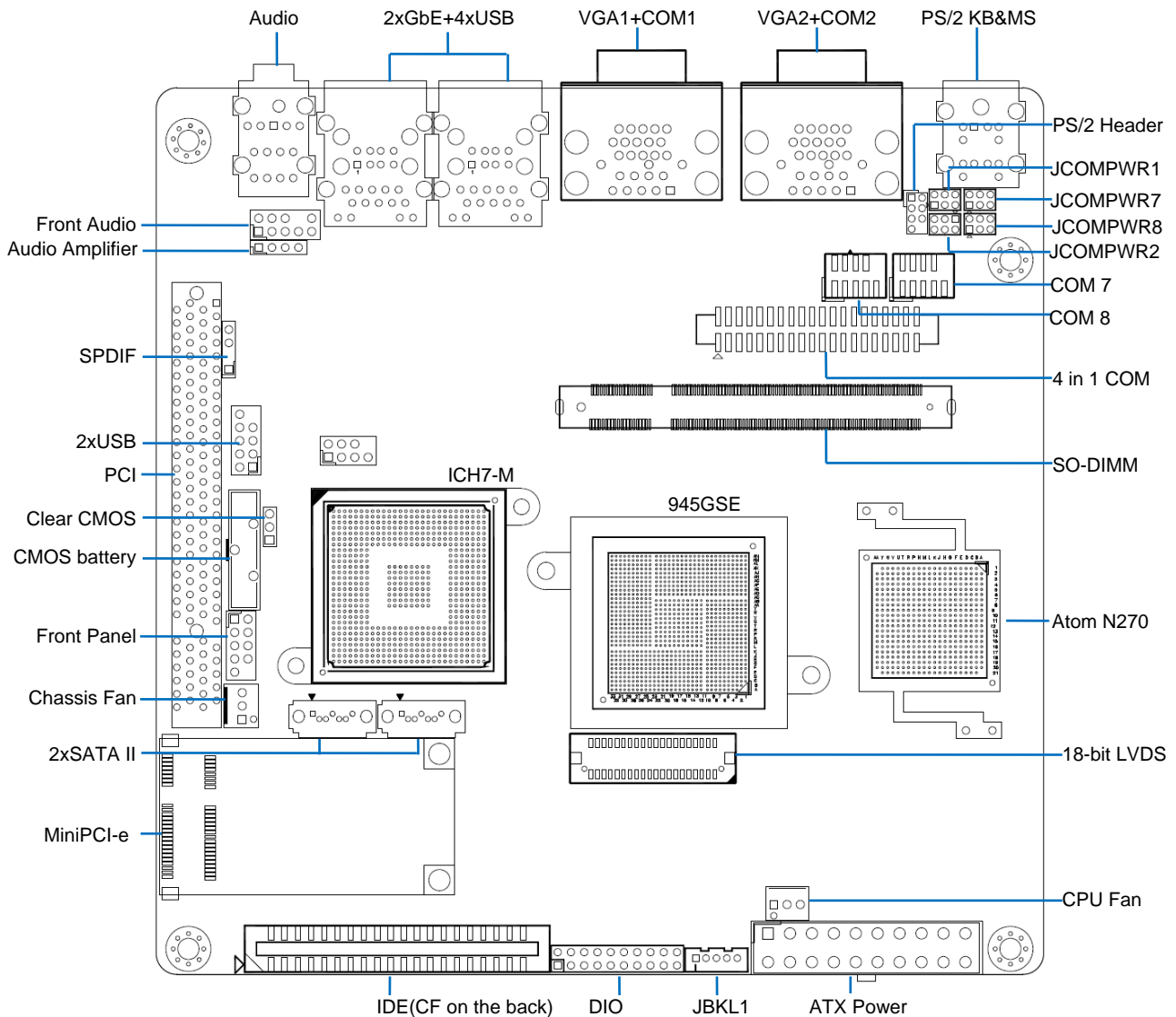
Safety Declaration



This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.












