

SIMB-M22**AMD G-Series™ APU with A55E Controller
Hub(FCH) Mini-ITX Motherboard
Startup Manual****Packing List**

Before you begin installing your card, please make sure that the following items have been shipped:

- 1 x SIMB-M22 Mini ITX Main board
- 1 x CD-ROM per carton, which contains the followings:
 - User's manual
 - Drivers
- 1 x SATA cable kit (SATA/POWER)
- 1 x I/O Shield
- 1 x Startup Manual per carton

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note1:

Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe).

Specifications**System**

- **APU:** AMD G-Series T40R SC 1.0GHz
- **FCH:** AMD A55E Controller Hub (Hudson-E1)
- **BIOS:** AMI 16Mb SPI
- **System Chipset:** AMD G-Series + A55E Controller Hub
- **I/O Chipset:** Winbond W83627DHG-P
- **Memory:** One 204-pin SODIMM sockets support up to 4 GB DDR3 1066/1333 MT/s
- **SSD:** N/A
- **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 Slots:** 1 PCI-E x4 Gen.2, 1 Mini PCI-E
- **Power State:** S3, S4, S5
- **Wake up on LAN or Ring:** LAN
- **Smart Fan Control:** Yes

Display

- **Chipset:** AMD Radeon HD 6250
- **Display Memory:** Shared Memory, up to 512MB
- **Dual Display:** VGA+LVDS, VGA+HDMI, HDMI+LVDS, eDP+HDMI, eDP+VGA
- **VGA:** Onboard, supports up to 1920 x 1200
- **HDMI:** Onboard, supports HDMI 1.3a & up to 1920 x 1080
- **LVDS:** Onboard, 18-bit single channel LVDS
- **LVDS Backlight:** Yes, PWM Control (Backlight adjusted from AMD A55E Controller Hub)
- **eDP:** Onboard optional (18,24,30 bpp up to 1920 x 1200)

Audio

- **Audio Codec:** Realtek ALC892, 7.1 Channel HD Audio
- **Audio Interface:** Line-in, Line-out, Mic.-in, S/PDIF, Front Audio Header

Ethernet

- **LAN1/LAN2:** Realtek RTL8111DL GbE LAN

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For technical support and service, please visit our support website at:














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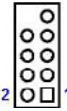
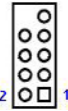


This manual is for the SIMB-M22 series Rev. A1.

Part No. 20060M2210
Printed in China




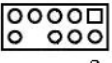


1st Edition
August 2011

Connectors and Jumpers

Jumpers		
Label	Function	Note
CLRTC	Clear CMOS	<div> <div>Normal*</div>  </div> <div> <div>Clear CMOS</div>  </div>
JSETCOM3	COM3, COM4 RI/+5V/+12V COM3	<div> <div>RI</div>  </div> <div> <div>+5V</div>  </div> <div> <div>+12V</div>  </div>
JSETCOM4	COM4	<div> <div>RI</div>  </div> <div> <div>+5V</div>  </div> <div> <div>+12V</div>  </div>
PERSON1	AT/ATX Mode Select <div>  </div> 1. ATSEL IN 2. PWRBT 3. ATXSEL IN	<div> <div>AT MODE</div>  </div> <div> <div>ATX MODE</div>  </div>
JBL3	LCD POWER (VDDSAFE)	<div> <div>3.3V</div>  </div> <div> <div>5V</div>  </div>

Connectors		
Label	Function	Note
COM3, COM4	Serial Port Connector	<div> <div>COM3</div>  </div> <div> <div>COM4</div>  </div>
JFP1+JFP2	System Panel & Speaker	<div>  </div> <div> 3. PWRBT+ 6. PWRBT- 9. SYS_RST 12. GND 2. HDLED+ 5. HDLED- 8. I2C DATA 11. I2CCLK 1. +5V 4. NC 7. SPK_P3 10. SPK_P4 </div> <div> PIN7-10 Internal SPK PIN1-10 External SPK </div> <div> PIN3-6 POWER BT PIN9-12 SYS_RESET </div>
JFP3	Power LED & Keylock	<div>  </div> <div> 1. POWER LED 2. NC 3. GND 4. KEYLOCK 5. GND </div>

