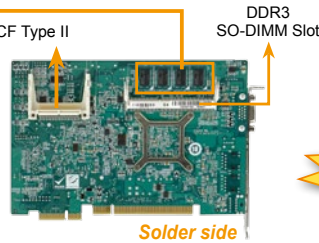
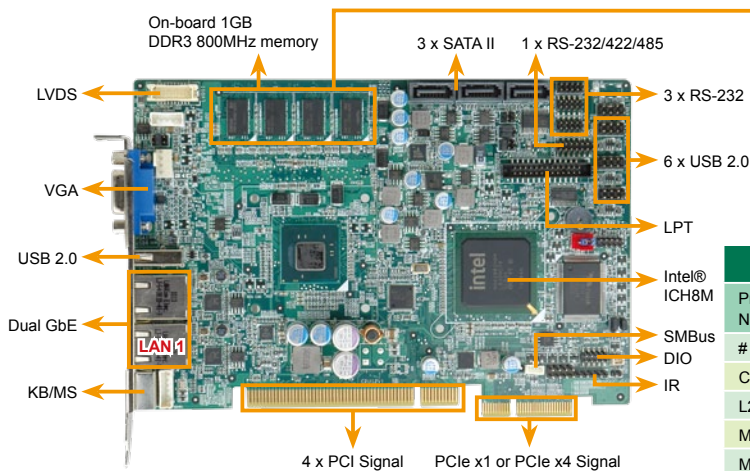


# PIC0e-PV- D4251-R11 N4551-R11 D5251-R11

Half-size PCIe CPU card with Intel® Atom™ D425/ N455/D525, DDR3, 1 GB Memory on board, VGA/ LVDS, Dual PCIe GbE, USB 2.0, SATA II, Audio and RoHS



**Dual Core CPU  
DDR3 Memory**

## Specifications

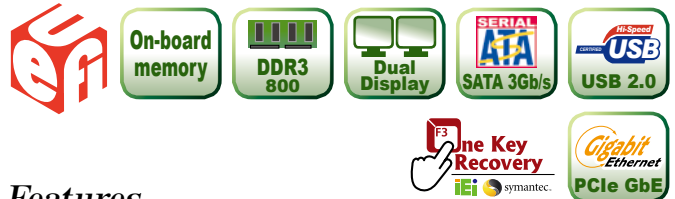
- ◆ CPU
  - Intel® Atom™ Dual Core D525 Processor (1.80GHz with 1MB L2 cache)
  - Intel® Atom™ Single Core N455 Processor (1.66GHz with 512K L2 cache)
  - Intel® Atom™ Single Core D425 Processor (1.80GHz with 512K L2 cache)
- ◆ System Chipset
  - ICH8M
- ◆ BIOS
  - UEFI BIOS
- ◆ Memory
  - One 204-pin 800MHz DDR3 SDRAM SO-DIMM supported (system max. 4GB for D525/D425, 2GB for N455) (compatible w/128MB\*8 SDRAM)
  - On-board 1 GB DDR3 800 MHz memory
- ◆ Graphics Engine
  - GMA 3150
  - Gen3.5 DX9, 400MHz for D525/D425
  - Gen3.5 DX9, 200MHz for N455
- ◆ Ethernet
  - Dual PCIe GbE by Realtek RT8111E, LAN1 with ASF 2.0 support
- ◆ Display Interface
  - Analog CRT up to 2048x1536 for D525/D425, 1400x1050 for N455
  - Supports CRT hot plug
  - Single-channel 18-bit LVDS supports resolution up to XGA (1024x768) & WXGA (1366x768)
- ◆ I/O Interfaces
 

3 x RS-232	1 x RS-232/422/485 with auto flow control
1 x LPT	1 x PS/2 for KB/MS
1 x CF Type II	1 x 6-pin wafer header for KB/MS
3 x SATA II	7 x USB 2.0 (6 by header, 1 on rear side)
- ◆ Digital I/O
  - 8-bit digital I/O, 4-bit input/4-bit output
- ◆ Super IO
  - Fintek F81865
- ◆ Infrared Interface
  - 1 x 5-pin header
- ◆ TPM (Optional)
  - On-board INFINEON SLB9635TT1.2
- ◆ SMBus
  - 1 x 4-pin wafer connector
- ◆ Fan Connector
  - 1 x 4-pin fan connector
- ◆ Expansion
  - 4 x PCI
  - 4 x PCIe x1 or 1 x PCIe x4
- ◆ Audio
  - Supports 7.1 channel HD audio by IEI AC-KIT-888HD-R10 kit
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset
- ◆ Power Consumption
 

