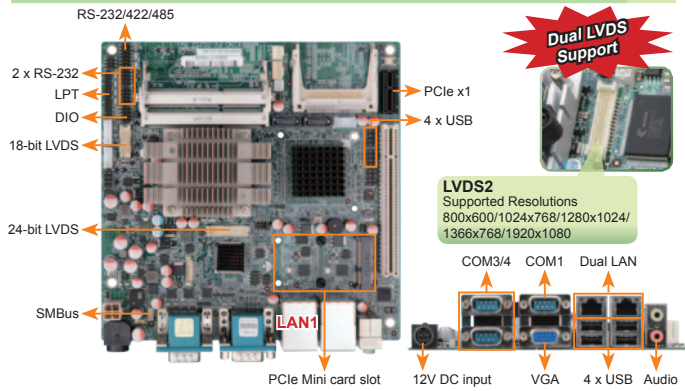


# KINO-PV-D4252/D5252

Mini-ITX SBC with Intel® Atom™ D425/D525, DDR3, VGA/18+48-bit LVDS, dual GbE, audio, USB 2.0 and SATA 3Gb/s, RoHS



## Features

- Mini-ITX SBC with Intel® Atom™ D525/D425 processor
- Support 800 MHz DDR3 SO-DIMM socket (system max. 4 GB)
- Support 24-bit dual-channel LVDS with up to 1920x1080 resolution
- Complete I/O with eight USB, two SATA 3Gb/s, one CF Type II, six COM and audio
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU
  - Intel® Atom™ D525 dual-core processor 1.8GHz/1MB L2 cache
  - Intel® Atom™ D425 single-core processor 1.8GHz/512KB L2 cache
- ◆ Chipset: ICH8M
- ◆ BIOS: UEFI BIOS
- ◆ Memory
  - Two 204-pin 800 MHz DDR3 SDRAM SO-DIMMs supported (system max. 4 GB) for D525/D425
- ◆ Graphics
  - GMA 3150
  - Graphics core speed 400 MHz for D525/D425
- ◆ Display Interface
  - Analog CRT up to 2048x1536 for D525/D425
  - Support CRT hotplug
  - 18-bit single-channel LVDS, up to WXGA 1366x768 or XGA 1024x768
  - 24-bit dual-channel LVDS by Novatek 68660UFG, up to 1920x1080
- ◆ Ethernet
  - LAN1: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support
  - LAN2: Realtek RTL8111E PCIe GbE controller
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ Audio: Realtek ALC662-GR HD Audio codec
- ◆ Digital I/O
  - 8-bit digital I/O (2x5 pin)
- ◆ Expansion
  - 1 x PCI slot
  - 1 x PCIe x1 slot
  - 1 x PCIe Mini card slot
- ◆ External I/O Interface
  - 3 x RS-232
  - 4 x USB 2.0
- ◆ Internal I/O Interface
  - 1 x CF Type II
  - 1 x KB/MS
  - 1 x LPT (2x13 pin, P=2.54)
  - 1 x RS-232/422/485 (2x7 pin, P=2.00)
  - 2 x RS-232 (2x5 pin, P=2.00)
  - 2 x SATA 3Gb/s
  - 4 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset
- ◆ Power Supply
  - 12V, AT/ATX power mode
  - 1 x External 4-pin DIN DC jack
  - 1 x Internal 4-pin (2x2) power connector
- ◆ TPM (optional): On-board Infineon SLB9635T1.2
- ◆ Fan Connector
  - 1 x CPU smart fan (1x4 pin)
  - 1 x System fan (1x3 pin)
- ◆ Power Consumption
  - 12V@1.95A (Intel® Atom™ D525 1.8GHz with two 1 GB DDR3)
- ◆ Operating Temperature: -10°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Weight: GW: 800g/NW: 340g

## Packing List

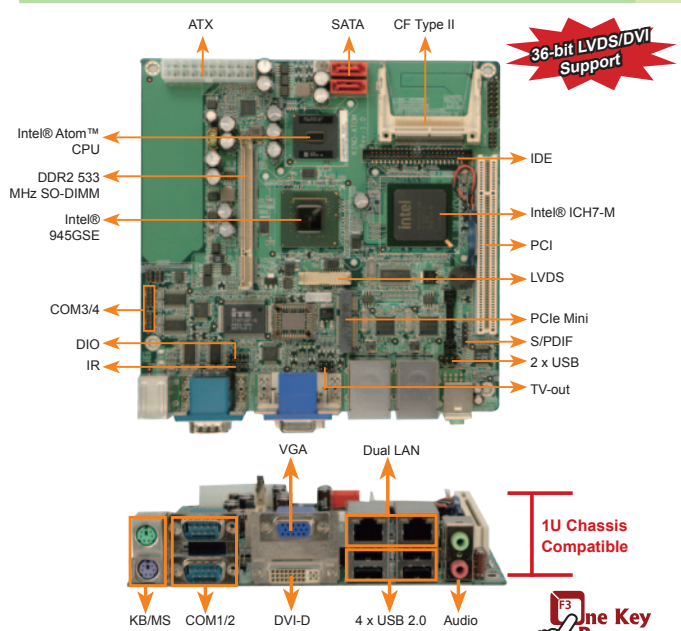
1 x KINO-PV-D4252/D5252 single board computer	1 x Mini jumper pack
1 x I/O shielding	1 x One Key Recovery CD
1 x RS-232 cable with bracket	1 x QIG
1 x SATA with power cable	1 x Utility CD

