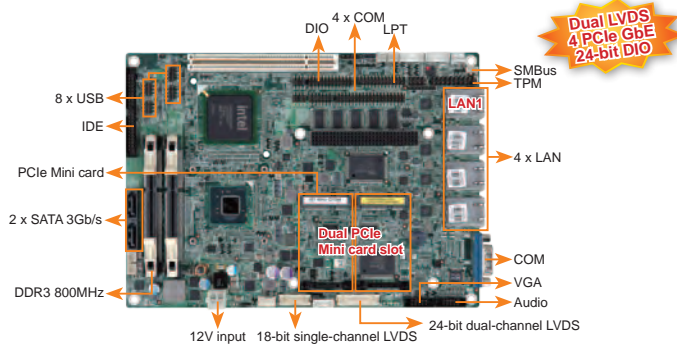
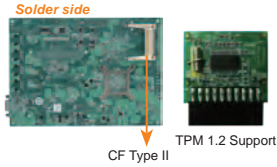


# NOVA-PV-D5251-R11

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



Dual LVDS  
4 PCIe GbE  
24-bit DIO



## Features

- 5.25" SBC supports Intel® Atom™ D525/D425 processor
- 800/1066 MHz DDR3 supports up to 4GB
- 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

## Specifications

- CPU**
  - 1.8GHz Intel® Atom™ D525 dual-core processor with 1MB L2 cache
- System Chipset:** Intel® ICH8M
- BIOS:** UEFI BIOS
- Memory**
  - Two 204-pin 800MHz DDR3 SDRAM SO-DIMMs supported (system max. 4GB) for D525
- Ethernet**
  - Four PCIe Realtek RTL8111E GbE controller, LAN1 with ASF 2.0 support
- Graphic**
  - GMA 3150
  - Graphic core speed 400MHz for D525
- I/O Interface**
  - 4 x RS-232 for NOVA-PV-D5251-G2L2-R11
  - 5 x RS-232 for NOVA-PV-D5251-G4-R11
  - 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 ALC662 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)
- Operating Temperature:** -10°C ~ 60°C
- Humidity**
  - Operation: 5% ~ 95%, non-condensing
- Dimensions:** 203 mm x 146 mm
- Weight:** GW: 1000g/NW: 400g

## Packing List

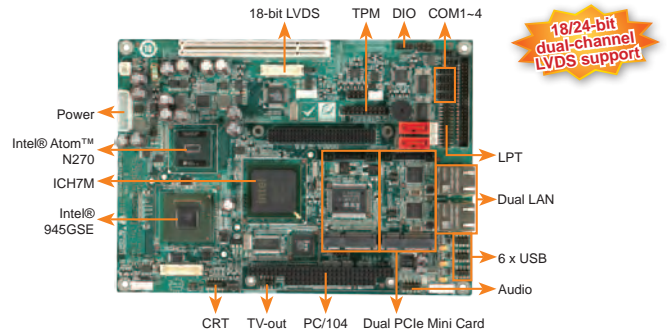
|  |                         |
|--|-------------------------|
| 1 x NOVA-PV-D5251 single board computer                  |                         |
| 1 x Quad RS-232 cable (P/N: 32205-002000-100-RS)         |                         |
| 1 x SATA with Power cable kit (P/N: 32801-000201-300-RS) |                         |
| 1 x Audio cable (P/N: 32000-072100-RS)                   | 1 x One Key Recovery CD |
| 1 x KB/MS Y cable (P/N: 32000-023800-RS)                 | 1 x Mini jumper pack    |
| 1 x USB cable (P/N: 32000-070301-RS)                     | 1 x Utility CD          |
| 1 x VGA cable (P/N: 32000-033804-RS)                     | 1 x QIG                 |

## Ordering Information

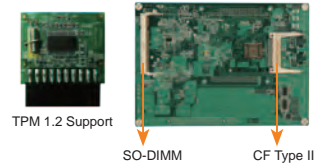
| Part No.                   | Description  |
|----------------------------|--|
| NOVA-PV-D5251-G4-R11       | 5.25" SBC, Intel® Atom™ D525 dual-core 1.8GHz, DDR3, 18-bit LVDS/VGA, dual PCIe Mini, quad PCIe GbE, USB 2.0, SATA 3Gb/s, audio, RoHS    |
| NOVA-PV-D5251-G2L2-R11     | 5.25" SBC, Intel® Atom™ 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  |
| 32200-026500-RS            | RS-232/422/485 cable   |
| 19FFD124010HB2A7-000001-RS | CPU fan  |
| 34000-000510-RS            | 30mm higher heatsink   |
| TPM-IN01-R11               | 20-pin Infineon TPM module, software management tool, firmware V3.17   |