5V@3.38A, 12V@0.54A (Intel® Dual Core Atom™ D525 1.80GHz with 1GB DDR3 800MHz memory on board)
5V@3.28A, 12V@0.43A (Intel® Single Core Atom™ D425 1.80GHz with 1GB DDR3 800MHz memory on board)
5V@3.13A, 12V@0.32A (Intel® Single Core Atom™ N455 1.66GHz with 1GB DDR3 800MHz memory on board)
- ◆ Power Supply
  - 5V/12V, AT/ATX support
- ◆ 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
-20°C ~ 70°C with free air, -20°C ~ 75°C with force air for N455 processor
- ◆ Humidity
  - Operation: 5% ~ 95%, non-condensing
- ◆ Dimensions
  - 185 mm x 122 mm
- ◆ Weight
  - GW: 1000g/NW: 250g

Intel® Atom™ Comparison Table for PIC0e-PV SKUs				
Processor Name	Intel® Atom™ D525	Intel® Atom™ N455	Intel® Atom™ D425	Intel® Atom™ D510
# of Cores	2	1	1	2
Clock Speed	1.80 GHz	1.66 GHz	1.80 GHz	1.66 GHz
L2 Cache	1 MB	512 KB	512 KB	1 MB
Max TDP	13 W	6.5 W	10 W	13 W
Memory	DDR3 800MHz	DDR3 800MHz	DDR3 800MHz	DDR2 667/800



## Features

1. PCIe CPU card supports four PCIe x1 or one PCIe x4 and four PCI expansions
2. Intel® Atom™ D525/D425/N455 processor
3. 1GB of DDR3 800MHz SDRAM on board and one expansion SO-DIMM slot support
4. Supports VGA and 18-bit single-channel LVDS with dual display support
5. I/O includes three RS-232, one RS-232/422/485, seven USB 2.0 and three SATA II
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x PIC0e-PV-D4251/N4551/D5251 single board computer	
1 x Dual RS-232 cable (P/N: 19800-000112-RS)	
3 x SATA cable (P/N: 32801-000703-200-RS)	
1 x KB/MS Y cable (P/N: 32006-000300-100-RS)	1 x Mini jumper pack
1 x USB cable (P/N: 19800-003100-200-RS)	1 x Utility CD
1 x One Key Recovery CD	1 x QIG

## Ordering Information

Part No.	Description
PIC0e-PV-D5251-R11	Half-size PCIe CPU card with Intel® Atom™ dual-core D525 1.80GHz/1MB L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, RoHS
PIC0e-PV-D5251T-R11	Half-size PCIe CPU card with Intel® Atom™ dual-core D525 1.80GHz/1MB L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, TPM, RoHS
PIC0e-PV-N4551-R11	Half-size PCIe CPU card with Intel® Atom™ single-core N455 1.66GHz/512K L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, RoHS
PIC0e-PV-N4551T-R11	Half-size PCIe CPU card with Intel® Atom™ single-core N455 1.66GHz/512K L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, TPM, RoHS
PIC0e-PV-D4251-R11	Half-size PCIe CPU card with Intel® Atom™ single-core D425 1.80GHz/512K L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, RoHS
PIC0e-PV-D4251T-R11	Half-size PCIe CPU card with Intel® Atom™ single-core D425 1.80GHz/512K L2, 1GB memory on board, VGA/LVDS, dual PCIe GbE, USB 2.0, SATA II and audio, TPM, RoHS
AC-KIT-888HD-R10	7.1 channel HD audio kit with Realtek ALC888 supports dual audio streams
19800-000075-RS	KB/MS cable with bracket
32102-000100-200-RS	SATA power cable
32200-015100-RS	LPT cable
19800-004300-100-RS	RS-232/422/485 cable with bracket
31100-000327-RS	CPU fan