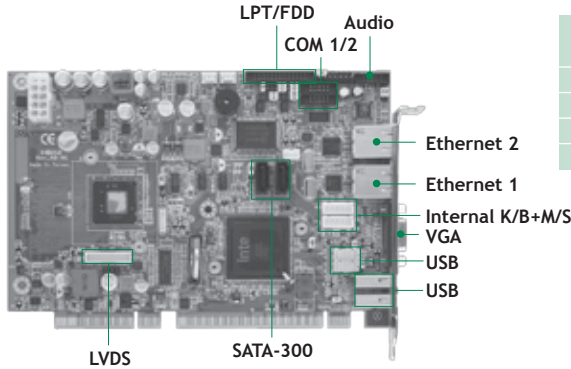


SHB212

Intel® Atom™ N455/ D425/ D525 PICMG 1.3 Half-size CPU Card with Intel® ICH8M Chipset, VGA, LVDS, Dual LANs and Audio



Atom™
D425/ D525/ N455
2 G.E.
1 DDR3
6 USB 2.0
CompactFlash™



Features

- Intel® Atom™ processor N455 (1.66 GHz)/ D425/ D525 (1.8 GHz)
- Intel® ICH8M chipset
- 1 DDR3 SO-DIMM support up to 4GB memory capacity

System

| | |
|---------------------|--|
| CPU | Intel® Atom™ processor D425/ D525 1.8 GHz & N455 1.66 GHz |
| System Memory | 1 x 204-pin SO-DIMM supports DDR3-667 (N455)/ 800(D425/ D525) max. up to 4GB |
| Chipset | Intel® ICH8M |
| BIOS | AMI |
| SSD | 1 x CompactFlash™ |
| Watchdog Timer | 255 levels, 1-255 sec. |
| Expansion Interface | 4 x PCIe lanes support for 1 x PCIe x4 or 4 PCIe x1 I/O device Note: There is no PCIe x16 signal |
| Battery | Lithium 3V/196mAh |
| Power Requirements | Intel® Atom™ N455 @ 1.66 GHz, 1GB DDR3 +5V_SBY @ 110mA, +3.3V @ 150mA, +12V @ 380mA Intel® Atom™ D425 @ 1.86 GHz, 1GB DDR3 +5V_SBY @ 112mA, +3.3V @ 165mA, +12V @ 390mA Intel® Atom™ D525 @ 1.86 GHz, 1GB DDR3 +5V_SBY @ 115mA, +3.3V @ 180mA, +12V @ 410mA |
| Size | 185 x 126 mm |
| Board Thickness | 1.6 mm |
| Temperature | 0°C ~ +60°C (32°F ~ 140°F), operation |
| Relative Humidity | 10% ~ 95% relative humidity, non-condensing |

I/O

| | |
|---------------------|--|
| MIO | 1x IDE 1 x FDD/LPT(default); with SPP/EPP/ECP supported 1 x PS/2 keyboard 1 x PS/2 mouse 1 x RS-232/422/485 (COM 1) 1 x RS-232 (COM 2) |
| SATA | 2 x SATA-300 |
| Hardware Monitoring | Detect CPU/system temperature, voltage and support Smart Fan control |
| Ethernet | 1st port as 10/100/1000Mbps supports Wake-on-LAN, RPL/PXE Boot ROM with Intel® 82567V 2nd port as 10/100/1000Mbps supports Wake-on-LAN, RPL/PXE Boot ROM with Intel® 82574L |
| Audio | HD Codec audio as MIC-in/Line-in/Line-out/speaker-out with Realtek ALC662 |
| USB | 6 x USB 2.0 |
| SMBus | N/A |

Display

| | |
|------------------|--|
| Chipset | Intel® GMA 3150 graphics Core |
| Memory Size | Intel® DVM 4.0 compliant |
| Output Interface | 1x VGA 1x LVDS; 18-bit single channel |

Packing List

| Standard | | |
|---|------------------------------|-----|
| Quick installation guide, user's manual/utility CD, cable | | |
| Cable | | |
| Part Number | Description | Qty |
| 5938450000E | COM + Print cable w/ bracket | 1 |
| 593826A0000E | SATA signal cable 500mm | 1 |

Ordering Information

| Standard | |
|-----------------------------------|---|
| SHB212VGGA-N455 (P/N: E38C212100) | Intel® Atom™ N455 PICMG 1.3 Half-size CPU card with VGA, 2 10/100/1000Mbps Ethernet (Fanless) and audio |
| SHB212VGGA-D425 (P/N: E38C212101) | Intel® Atom™ D425 PICMG 1.3 Half-size CPU card with VGA, 2 10/100/1000Mbps Ethernet and audio |
| SHB212VGGA-D525 (P/N: E38C212102) | Intel® Atom™ D525 PICMG 1.3 Half-size CPU card with VGA, 2 10/100/1000Mbps Ethernet and audio |
| Optional | |
| 593836A0030E | 4-pin power cable to SATA x 2 L=150mm |
| 59382631000E | 2 x USB port wafer cable with bracket L=180mm |
| 59383600000E | Audio cable |

SBC Services and Solutions

System on Modules

Embedded SBCs > EPIC

Embedded SBCs > 3.5" Capa

Embedded SBCs > Pico-ITX

Embedded SBCs > PC/104

Industrial Motherboards

Slot CPU Cards

Accessories

Appendix