



Innovative technologies deliver easy expandability, complete storage and high power efficiency

The ASUS Z9PE-D16/2L serverboard provides an ideal foundation for reliable performance and future upgrades. Through innovative ASUS design, it offers high power efficiency of up to 90%, dual Intel® LAN ports with great virtualization support, and high I/O expandability. Users also obtain high manageability via the latest ASMB6, making this an ideal general purpose host server, AP server, mail server, and storage server.

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Complete storage support

The Z9PE-D16/2L boasts multiple SAS/SATA implementation, from Intel® AHCI to ASUS PIKE, supporting the latest

SATA/SAS 6Gb/s technology. While ASUS optional PIKE provides slim-sized and flexible storage options, direct SAS RAID upgrades can be achieved via a unique slot — without sacrificing expansion capability. ASUS PIKE further provides customers with multiple I/O options and RAID functionality, and various storage expansion choices for different applications.

Green and highly power efficient

Z9PE-D16/2L voltage regulation manages up to 90% peak power efficiency, with 88%+ during heavy CPU loading. This ensures high power efficiency for the entire system to help customers save operating costs.

Build in BMC engine, KVM-over-IP enabled by ASMB6 module for easy troubleshooting

The ASMB6-iKVM enables dashboard system health monitoring, remote power on/off and control, virtual media over LAN, and management LAN fail-over support. In addition, the ASMB6 function is based on BIOS-level access, so even if the server operating system is down or offline, the KVM module can still provide round-the-clock remote monitoring and diagnosis through a user-friendly web-based graphical interface through all major browsers.

Cutting-edge architecture

The Z9PE-D16/2L supports the latest Intel® E5-2600 series processors (Sandy Bridge-EP). Through ASUS design and research expertise, it has been adapted to support upcoming E5-2600 V2 processors (Ivy Bridge-EP) to protect customer investment. Featuring 16-DIMM slots, it can take up to 512GB of DDR3 1600/1333/1066 RDIMM, and DDR3 1333/1066 UDIMM/LRDIMM memory, providing high computing capability. Additionally, with PCI Express 3.0 support, the Z9PE-D16/2L enables higher bandwidth to meet various demanding application requirements.

Server-class dual LAN connection

The new serverboard ships with the industry's first fully integrated Intel® I350 dual-port Ethernet controller, which supports energy efficient Ethernet and DMA coalescing and offers reliable and fast network connections. With VT-d technology and new VMDq queuing, the Z9PE-D16/2L easily manages virtualization applications while maintaining superior performance.

Processor / System Bus

2 x Socket 2011

Intel® Xeon® processor E5-2600 product family

Intel® Xeon® processor E5-2600 v2 product family

QPI 6.4 / 7.2 / 8.0 GT/s

Core Logic

Intel® C602-A PCH

Memory

Total Slots : 16 (4-channel per CPU, 8 DIMM per CPU)

Capacity : Maximum up to 512GB RDIMM

Memory Type :

DDR3 1866/1600/1333/1066 RDIMM

DDR3 1866/1600/1333/1066 UDIMM

DDR3 1866/1600/1333/1066 LRDIMM

Memory Size :

32GB, 16GB, 8GB, 4GB, 2GB RDIMM

8GB, 4GB, 2GB UDIMM

32GB, 16GB, 8GB LRDIMM

Expansion Slots

Total Slot : 6

Slot Location 1 : PCI-E x16 (Gen3 X8 Link)

Slot Location 2 : PCI-E x16 (Gen3 X16 Link)

Slot Location 3 : PCI-E x16 (Gen3 X16 Link)

Slot Location 4 : PCI-E x16 (Gen3 X16 Link)

Slot Location 5 : PCI-E x16 (Gen3 X16 Link), Auto switch to x8 link if slot 6 is occupied

Slot Location 6 : PCI-E x16 (Gen3 X8 Link), MIO supported

Additional Slot 1 : PIKE Slot for Storage expansion

Follow SSI Location#

Form Factor

EEB (12"x13")

ASUS Features

Fan Speed Control

Rack Ready (Rack and Pedestal Dual Use)

ASWM Enterprise

Storage

SATA Controller :

Intel® C602-A AHCI

4 x SATA2 3Gb/s ports

2 x SATA3 6Gb/s ports

Intel® Rapid Storage Technology Enterprise (RSTe) (For Windows Only)

(Support Software RAID 0, 1, 5, 10)

LSI® MegaRAID (For Linux/Windows)

(Support Software RAID 0, 1, 10)

SATA Controller :

Intel® C602-A SCU

4 x SATA2 3Gb/s ports

Intel® Rapid Storage Technology Enterprise (RSTe) (For Windows Only)

(Support Software RAID 0, 1, 5, 10)

SAS Controller :

ASUS PIKE 2008 8-port SAS2 6G RAID card (Optional)

ASUS PIKE 2008/IMR 8-port SAS2 6G RAID card (Optional)

ASUS PIKE 2108-32PD 8-port SAS2 6G RAID card (Optional)

ASUS PIKE 2208 8-port SAS 6G HW RAID card (Optional)

ASUS PIKE 2308 8-port SAS 6G RAID card (Optional)

ASUS PIKE 9230 4-port SATA 6G RAID card (Optional)

Networking

1 x Dual Port Intel Ethernet Controller i350-AM2 + 1 x Mgmt LAN

Graphic

Aspeed AST2300 with 16MB VRAM

On Board I/O

1 x TPM header

1 x PSU Power Connector (24-pin SSI power connector + 8-pin SSI 12V + 8-pin SSI 12V power connector)

1 x Management Connector , Onboard socket for management card

2 x USB pin header , Up to 4 Devices

1 x Internal A Type USB Port

8 x Fan Header , 4pin

1 x Chassis Intruder

2 x Serial Port Header

2 x SMBus

Back I/O Ports

2 x External USB Port

1 x VGA Port

2 * GbE LAN + 1 * Mgmt LAN

1 x PS/2, 1 KB/mouse

Management Solution

ASWM Enterprise

ASMB6-iKVM for KVM-over-Internet

Regulatory Compliance

CE, C-Tick, FCC(Class B)

Environment

Operation temperature: 10°C ~ 35°C

Non operation temperature: -40°C ~ 70°C

Non operation humidity: 20% ~ 90% (Non condensing)

Accessories

Gift Box Pack :

1 x User's Guide

1 x ASUS Mainboard Support CD

1 x I/O Shield
1 x ASWM Enterprise SDVD
10 x SATA Data Cables
1 x ASMB6-iKVM Support CD
1 x ASMB6-iKVM User Guide
1 x USB to SATA DOM Power cable

Bulk Pack :

1 x User's Guide
1 x ASUS Mainboard Support CD
1 x I/O Shield
1 x ASWM Enterprise SDVD
1 x ASMB6-iKVM Support CD
1 x ASMB6-iKVM User Guide

Product SKUs

Standard Gift Box Pack with ASMB6-ikvm
Standard Bulk Pack with ASMB6-ikvm

Monitoring

CPU Temperature
Fan RPM

Note

* Refer to ASUS Server AVL for latest update.
** Specifications are subject to change without notice.