Product Overview



Specifications

System	
CPU	Onboard Intel® with 45nm Atom™ N270 Processor
FSB	533 MHz
BIOS	Award 16Mb (Mega Bit) SPI BIOS
System Chipset	Intel® 945GSE + ICH7-M Chipset
I/O Chipset	Winbond W83627DHG-A
Memory	One 200-pin SO-DIMMs Max. 2GB SC DDR2 533 SDRAM , non-ECC
SSD	Optional, One Compact Flash Type I/II socket
Watchdog Timer	Reset: 1~255 sec./min. per step
H/W Status Monitor	Monitoring CPU temperature, voltage, and cooling fan status. Auto throttling control when CPU overheats
Expansion Slots	1 x PCI (PCI Rev. 2.3 compliant) supports 3 PCI master ; 1 x Mini-PCI Express ; 1 x CF Socket(Optional)
DIO	16-bit General Purpose I/O for DI/DO
Power State	S1, S3, S4, S5
TPM	Optional, TPM1.2 (Infineon® TPM chip 9635 TT 1.2 on board)

Wake up on LAN or Ring	LAN (PME/RPL)
Display	
Chipset	Intel® 945GSE integrated Graphics Media Accelerator 950
Display Memory	Intel® DVM T 3.0 supports 224 MB 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
LVDS	Optional, LVDS 18bit Dual Channel
LVDS Backlight Power	Optional, 5V and 12V
Ethernet	
LAN1	Realtek RTL8111C PCI-E Gigabit LAN
LAN2	Realtek RTL8111C PCI-E Gigabit LAN
Audio	
Audio Codec	Realtek® ALC888, 5.1+2 HD Audio
Audio Interface	Mic in, Line in, Line out (3 jack)
Audio Amplifier	Optional, TPA3005D2 Stereo 3+3Watt
I/O	
Back Panel I/O Port	1 *PS/2 Keyboard , 1 *PS/2 Mouse , 2 * VGA port 2 * COM Port , 2 * RJ45 port , 4 * USB 2.0/1.1 , 1 * Audio Jack (3 ports)
Internal I/O	2 * Power COM port, 1 * 4-in-1 COM port , 1 * 20-pin ATX power connector, 1 *CPU fan connector, 1 * Chassis fan connector, 1 * USB header supports additional 2 USB ports, 1 * 18bit LVDS connector(optional) , 1 * IDE connector, 2 * SATA connectors, 1 * Digital IO header, 1 * Front panel header, 1 * S/PDIF Out header, 1 * Audio Amplifier header(optional), 1 * Front audio header, 1 * Mini-PCI Express , 1 * PS/2 KB&MS header
Mechanical & Environment	
Power Type	ATX mode
Power Requirement	+12V@0.96A; +5V@0.77A; +5Vsb@0.48A; +3.3V@0.44A
Operating Temp.	0 ~ 60°C (32 ~ 140°F)
Operating Humidity	0%~90% relative humidity, non-condensing
Size (L x W)	170 mm x 170 mm

Jumpers				
Function	Label	Note		
Clear CMOS	CLRTC	Normal (Default)	Clear CMOS	
				
COM port Power Selection		+5V(Default)	+12V Ring	
COM1	JCOMPWR1			
	JCOMPWR2			
COM2	JCOMPWR1			

	JCOMPWR2			
COM7	JCOMPWR7			
	JCOMPWR8			
COM8	JCOMPWR7			
	JCOMPWR8			

Connectors

Label	Function	Note
F_PANEL1	System Panel Connector & Power Switch	
COM7 & COM8	Serial Port Connector	
JDIO1	Digital I/O Connector	
CHA_FAN CPU_FAN	Chassis Fan Connector CPU Fan Connector	
AAFP1	Front panel audio connector	
JBKL1 (Optional)	LCD Inverter Connector	
JAMP1 (Optional)	Amplifier connector	
JLVDS1 (Optional)	LVDS Connector	