

» IP Network Server NSC2U «



- » Front and Rear I/O flexibility, with up to 8 x Gb NICs in front
- » Short depth, ruggedized 2U chassis
- » “Appliance” look and feel
- » Long life support (3 years)
- » Dual, redundant AC or DC power option
- » Hardware RAID option
- » Industry-leading performance/watt

IP Network Server NSC2U, featuring the Quad-Core Intel® Xeon® processors 5400 and 5300 series, provides extended lifecycle support and improved performance-per-watt over previous generation rackmount servers. Due to high I/O throughput and performance, the NSC2U is an excellent choice for network security applications with large I/O requirements, including intrusion detection/intrusion prevention, VPN/firewall, and unified threat management solutions.

The NSC2U features shallow depth, DC power capabilities, and the ruggedness usually found on carrier-grade servers. It is well suited for enterprise application acceleration and content caching, and is an ideal platform for running Telco SoIP, including IMS, IPTV, video on demand (VoD), SIP application servers, IP-PBX, and IP-PSTN gateways.

Features & Benefits

Standard Feature

Support for two 64-bit Quad-Core Intel® Xeon® processors (5400 series or 5300 series)

Three-year extended lifecycle support with possible extension to five years

Shallow 20-inch depth

600W AC or DC hot-swap power supply

Two rear-panel GbE NIC (Cu) ports

Eight FB-DIMM slots (240-pin DDR2-533/667)

Drive trays for up to six hot-swap 2.5-inch SAS hard disk drives

Bay supports optical drive (purchased separately)

Customizable front bezel

Up to five PCI slots for flexibility and additional I/O

Optional Features

Hardware RAID 5

Intel® Remote Management Module 2

Flash storage capability supports 3rd party solid state drives (purchased separately)

Optional I/O modules (rear)

Additional four or eight front-panel GbE NIC ports (copper or fiber)

Additional full-height risers for PCI-X

Benefit

New 45nm enhanced Intel® Core™ microarchitecture boosts performance on multiple applications/user environments and data-demanding workloads

Faster performance with improved energy efficiency enables denser deployments

Reduces customer risk for long product roll-outs

Fewer platform transitions requiring additional testing and software

Increases installation and service flexibility

Flexibility of installation and applications

Uninterrupted operation (DC-backed power)

Scalable Ethernet ports, upgradeable to 20 GbE (max) based on PCI configuration and optional I/O modules

Maximum 32 GB memory (non-mirrored mode)

High-performance, enterprise-class drives for 24/7 operation

Accommodates Slimline CD-ROM; CD-R/W; CD DVD-R/W

Adaptable to customer needs and environment

Low-profile riser supports two PCIe x4 slots

Full-height, full-length riser supports two PCIe x4 slots and one PCI-X slot

Benefit

Greater protection and reliability of data storage

Lights-out management

High-speed, high-density storage, faster boot times, USB interface

Enables additional external SAS storage or two additional GbE NIC (Cu) ports on rear panel

High-performance, enterprise-class drives for 24/7 operation

PCI-X (active): three independent PCI-X, each with maximum 133 MHz

PCI-X (passive): two PCI-X with maximum 100 MHz and one PCI-X (66 MHz) all on a shared PCI bus

Technical Information

Processor

Type

Two (2) Quad-Core Intel® Xeon® processors 5400 series or 5300 series

Front-side bus

Supports 1066 MHz and 1333 MHz

Chipset

Memory controller hub

Intel® 5000P Memory Controller Hub(MCH)

I/O controller hub

Intel® 6321ESB I/O Controller Hub (ICH)

Connections

PCI adapter slot support

One (1) low-profile riser:
» Two PCIe x4 slots — included

One (1) full-height, full-length riser — 3options:
» Two (2) PCIe x4 slots and one (1) PCI-X 133 MHz slot — included
» Three (3) PCI-X slots (133 MHz max) — optional
» Two (2) PCI-X slots (100 MHz max) and one (1) PCI-X slot (66 MHz) — optional

GbE NIC (CU) ports

Two (2) on base board (rear)
Two (2) via I/O Option Module (rear optional)
Eight (8) via Intel® PRO Bypass Adapters (front)

GbE NIC (Fibre) ports

Eight (8) via Intel® PRO Bypass Adapters (front)

USB 2.0 ports

Three (3): one front/two rear

Storage

Type

SAS 2.5" hot-swap HDD

Redundancy

RAID 1 and RAID 5

Internal

Carrier with six HDD trays

External

SAS port on rear supports JBOD

Environmental

Temperature, operating

10°C to 35°C (50° F to 95° F)

Temperature, non-operating

-40°C to 70°C (-40° F to 158° F)

Humidity, non-operating

50% to 90%, non-condensing with a maximum wet bulb of 28° C (at temperatures from 25° C to 35°C)

