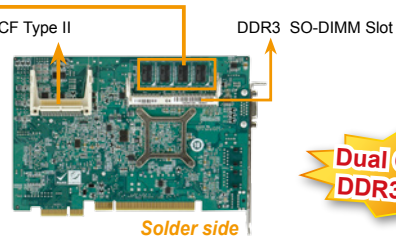
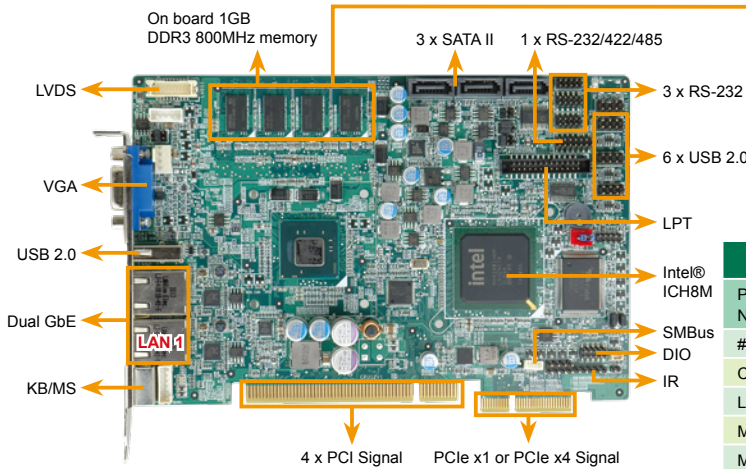


# PIC0e-PV-D4251 N4551 D5251

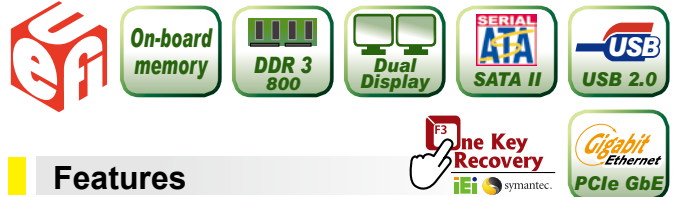
Half-size PCIe CPU Card with Intel® Atom™ D425/N455/D525, DDR3, 1 GB Memory on board, VGA/LVDS, Dual PCIe GbE, USB 2.0, SATA II, Audio and RoHS



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

## 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. 2GB)
  - On-board 1 GB DDR3 800 MHz memory
- ◆ Graphic Engine
  - GMA 3150
  - Gen3.5 DX9, 400MHz for D525/D425
  - Gen3.5 DX9, 200MHz for N455
- ◆ Ethernet
  - Dual PCIe GbE by Realtek RT8111E, LAN1 supports ASF2.0
- ◆ Display Interface
  - Analog CRT up to 2048x1536 for D525/D425, 1400x1050 for N455
  - Support for CRT hot plug
  - Single Channel 18-bit LVDS support 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
  - Support 7.1 channel HD audio by IEI AC-KIT883HD kit
- ◆ Watchdog Timer
  - Software programmable support 1~255 sec. system reset
- ◆ Power Consumption
  - 12V@0.54A, 5V@3.38A (Intel® Atom™ Dual Core D525 1.80GHz 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



## 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. Support VGA and 18-bit single channel LVDS with dual display support
5. I/O include 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:19800-000051-RS)	
3 x SATA cable (P/N:32000-0628000-RS)	
1 x KB/MS Y cable (P/N: 32000-133200-RS)	
1 x USB cable (P/N: CB-USB02-RS)	1 x Utility CD
1 x Mini jumper pack	1 x QIG

## Ordering Information

Part No.	Description
PIC0e-PV-D5251-R10	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-R10	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-R10	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-R10	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-R10	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-R10	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-KIT883HD-R10	7.1 channel HD Audio kit with Realtek ALC883 support dual audio streams
19800-00075-RS	KB/MS cable with bracket
32102-000100-200-RS	SATA power cable
32200-015100-RS	LPT cable
19FTS00032100-000001-RS	CPU fan