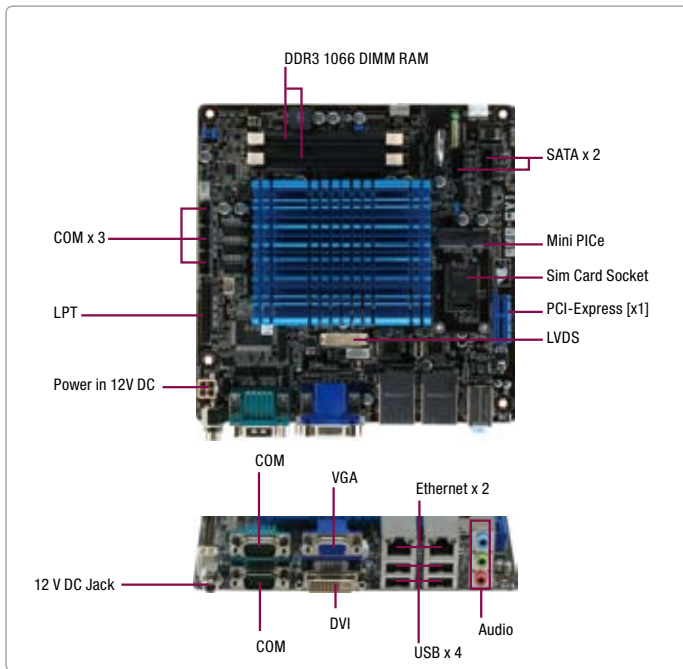


EMB-CV1

Mini-ITX Embedded Motherboard with Intel® Atom™ D2550 Processor

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Embedded & Industrial Motherboards



Features

- Onboard Intel® Atom™ D2550 Processor
- Intel® NM10
- VGA, 18/24-bit LVDS, DVI, Dual Independent Display
- Gigabit Ethernet x 2
- COM x 5 (RS-232 x 4, RS-232/422/485 x 1)
- PCI-Express [x1], Mini Card x 1 (Full Size), SIM Slot
- DC 12V (Selectable AT/ATX Mode for Power On)



Specifications

| System | |
|-----------------------|---|
| Form Factor | Mini-ITX |
| Processor | Integrated Intel® Atom™ processor D2550 Dual Core 1.86GHz (TDP ≤ 10W) |
| System Memory | Dual-Channel with 204-pin SODIMM x 2 DDR3 1066, up to 4 GB |
| Chipset | Intel® NM10 |
| I/O Chipset | ITE IT8783F |
| Ethernet | Realtek® 8111E, Gigabit Ethernet, RJ-45 x 2 |
| BIOS | AMI BIOS, 32MB ROM |
| Wake On LAN | Yes |
| Watchdog Timer | Yes |
| TPM | Infineon SLB9635 TT1.2 |
| H/W Status Monitoring | Temperature Monitor on CPU/Chassis Voltage Monitor on Vcore /5V/3.3V/12V Fan Monitor on CPU/Chassis |
| Expansion Interface | PCIe [x1] x 1, Full-size Mini Card (PCIe[x1] +USB) x 1, SIM x 1 |
| Battery | Lithium battery |
| Power Requirement | DC 12V, 4-pin ATX x 1 |
| Power Consumption | 15W @ Intel® Atom™ D2550, DDR3 1066/2GB, DC |
| Board Size | 6.7" x 6.7" (170mm x 170mm) |
| Gross Weight | 1.1 lb (0.5 Kg) |
| Operation Temperature | 32°F ~ 140°F (0°C ~ 60°C) |
| Storage Temperature | -40°F ~ 185°F (-40°C ~ 85°C) |
| Operation Humidity | 0%~90%RH, non-condensing |
| MTBF (Hours) | 178,000 |
| Display | |
| Graphic | Intel® Graphics Media Accelerator |
| Memory | Shared system memory up to 384MB |
| Resolution | Up to 1920 x 1200@60Hz for VGA Up to 1440 x 900 @60Hz for LVDS Up to 1920 x 1200@60Hz for DVI |
| Output Interface | 18/24-bit LVDS VGA x 1, DVI-D x 1 |
| I/O | |
| Storage | SATA 3.0Gb/s x 2 |
| Serial Port | RS-232 x 4, RS-232/422/485 x 1 (RS-422/485 is selectable by jumper and BIOS) |
| Parallel Port | SPP/EPP/ECP |
| USB | USB 2.0 x 7, 3 ports for internal, 4 ports on back panel |
| Digital I/O | 8-bit programmable |
| PS/2 Port | PS/2 Port Keyboard/Mouse 6-pin connector x 1 |
| Audio | Line-in, Mic-in, Line-out |