Connectors and Jumpers

LVDS 1	18-bit LVDS Connector	<p> 1.VDDSAFE 11.GND 21.LVDS_L2_P 31.LVDS_DDC_CLK 2.VDDSAFE 12.GND 22.NC 32.LVDS_DDC_DATA 3.GND 13.LVDS_L1_N 23.GND 33.GND 4.GND 14.NC 24.GND 34.GND 5.VDDSAFE 15.LVDS_L1_P 25.LVDS_CLK_N 35.NC 6.VDDSAFE 16.NC 26.NC 36.NC 7.LVDS_L0_N 17.GND 27.LVDS_CLK_P 37.NC 8.NC 18.GND 28.NC 38.NC 9.LVDS_L0_P 19.LVDS_L2_N 29.GND 39.LCD_BLK_EN 10.NC 20.NC 30.GND 40.VCON </p> 
JBL1	Inverter PWR	<p>JBL1</p>  <p> 1. +V12SA 2. GND 3. LCD_BLK_EN 4. LCD_BLK_PWM 5. +5V </p>
CN4	SPI connector	<p> F_SPK_MOSI F_SPK_CLK GND </p>  <p> SPI_HOLD# F_SPI_MISO F_SPI_CS# +3V ROM </p>
AAFP	Audio Mic.-In & Line-Out Connector	 <p> 10. SENSE2_RTN 9. LIN2_L 8. NC 7. SENSE_B 6. SENSE1_RTN 5. LIN2_R 4. PRESENSE 3. MIC2_R 2. GND 1. MIC2_L </p>
SPDIF_OUT1	SPDIF OUT	 <p> 4. GND 3. SPDIF_O 1. +5V </p>
CN10	Amp_R+ R-/ Amp_L+ L-	 <p> 1. L- 2. L+ 3. R- 4. R+ </p>

Disclaimer and Notice

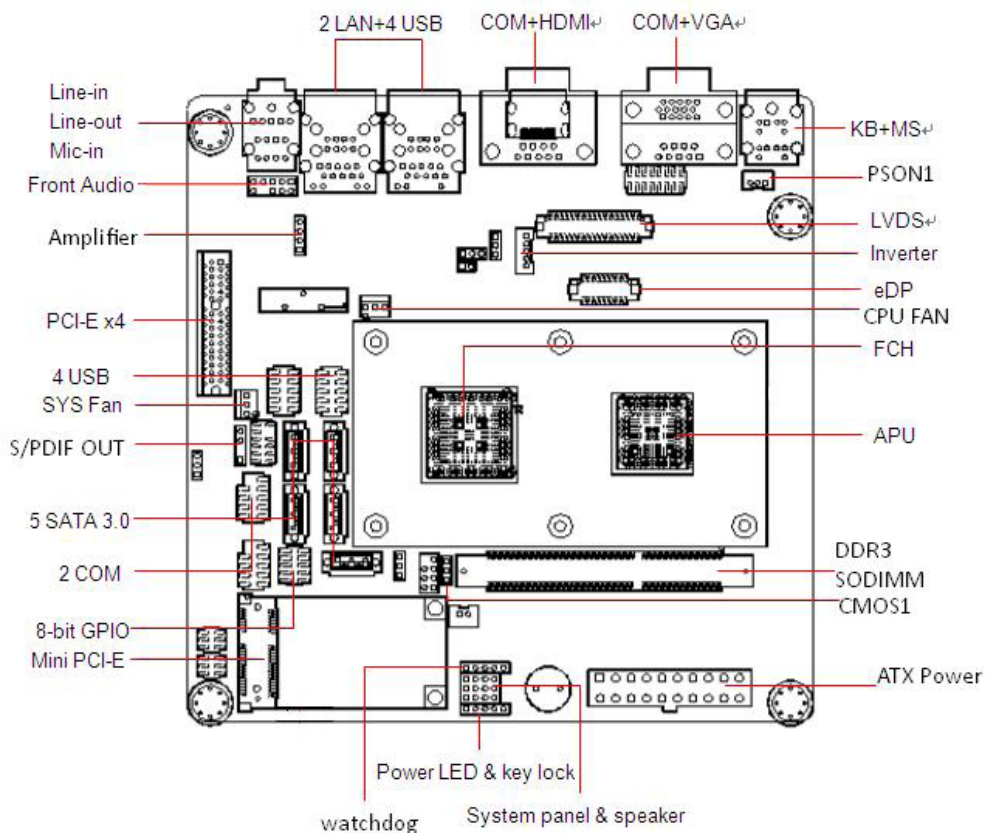
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Safety Declaration

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.

Board Diagram



Mouser Electronics

Authorized Distributor

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