# NOVA-945GSE-R20

5.25" SBC, Intel® Atom™ N270 1.6GHz, LVDS/VGA/HDTV, Dual PCIe Mini, Dual PCIe GbE, USB 2.0, SATA, RoHS



18/24-bit  
dual-channel  
LVDS support



## Features

- 1.6GHz Intel® Atom™ N270 processor with fanless support
- 400/533MHz DDR2 SO-DIMM memory support up to 2GB
- Support dual PCIe Mini card/PCI slot for expansion
- Dual LVDS support dual display output
- CF socket for storage expansion
- TPM support
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- CPU**
  - Intel® Atom™ N270 1.6GHz with a 533MHz FSB
- System Chipset:** Intel® 945GSE+ICH7M
- BIOS:** AMI BIOS
- Memory**
  - One 200-pin 400/533MHz DDR2 SDRAM SO-DIMM supported (system max. 2GB)
- Ethernet**
  - Dual LAN: Realtek PCIe 8111CP GbE controller
- Graphic**
  - Intel® Graphics Media Accelerator 950
- I/O Interface**
  - 3 x RS-232
  - 1 x RS-232/422/485
  - 6 x USB 2.0
  - 2 x SATA with 5V output
  - 1 x LPT
  - 1 x IDE
  - 1 x 6-pin header for KB/MS
- Expansion**
  - 1 x PC/104+ (ISA+PCI bus)
  - 2 x PCIe Mini card
  - 1 x PCI
- Digital I/O**
  - 8-bit digital I/O (4-bit input, 4-bit output)
- Infrared Interface**
  - 1x 5-pin infrared interface by pin header
- Super IO:** ITE IT8718F
- Display Output**
  - Analog CRT support CRT hotplug
  - HDTV supported by component interface
- Audio:** AC'97 ALC655 codec
- SSD:** CF Type II
- Watchdog Timer**
  - Software programmable supports 1~255 sec. system reset
- TPM:** 1x 20-pin header
- Power Supply**
  - 5V only, 12V for LCD/system fan, AT/ATX power
- Power Consumption**
  - 5V@3.49A (Intel® Atom™ N270 with 512MB DDR2)
- Temperature Operation**
  - 0°C ~ 60°C (32°F~140°F)
- Humidity Operation**
  - 5% ~ 95%, non-condensing
- Dimensions:** 203mm x 146mm
- Weight:** GW:1000g, NW:400g

## Packing List

|   |                                      |
|---|--------------------------------------|
| 1 x NOVA-945GSE-R20 single board computer |                                      |
| 1 x Audio cable (P/N: 32000-072100-RS)    | 1 x USB cable (P/N: 32000-070301-RS) |
| 1 x KB/MS Y cable (P/N: 32000-023800-RS)  | 1 x One Key Recovery CD              |
| 1 x VGA cable (P/N: 32000-033804-RS)      | 1 x Mini jumper pack                 |
| 2 x SATA cable (P/N: 32000-062800-RS)     | 1 x Utility CD                       |
| 4 x RS-232 cable (P/N: 32200-000049-RS)   | 1 x QIG                              |

## Ordering Information

| Part No.             | Description   |
|----------------------|---|
| NOVA-945GSE-N270-R20 | 5.25" SBC, Intel® Atom™ N270 1.6GHz, 18-bit LVDS/VGA/HDTV, dual PCIe Mini, dual PCIe GbE, USB 2.0, SATA, RoHS |
| 32200-000009-RS      | 44-pin 2.5" IDE cable   |
| 32102-000100-200-RS  | SATA power cable  |
| 32200-015100-RS      | LPT cable   |
| VMPCIE-V01-R30       | 802.11b/g PCIe Mini card wireless LAN module  |
| VMUSB-V01-R20        | 802.11b/g USB embedded module   |
| 32200-833600-RS      | RS-422/485 cable  |

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