## Ordering Information

Part No.	Description
KINO-PV-D5252-L2-R11	Mini-ITX SBC with Intel® Atom™ D525 1.8GHz, DDR3, VGA/18+48 bit LVDS, dual GbE, audio, USB 2.0 and SATA 3Gb/s, RoHS
KINO-PV-D4252-R11	Mini-ITX SBC with Intel® Atom™ D425 1.8GHz, DDR3, VGA/18-bit LVDS, dual GbE, audio, USB 2.0 and SATA 3Gb/s, RoHS
19800-003100-300-RS	Dual-port USB cable
19800-004300-100-RS	RS-232/422/485 cable with bracket
19FFD124010HB2A7-000001-RS	CPU fan
32000-023800-RS	PS2 KB/MS cable
32100-192900-RS	One 4-pin (2x2) to one 4-pin (1x4) DC power cable with terminal block
32200-015100-RS	LPT cable
34000-000510-RS	30mm higher heatsink
PCIER-K101L-R10	PCIe x1 riser card

# KINO-945GSE-R12

Mini-ITX SBC with Intel® Atom™ N270 1.6GHz, VGA/DVI/TV, dual PCIe GbE, USB 2.0, SATA and audio



## Features

- Intel® Atom™ processor N270 1.6GHz with ultra low voltage fanless support
- 400/533 MHz DDR2 SO-DIMM memory support up to 2 GB
- Dual display supported by VGA + DVI-D, LVDS + VGA, LVDS + DVI-D
- Support PCIe Mini slot and PCI slot for expansion
- Support six USB 2.0, two SATA, four COM
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU
  - Intel® Atom™ processor N270 1.6GHz with a 533 MHz FSB
- ◆ System Chipset
  - Intel® 945GSE + ICH7M
- ◆ BIOS
  - AMI BIOS
- ◆ Memory
  - One 200-pin 400/533 MHz DDR2 SDRAM SO-DIMM supported (system max. 2 GB)
- ◆ Ethernet
  - Dual LAN: Realtek 8111CP PCIe GbE controller
- ◆ External I/O Interface
  - 1 x KB/MS
  - 2 x RS-232
  - 4 x USB 2.0
- ◆ Internal I/O Interface
  - 1 x CF Type II
  - 1 x IDE
  - 1 x KB/MS
  - 1 x RS-232 (2x5 pin, P=2.00)
  - 1 x RS-232/422/485 (2x5 pin, P=2.00)
  - 1 x SATA 3Gb/s
  - 2 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Graphics: Intel® Graphics Media Accelerator 950
- ◆ Display Output
  - VGA integrated in Intel® 945GSE
  - Support HDTV resolution up to 1080i by component interface
  - 18-bit dual-channel LVDS by Intel® 945GSE
  - DVI-D supported by Silicon Image SiI1362
- ◆ Expansion
  - 1 x PCI, 1 x PCIe Mini card slot
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Infrared Interface by pin header
- ◆ Audio
  - Realtek ALC655 AC'97 codec
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset
- ◆ Power Supply
  - AT/ATX power support
- ◆ Power Consumption: 2.89A@5V, 0.04A@12V (Intel® Atom™ N270 with 1 GB DDR2)
- ◆ Operating Temperature
  - KINO-945GSE-N270-R11: Operating: 0°C ~ 60°C (32°F ~ 140°F)
  - Storage: -20°C ~ 70°C
  - KINO-945GSE-N270W-R11: Operating: -20°C ~ 70°C
  - Storage: -30°C ~ 80°C
- ◆ Humidity Operating
  - 5% ~ 95%, non-condensing
- ◆ Dimensions
  - 170mm x 170mm
- ◆ Weight: GW: 1100g/NW: 370g

## Packing List

1 x KINO-945GSE single board computer	1 x Mini jumper pack
1 x Dual RS-232 cable	1 x One Key Recovery CD
1 x I/O shielding	1 x QIG
2 x SATA cable	1 x Utility CD

## Ordering Information

Part No.	Description
KINO-945GSE-N270-R12	Mini-ITX SBC with Intel® Atom™ N270 1.6GHz, VGA/DVI/TV, dual PCIe GbE, USB 2.0, SATA and audio
KINO-945GSE-N270W-R12	Mini-ITX SBC with Intel® Atom™ N270 1.6GHz, VGA/DVI/TV, dual PCIe GbE, USB 2.0, SATA and audio, -20~70°C
19800-003100-300-RS	Dual USB cable
32102-000100-200-RS	SATA power cable
32200-000009-RS	44-pin 2.5" IDE cable
32200-833600-RS	RS-422/485 cable