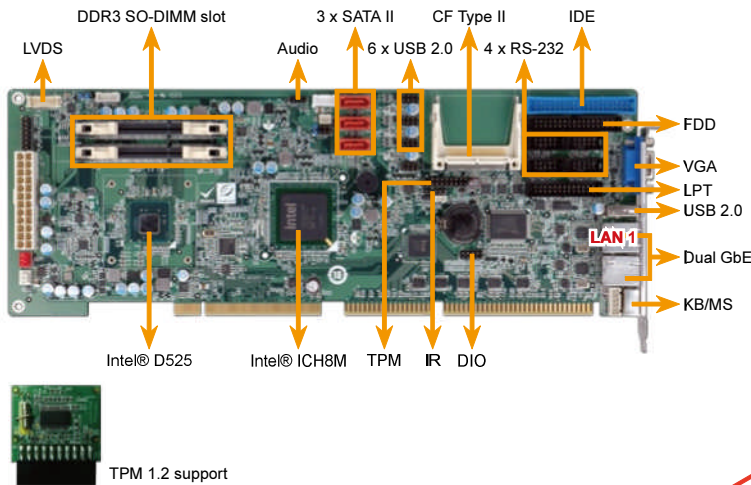


# WSB-PV- D4251 D5251

Full-size PICMG 1.0 CPU card with Intel® Atom™ D425/D525, DDR3, VGA/LVDS, Dual PCIe GbE, SATA II, COM, USB 2.0, Audio and RoHS



Dual Independent Display support

**New**

Feature Comparison Table for WSB-PV SKUs

Processor Name	Intel® Atom™ D525 (1M Cache, 1.80 GHz)	Intel® Atom™ D425 (512K Cache, 1.80 GHz)
# of Cores	2	1
CPU Freq.	1.80 GHz	1.80 GHz
Memory Freq.	DDR3 800MHz	
Memory Channel	Single Channel, 2 SO-DIMM Slots	
Max. Memory Size	4GB	
Display Interface	Dual independent display by VGA and LVDS	
Max. Resolution	VGA: 2048 x 1536 LVDS: 1366 x 768; WXGA: 1280 x 800	



## Specifications

- ◆ CPU
  - Intel® Atom™ D525 dual-core processor (1.80GHz/1MB L2 cache)
  - Intel® Atom™ D425 single-core processor (1.80GHz/512KB L2 cache)
- ◆ System Chipset
  - ICH8M
- ◆ BIOS
  - UEFI BIOS
- ◆ System Memory
  - Two 204-pin 800MHz DDR3 SDRAM SO-DIMMs supported (System max. 4GB) for D525/D425
- ◆ Graphics Engine
  - GMA 3150
  - Gen3.5 DX9, 400MHz for D525/D425
- ◆ Ethernet
  - Dual PCIe Realtek RTL8111E GbE controller, LAN1 with ASF2.0 support
- ◆ Display Interface
  - Analog CRT up to 2048x1536 for D525/D425
  - Supports CRT hot plug
  - 18-bit single channel LVDS, resolution support up to WXGA 1366x768 or XGA 1024x768
- ◆ I/O Interface
  - 4 x RS-232
  - 1 x IDE
  - 1 x CF Type II
  - 1 x LPT
  - 7 x USB 2.0 (1 on bracket, 6 on board by pin header)
  - 3 x SATA II
  - 1 x FDD
  - 1 x 5-pin on-board header for KB
  - 1 x PS/2 connector for KB/MS
- ◆ TPM
  - 2 x 10-pin header
- ◆ SMBus
  - 1 x 4-pin wafer connector
- ◆ Digital I/O
  - 8-bit digital I/O, 4-bit input/4-bit output
- ◆ Infrared Interface
  - 1 x 5-pin infrared by pin header
- ◆ Super I/O
  - Fintek F81865
- ◆ Audio
  - 1 x 10-pin on-board header connects to the IEI audio kit
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset
- ◆ Power Supply
  - AT/ATX power
- ◆ Power Consumption
  - 5V@ 5.16A, 12@ 0.55A
  - (Intel® Dual Core Atom™ D525 1.80GHz with 1066MHz DDR3 2GB x 2 Memory)
- ◆ 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
  - 338 mm x 122 mm
- ◆ Weight
  - GW: 1100g

## Features

1. PICMG 1.0 form factor and RoHS compliant
2. Support Intel® Atom™ D425/D525 1.80GHz processor
3. Support 800MHz DDR3 SDRAM SO-DIMM up to 4GB
4. Dual PCIe Ethernet, three SATA II, and four RS-232 serial port connectors
5. VGA and 18-bit single channel LVDS for dual independent display support
6. TPM V1.2 hardware security function supported by TPM module
7. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

1 x WSB-PV-D4251/D5251 single board computer	
2 x SATA cable (P/N: 32000-062800-RS)	
1 x Dual RS-232 cable (P/N: 19800-000051-RS)	
1 x USB cable (P/N: CB-USB02-RS)	1 x Mini jumper pack
1 x Utility CD	1 x QIG

## Ordering Information

Part No.	Description
WSB-PV-D5251-R10	Full-size PICMG 1.0 CPU card with Intel® Dual Core Atom™ D525 1.80GHz/1MB L2 cache, DDR3, VGA/LVDS, Dual PCIe GbE, SATA II, COM, USB 2.0 and audio, RoHS
WSB-PV-D4251-R10	Full-size PICMG 1.0 CPU card with Intel® Single Core Atom™ D425 1.80GHz/512KB L2 cache, DDR3, VGA/LVDS, Dual PCIe GbE, SATA II, COM, USB 2.0 and audio, RoHS
AC-KIT-888HD-R10	7.1 channel HD Audio kit with Realtek ALC888 support dual audio streams
CB-USB14-RS	4 ports USB cable
32006-000300-100-RS	KB/MS Y cable
32200-000052-RS	ATA 66 flat cable
32102-000100-200-RS	SATA power cable
19800-000400-100-RS	LPT cable
2200-000017-RS	FDD cable
19FTS00032100-000001-RS	CPU Fan
TPM-IN01-R11	20-Pin Infineon TPM module, software management tool, firmware V3.17

1

Industrial Computing Solutions

2

Video Capture Solutions

3

Embedded Computing Solutions

4

Industrial Data Collector and Controller

5

Panel Solutions Introduction

6

ORing Network Communication

7

Power Supply/Peripherals