Altitude

0 to 1,800 m (0 to 5,905 ft) @ 40° C

Vibration, non-operating

2.2 Grms, 10 minutes per axis on all three axes

Shock, operating

Half-sine 2 G, 11 ms pulse, 100 pulses in each direction, on each of the three axes

Shock, non-operating

Trapezoidal, 25 G, 170 inches/sec delta V, three drops in each direction, on each of the three axes

Electrostatic discharge (ESD)

Tested to ESD levels up to 15 kilovolts (kV) air discharge and up to 8 kV contact discharge without physical damage

Acoustic

Sound power: < 7.0 BA at ambient temperatures at 23 ± 2 °C

RoHS

Complies with RoHS directive 2002/95/EC

Memory

Maximum memory capacity

32 GB (non-mirrored mode)

Number of DIMM slots

Eight (8)

Memory type

FB-DIMM technology at 533 and 667 MHz

Physical

Height

3.45 inches (87.6 mm)

Width

17.14 inches (435.3 mm)

Depth

20 inches (508 mm)

Regulatory Compliance

Safety

UL 60950-1, 1st Edition/CSA 22.2 60950-1, Low Voltage Directive 2006/95/EC, GS to EN60950-1, 1st Edition CB Certificate and Report to IEC60950-1, 1st Edition and all international deviations

Electromagnetic Compatibility:

Australia/New Zealand

C-tick, Class A

Canada

ICES-003, Issue 4, Class A Limit

Europe

EMC Directive, 89/336/EEC, EN55022, Class A Limit, Radiated and Conducted Emissions, EN55024 Immunity Characteristics for ITE, EN61000-4-2 ESD Immunity, EN61000-4-3 Radiated Immunity, EN61000-4-4 Electrical Fast Transient, EN61000-4-5 Surge, EN61000-4-6 Conducted RF, EN61000-4-8 Power Frequency Magnetic Fields, EN61000-4-11 Voltage Fluctuations and Short Interrupts, EN61000-3-2 Harmonic Currents, EN61000-3-3 Voltage Flicker

International

CISPR 22, Class A Limit, CISPR 24 Immunity

Japan

VCCI Class A

Korea

RRL Approval, Class A

Russia

Gost Approval

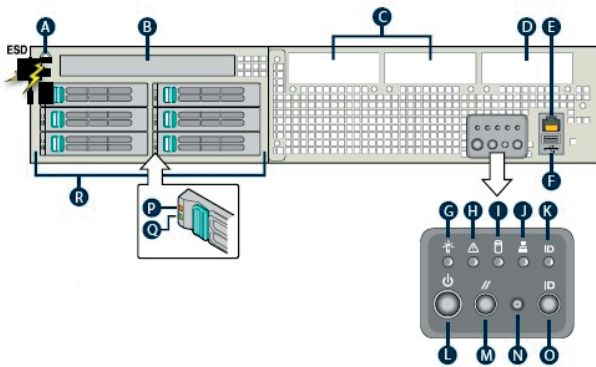
Taiwan

BSMI Approval, CNS 13438, Class A and CNS13436 Safety

USA

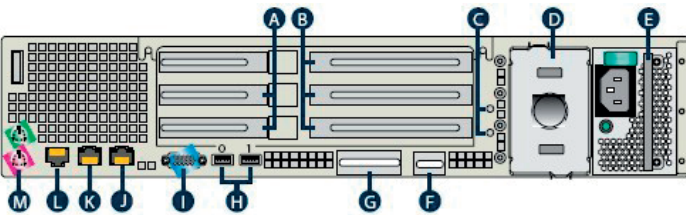
FCC 47 CFR Parts 2 and 15, Verified Class A Limit

IP Network Server NSC2U front panel



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|----------------------------------|-----------------------|--|
| A – Anti-static connection | G – Power LED | M – Reset switch |
| B – Optical drive bay (optional) | H – Status LED | N – NMI switch |
| C – 4x GbE ports (optional) | I – Disk activity LED | O – ID switch |
| D – For future design use | J – NIC activity LED | P – Drive fault indicator |
| E – Serial port (COM 2) | K – ID LED | Q – Drive activity indicator |
| F – USB port | L – Power switch | R – Hard drive bay (supports six 2.5" SAS) |

IP Network Server NSC2U rear panel



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|--|------------------------------|
| A – Low-profile add-in cards or filler panels | H – USB ports |
| B – Full-height add-in cards or filler panels | I – Video connector |
| C – Grounding lugs (for DC) | J – RJ45 NIC 2 Connector |
| D – Power supply #2 slot (filler panel shown) | K – RJ45 NIC 1 Connector |
| E – Power supply #1 (AC module shown; DC modules also available) | L – RJ45 Serial port (COM 2) |
| F – Filler panel (optional GCM port) | M – PS2 mouse and keyboard |
| G – Filler panel (optional dual NIC or external SAS ports) | |

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