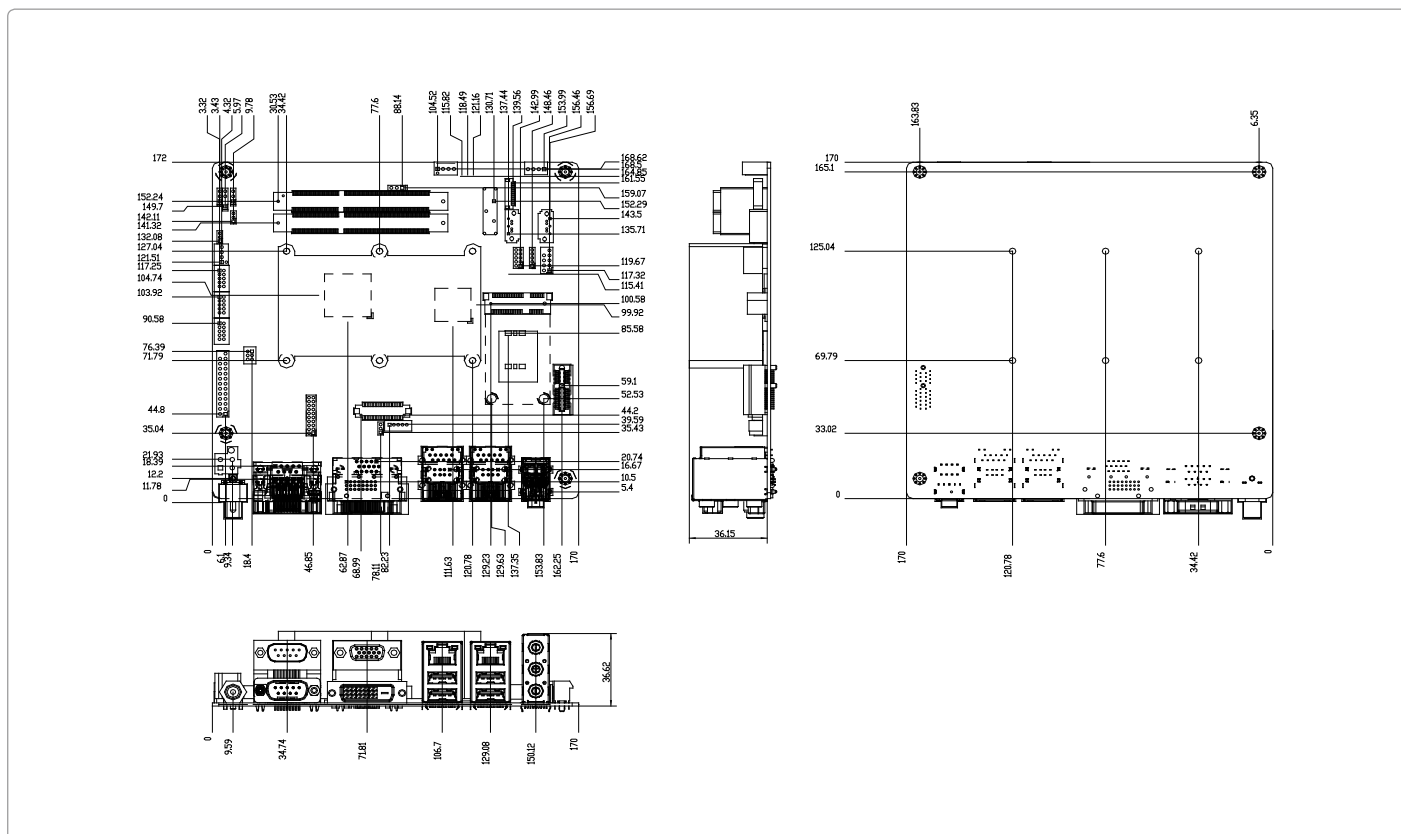
Packing List

- SATA Cable x 2
- SATA Power Cable
- Metal I/O Bracket
- Product CD
- EMB-CV1

EMB-CV1

Dimension

Unit: mm



Ordering Information

| Part Number | CPU | RAM | Fan/Fanless | Display | Storage | LVDS | LAN | USB | RS-232 | RS-232/422/485 | Expansion Slot | Power | Temp. |
|----------------|--------------------|--------|-------------|----------------|-----------|------------------------|---------|-----|--------|----------------|-------------------------------------|---------|------------|
| EMB-CV1-A10-01 | Intel® Atom™ D2550 | SODIMM | Fanless | VGA/DVI-D/LVDS | SATA2 x 2 | 18/24-bit Dual-channel | GbE x 2 | 7 | 4 | 1 | Full-size Mini Card, PCI-E [x1] x 1 | +12V/DC | 0°C ~ 60°C |

Optional Accessories

- **1757306007**
Lockable Adapter
- **1700060152**
PS/2 Cable
- **LPT Cable**
- **1701100206**
COM Port Cable
- **1709100201**
USB2.0 Cable
- **1709070800**
SATA Cable