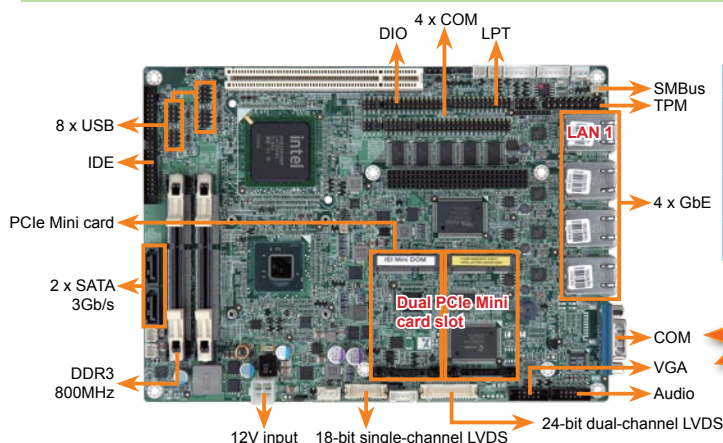


# NOVA-PV-D4251 D5251

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

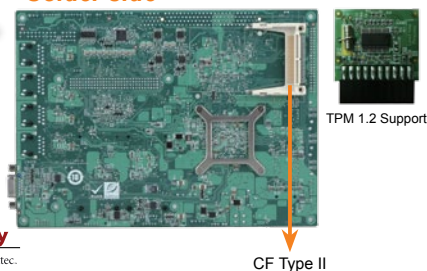


## Model Variations

Model	CPU	PCIe GbE	LVDS	COM Ports
NOVA-PV-D5251-G4	Intel® Atom™ D525	Four RJ-45	18-bit single-channel	1 x DB-9 RS-232 4 x Internal RS-232 1 x Internal RS-232/422/485
NOVA-PV-D4251-G2L2	Intel® Atom™ D425	Two RJ-45	18-bit single-channel & 24-bit dual-channel	4 x Internal RS-232
NOVA-PV-D5251-G2L2	Intel® Atom™ D525			1 x Internal RS-232/422/485

Dual LVDS  
4 PCIe GbE  
24-bit DIO

## Solder side



## Specifications

- ◆ CPU  
1.8GHz Intel® Atom™ D525 dual-core processor with 1MB L2 cache  
1.8GHz Intel® Atom™ D425 single-core processor with 512KB L2 cache
- ◆ System Chipset  
Intel® ICH8M
- ◆ BIOS  
UEFI BIOS
- ◆ Memory  
Two 204-pin 800MHz DDR3 SDRAM SO-DIMMs supported (system max. 4GB) for D525/D425
- ◆ Ethernet  
Four PCIe Realtek RTL8111E GbE controller, LAN1 with ASF 2.0 support
- ◆ Graphic  
GMA 3150  
Graphic core speed 400MHz for D525/D425
- ◆ I/O Interface  
4 x RS-232 for NOVA-PV-D5251/D4251-G2L2-R10  
5 x RS-232 for NOVA-PV-D5251-G4-R10  
1 x RS-232/422/485 with auto flow control  
8 x USB 2.0      2 x SATA 3Gb/s  
1 x LPT            1 x IDE  
1 x CF Type II    1 x 6-pin header for KB/MS
- ◆ Expansion  
1 x PCI-104  
2 x PCIe Mini card slot  
1 x PCI
- ◆ Digital I/O  
24-bit digital I/O, 12-bit input/12-bit output
- ◆ Super IO  
Fintek F81865
- ◆ Display Interface  
Dual display supported  
1 x VGA  
1 x 18-bit single-channel LVDS  
1 x 24-bit dual-channel LVDS
- ◆ Audio  
Realtek ALC888 HD Audio codec
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ TPM  
2 x 10-pin header
- ◆ SMBus  
1 x 4-pin wafer
- ◆ SATA Power  
2 x 2-pin wafer for SATA 5V power connector
- ◆ Fan Connector  
1 x 4-pin CPU fan connector  
1 x 3-pin system fan connector
- ◆ Power Supply  
12V only
- ◆ Power Consumption  
12V@1.46A (Intel® Atom™ D525 1.8GHz with DDR3 1GB\*2)
- ◆ Temperature  
-20°C ~ 60°C with free air, -20°C ~ 70°C with force air for D525 processor  
-20°C ~ 65°C with free air, -20°C ~ 70°C with force air for D425 processor
- ◆ Humidity  
Operation: 5% ~ 95%, non-condensing
- ◆ Dimensions  
203 mm x 146 mm
- ◆ Weight  
GW: 1000g/NW: 400g



## Features

1. 5.25" SBC supports Intel® Atom™ D525/D425 processor
2. 800/1066 MHz DDR3 supports up to 4GB
3. VGA/18-bit single-channel/24-bit dual-channel LVDS for dual independent display support
4. Quad PCIe Ethernet, two SATA 3Gb/s, and six RS-232 serial port connectors
5. TPM V1.2 hardware security function supported by TPM module
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x NOVA-PV-D4251/D5251 single board computer	
1 x KB/MS Y cable (P/N: 32000-023800-RS)	
1 x VGA cable (P/N: 32000-033804-RS)	
1 x Quad RS-232 cable (P/N: 32100-147900-RS)	
1 x SATA with Power cable kit (P/N: 32801-000201-100-RS)	
1 x Audio cable (P/N: 32000-072100-RS)	1 x Mini jumper pack
1 x USB cable (P/N: 32001-008600-100-RS)	1 x Utility CD
1 x One Key Recovery CD	1 x QIG

## Ordering Information

Part No.	Description
NOVA-PV-D5251-G4-R10	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-D4251-G2L2-R10	5.25" SBC, Intel® Atom™ D425 single-core 1.8GHz, DDR3, 18+48-bit LVDS/VGA, dual PCIe Mini, dual PCIe GbE, USB 2.0, SATA 3Gb/s, audio, RoHS
NOVA-PV-D5251-G2L2-R10	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
32200-000009-RS	44 pin 2.5" IDE cable
32200-015100-RS	LPT cable
32205-000300-100-RS	RS-232/422/485 cable
31100-000327-RS	CPU fan
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware V3.17

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Introduction