

**GA-870A-USB3** (rev. 3.1)other version : [rev. 3.0](#)

AMD 870 + SB850 Chipset

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<b>CPU</b>	AM3+ Socket: <ol style="list-style-type: none"><li>1. Support for AMD AM3+ processor</li><li>2. Support for AMD AM3 Phenom™ II processor / AMD Athlon™ II processor</li></ol>
<b>Hyper Transport Bus</b>	<ol style="list-style-type: none"><li>1. 5200 MT/s</li></ol>
<b>Chipset</b>	<ol style="list-style-type: none"><li>1. North Bridge: AMD 870</li><li>2. South Bridge: AMD SB850</li></ol>
<b>Memory</b>	<ol style="list-style-type: none"><li>1. 4 x 1.5V DDR3 DIMM sockets supporting up to 16 GB of system memory(Note 1)</li><li>2. Dual channel memory architecture</li><li>3. Support for DDR3 2000(O.C.)/1333/1066 MHz memory modules</li></ol>
<b>Audio</b>	<ol style="list-style-type: none"><li>1. Realtek ALC889 codec</li><li>2. High Definition Audio</li><li>3. 2/4/5.1/7.1-channel</li><li>4. Support for S/PDIF In/Out</li><li>5. Support for CD In</li></ol>
<b>LAN</b>	<ol style="list-style-type: none"><li>1. 1 x Realtek 8111E chip (10/100/1000 Mbit)</li></ol>
<b>Expansion Slots</b>	<ol style="list-style-type: none"><li>1. 1 x PCI Express x16 slot, running at x16 (PCIEX16)(Note 2)</li><li>2. 1 x PCI Express x16 slot, running at x4 (PCIEX4)</li><li>3. 2 x PCI Express x1 slots</li></ol> (All PCI Express slots conform to PCI Express 2.0 standard.)

	4. 3 x PCI slots
<b>Storage Interface</b>	<p>South Bridge:</p> <ol style="list-style-type: none"> <li>1. 6 x SATA 6Gb/s connectors supporting up to 6 SATA 6Gb/s devices</li> <li>2. Support for SATA RAID 0, RAID 1, RAID 5, RAID 10, and JBOD</li> </ol>
<b>USB</b>	<p>South Bridge:</p> <ol style="list-style-type: none"> <li>1. Up to 12 USB 2.0/1.1 ports (8 on the back panel, 4 via the USB brackets connected to the internal USB headers)</li> </ol> <p>Etron EJ168 chip:</p> <ol style="list-style-type: none"> <li>1. Up to 2 USB 3.0/2.0 ports</li> </ol>
<b>Internal I/O Connectors</b>	<ol style="list-style-type: none"> <li>1. 1 x 24-pin ATX main power connector</li> <li>2. 1 x 8-pin ATX 12V power connector</li> <li>3. 6 x SATA 6Gb/s connectors</li> <li>4. 1 x CPU fan header</li> <li>5. 2 x system fan header</li> <li>6. 1 x power fan header</li> <li>7. 1 x front panel header</li> <li>8. 1 x front panel audio header</li> <li>9. 1 x CD In connector</li> <li>10. 1 x S/PDIF In header</li> <li>11. 1 x S/PDIF Out header</li> <li>12. 2 x USB 2.0/1.1 headers</li> <li>13. 1 x serial port header</li> <li>14. 1 x clearing CMOS jumper</li> </ol>
<b>Back Panel Connectors</b>	<ol style="list-style-type: none"> <li>1. 1 x PS/2 keyboard/mouse port</li> <li>2. 1 x coaxial S/PDIF Out connector</li> <li>3. 1 x optical S/PDIF Out connector</li> <li>4. 8 x USB 2.0/1.1 ports</li> <li>5. 2 x USB 3.0/2.0 ports</li> <li>6. 1 x RJ-45 port</li> <li>7. 6 x audio jacks (Center/Subwoofer Speaker Out/Rear Speaker Out/Side Speaker Out/Line In/Line Out/Microphone)</li> </ol>
<b>I/O Controller</b>	<ol style="list-style-type: none"> <li>1. ITE IT8720 chip</li> </ol>
<b>H/W Monitoring</b>	<ol style="list-style-type: none"> <li>1. System voltage detection</li> <li>2. CPU/System temperature detection</li> <li>3. CPU/System/Power fan speed detection</li> <li>4. CPU overheating warning</li> <li>5. CPU/System/Power fan fail warning</li> <li>6. CPU/System fan speed control (Note 3)</li> </ol>
<b>BIOS</b>	<ol style="list-style-type: none"> <li>1. 2 x 16 Mbit flash</li> <li>2. Use of licensed AWARD BIOS</li> </ol>

	<ol style="list-style-type: none"> <li>Support for DualBIOS™</li> <li>PnP 1.0a, DMI 2.0, SM BIOS 2.4, ACPI 1.0b</li> </ol>
<b>Unique Features</b>	<ol style="list-style-type: none"> <li>Support for @BIOS</li> <li>Support for Q-Flash</li> <li>Support for Xpress BIOS Rescue</li> <li>Support for Download Center</li> <li>Support for Xpress Install</li> <li>Support for Xpress Recovery2</li> <li>Support for EasyTune (Note 4)</li> <li>Support for Easy Energy Saver</li> <li>Support for Smart Recovery</li> <li>Support for Auto Green</li> <li>Support for On/Off Charge</li> <li>Support for Cloud OC</li> <li>Support for Q-Share</li> </ol>
<b>Bundle Software</b>	<ol style="list-style-type: none"> <li>Norton Internet Security (OEM version)</li> </ol>
<b>Operating System</b>	<ol style="list-style-type: none"> <li>Support for Microsoft Windows 7/ Vista/ XP</li> </ol>
<b>Form Factor</b>	<ol style="list-style-type: none"> <li>ATX Form Factor; 30.5cm x 22.0 cm</li> </ol>
<b>Note</b>	<p>(Note 1) Due to Windows 32-bit operating system limitation, when more than 4 GB of physical memory is installed, the actual memory size displayed will be less than 4 GB.</p> <p>(Note 2) For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.</p> <p>(Note 3) Whether the CPU/system fan speed control function is supported will depend on the CPU/system cooler you install.</p> <p>(Note 4) Available functions in EasyTune may differ by motherboard model.</p>
<b>Remark</b>	<ol style="list-style-type: none"> <li>Due to different Linux support condition provided by chipset vendors, please download Linux driver from chipset vendors' website or 3rd party website.</li> <li>Most hardware/software vendors no longer offer support for Win9X/ME/2000/XP SP1/SP2. If drivers are available from the vendors, we will update them on the GIGABYTE website.</li> </ol>

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\* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

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\* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.