

CAPA831

3.5" Embedded SBC with Intel® Atom™ D2550/N2600/N2800, Intel® NM10, LVDS/DisplayPort/VGA, Dual LANs and Audio

Features

- Intel® Atom™ processor D2550 (1.86 GHz)/N2800 (1.86 GHz)/N2600 (1.6 GHz)
- 1 DDR3-800/1066 SO-DIMM, up to 4GB
- 6 USB 2.0 ports
- 4 COM ports
- DisplayPort, LVDS, and VGA with dual-view supported
- PCI Express Mini Card with mSATA supported



Core System

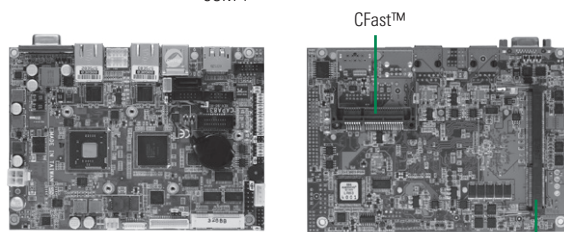
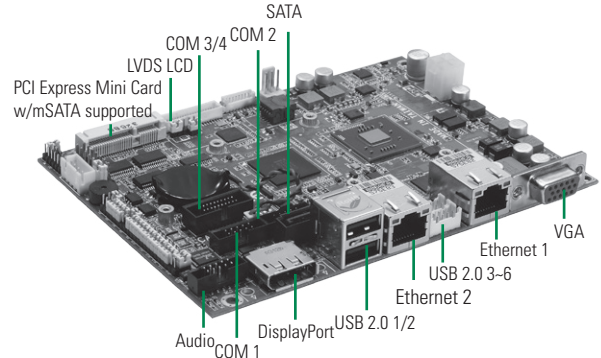
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|-----------------------|--|
| CPU | Intel® Atom™ processor D2550 1.86 GHz, N2800 1.86 GHz, N2600 1.6 GHz dual core onboard |
| System Memory | 1 x 204-pin DDR3-800/1066 SO-DIMM, up to 4GB (N2600 supports DDR-800, up to 2GB) |
| Chipset | Intel® NM10 |
| BIOS | AMI UEFI BIOS |
| SSD | 1 x CFast™ |
| Watchdog Timer | 255 levels, 1~255 sec. |
| Expansion Interface | 1 x PCI Express Mini Card V1.2 with mSATA |
| Battery | Lithium 3V/220mAH |
| Power Input | 2 x 2-pin connectors +12V DC-in only AT Auto Power On function supported |
| Power Requirement | Intel® Atom™ D2550 @ 1.86 GHz, 1GB DDR3 Max. RMS: +12V @ 1.48A |
| Size | 146 x 104 mm |
| Board Thickness | 1.6 mm |
| Operating Temperature | Standard: 0°C ~ +60°C (32°F ~ 140°F) Optional: -20°C ~ +70°C (-4°F ~ +158°F) |
| Operation Humidity | 10% ~ 95% relative humidity, non-condensing |

I/O

| | |
|---------------------|--|
| MIO | 2 x RS-232/422/485 (COM 1/2 with +5V/+12V powered) 2 x RS-232 (COM 3/4 with +5V/+12V powered) |
| SATA | 1 x SATA-300 |
| Hardware Monitoring | Detect CPU/system temperature, voltage and fan speed |
| Ethernet | 2 ports as 10/100/1000 Mbps support Wake-on-LAN, PXE Boot ROM with Intel® 82583V |
| Audio | HD Codec audio as MIC-in/Line-in/Line-out/Speaker-out with Realtek ALC662 |
| USB | 6 x USB 2.0 |
| SMBus | System Management Bus for advanced monitoring/control |
| Digital I/O | 8 channels IN/OUT programmable |
| TPM | ST 33TPM12LPC with TPM 1.2 compliant |

Display

| | |
|-------------------|---|
| Chipset | Intel® GMA 3650 graphics core for D2550/ N2800 Intel® GMA 3600 graphics core for N2600 |
| Memory Size | Share system memory |
| Display Interface | 1 x VGA 1 x DisplayPort 1 x LVDS; 18/24-bit single/dual channel |



▲ Top view

▲ Rear view

DDR3 SO-DIMM

Packing List

Standard

Quick installation guide, user's manual/utility CD, cable

Cable

| Part Number | Description | Qty |
|--------------|--|-----|
| 5938262000E | 1 x COM w/ bracket, P=2.0mm, L=300 mm | 1 |
| 59384500100E | Audio cable w/ bracket, P=2,450 mm | 1 |
| 59382631000E | 2 x USB 2.0 wafer cable w/ bracket, 180 mm | 1 |

Optional

| | |
|--------------|---|
| 59380003000E | 2 x COM w/ bracket, P=1.27 x 2.54, L=300 mm |
| 59070213000E | DisplayPort to VGA cable, L=100 mm |
| 59040131000E | DisplayPort to DVI cable, L=220 mm |
| 59050203000E | DisplayPort to HDMI cable, L=185 mm |
| 59091501000E | DisplayPort to DisplayPort cable, L=1500 mm |

Ordering Information

Standard

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|---|--|
| CAPA831VPGGA-N2800 (fanless) (P/N: E38E831103) | 3.5" Embedded SBC with Intel® Atom™ N2800 1.86 GHz, VGA/DisplayPort/ LVDS, 2 GbE LANs and audio |
| CAPA831VPGGA-N2600 (fanless) (P/N: E38E831105) | 3.5" Embedded SBC with Intel® Atom™ N2600 1.6 GHz, VGA/DisplayPort/ LVDS, 2 GbE LANs and audio |
| CAPA831VPGGA-D2550 (P/N: E38E831106) | 3.5" Embedded SBC with Intel® Atom™ D2550 1.86 GHz, VGA/DisplayPort/ LVDS, 2 GbE LANs, audio and heatsink fan |
| CAPA831VPGGA-N2800 w/ WT (fanless) | 3.5" Embedded SBC with Intel® Atom™ N2800 1.86 GHz, VGA/DisplayPort/LVDS, 2 GbE LANs, audio and WT (-20°C ~ +70°C) |
| CAPA831VPGGA-D2550 w/ WT (fanless) (P/N: E38E831108) | 3.5" Embedded SBC with Intel® Atom™ D2550 1.86 GHz, VGA/DisplayPort/LVDS, 2 GbE LANs, audio and WT (-20°C ~ +70°C) |

