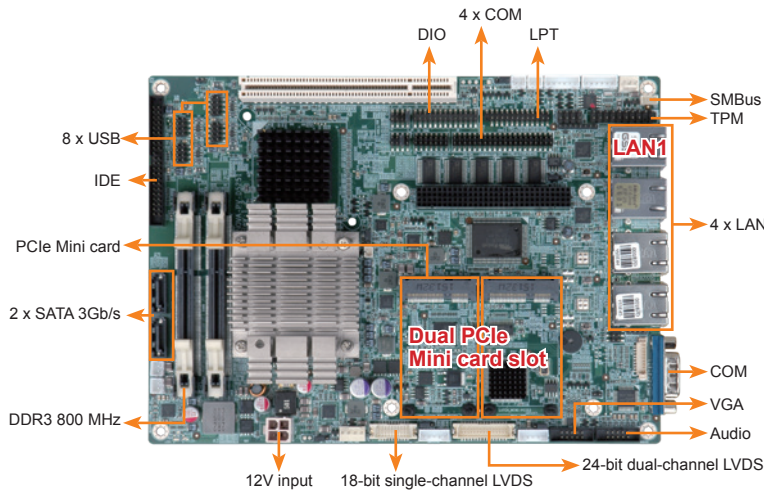
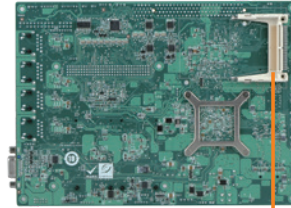


# NOVA-PV-D5251

5.25" SBC, Intel® Atom™ D425/D525, DDR3, 18-bit+48-bit LVDS/VGA, Dual PCIe Mini, Quad PCIe GbE, USB 2.0, SATA 3Gb/s, Audio, RoHS



Solder side



CF Type II

Dual LVDS  
4 PCIe GbE  
24-bit DIO



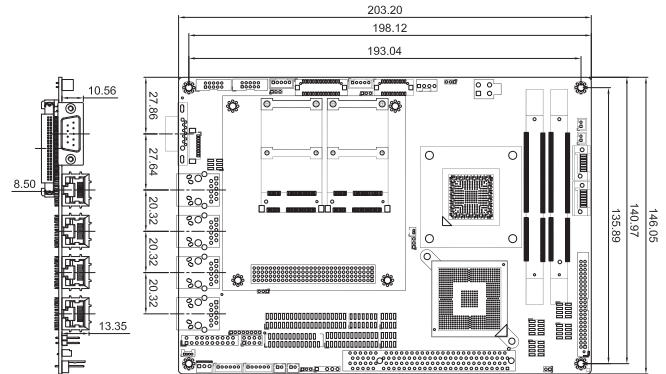
## Specifications

- ◆ CPU  
1.8GHz Intel® Atom™ D525 dual-core processor with 1MB L2 cache
- ◆ Chipset  
Intel® ICH8M
- ◆ BIOS  
UEFI BIOS
- ◆ Memory  
Two 204-pin 800 MHz DDR3 SDRAM SO-DIMM supports up to 4 GB
- ◆ Ethernet  
LAN1: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support  
LAN2-4: Realtek RTL8111E PCIe GbE controller
- ◆ Graphics  
GMA 3150  
Graphic core speed 400 MHz for D525
- ◆ External I/O Interface  
1 x RS-232
- ◆ Internal I/O Interface  
1 x CF Type II  
1 x IDE  
1 x RS-232/422/485 (2x5 pin, P=2.0) (Auto flow control)  
2 x SATA 3Gb/s with 5V SATA power connector (no RAID)  
3 x RS-232 for NOVA-PV-D5251-G2L2-R11 (2x5 pin, P=2.0)  
4 x RS-232 for NOVA-PV-D5251-G4-R11 (2x5 pin, P=2.0)  
8 x USB 2.0 (2x4 pin, P=2.0)
- ◆ TPM  
1 x TPM (2x10 pin)
- ◆ SMBus  
1 x SMBus (1x4 pin)
- ◆ Expansion  
1 x PCI-104  
2 x Full-size PCIe Mini card slot  
1 x PCI
- ◆ Digital I/O  
24-bit digital I/O (2x15 pin)
- ◆ Display Output  
Dual display supported  
1 x VGA (up to 2048x1536@60Hz)  
1 x 18-bit single-channel LVDS (up to 1366x768@60Hz)  
1 x 24-bit dual-channel LVDS (up to 1920x1080@60Hz)
- ◆ Audio  
Realtek ALC662 HD Audio codec  
1 x Front audio (2x5 pin)
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ Fan Connector  
1 x CPU smart fan (1x4 pin)  
1 x System smart fan (1x3 pin)
- ◆ Power Supply  
12V only DC input  
1 x Internal power connector (2x2 pin)  
Support AT/ATX mode
- ◆ Power Consumption  
12V@1.46A (Intel® Atom™ D525 1.8GHz with two 800 MHz 1 GB DDR3 SO-DIMM)
- ◆ Operating Temperature  
-10°C ~ 60°C
- ◆ Operating Humidity  
5% ~ 95%, non-condensing
- ◆ Dimensions  
203 mm x 146 mm
- ◆ Weight  
GW: 1000g / NW: 400g
- ◆ CE/FCC compliant

## Features

- 5.25" SBC supports Intel® Atom™ D525/D425 processor
- 800/1066 MHz DDR3 supports up to 4 GB
- VGA/18-bit single-channel/24-bit dual-channel LVDS for dual independent display support
- Quad PCIe Ethernet, two SATA 3Gb/s, and six RS-232 serial port connectors
- TPM V1.2 hardware security function supported by TPM module
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Dimensions (Unit: mm)



## Packing List

1 x NOVA-PV-D5251 single board computer	
1 x Audio cable	1 x VGA cable
1 x KB/MS cable	1 x Mini jumper pack
1 x Quad port RS-232 cable	1 x One Key Recovery CD
1 x SATA with power cable kit	1 x QIG
1 x USB cable	1 x Utility CD

## Ordering Information

Part No.	Description
NOVA-PV-D5251-G4-R12	5.25" SBC, Intel® Atom™ D525 dual-core 1.8GHz, DDR3, 18-bit LVDS/VGA, dual PCIe Mini, quad PCIe GbE, USB 2.0, SATA 3Gb/s, audio, RoHS
NOVA-PV-D5251-G2L2-R12	5.25" SBC, Intel® Atom™ D525 dual-core 1.8GHz, DDR3, 18+48-bit LVDS/VGA, dual PCIe Mini, dual PCIe GbE, USB 2.0, SATA 3Gb/s, audio, RoHS
19FFD124010HB2A7-000001-RS	CPU fan (40mm x 40mm x 10mm)
19800-004300-100-RS	RS-232 & RS-422/485 cable with bracket, 14-pin to two DB-9, 250mm, P=2.0
32200-000009-RS	44-pin 2.5" IDE cable, 400mm, P=2.0
32200-015100-RS	LPT cable, 280mm, P=2.0
34000-000629-RS	30mm higher heatsink
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17