Intel® IP Network Server
Intel® NSI2U (2Ux20”D)

Configuration Guide
System / Spares / Accessories List
Rev 2.9.1

A reference guide to assist customers and the field in ordering these servers, accessories and spares

~Subject to Change Without Notice~

NSI2U

March 2007

Document Table of Contents

I. Change History

Revision	Date	Comments
1.0	10/05/2005	Original version.
1.1	10/13/2005	Revised.
2.5	2/12/2006	Revised with RoHS MM#'s.
2.6	6/22/2006	Revised for RoHS MM's, CPUs, rail kits
2.7	6/27/2006	Revised.
2.8	10/23/2006	Revised for CPU-integrated SKUs
2.9	11/02/2006	Corrected CPU speed to 3.6GHz
2.9.1	03/22/2007	Fixed Logo and Some Trademarks Issues

II. Introduction

The NSI2U system is the first of a family of Intel® IP Network Server products, having long product life and 20" depth chassis. NSI2U is Intel® Telecom and Industrial Grade Rack Server family. The NSI2U uses the Intel® Xeon® Processor at 3.6GHz with 2M cache. An early version of NSI2U did not include the CPUs, and is being EOL'd by Q1 2007. The currently orderable version of the product includes 2 units of Intel® Xeon® Processors at 3.6 GHz with 2M cache and the associated heatsinks. There are no other configurations (one CPU or different speed) versions of the product being offered.

Intel® IP Network Servers are suited to a host of applications in the network security and industrial environment. The server is targeted to applications requiring rugged systems including Intrusion Detection, Intrusion Protection, Firewall, VPN, SSL VPN, and Application Secure Gateways. It can also support manufacturing, industrial, utility and military applications where a rugged, highly reliable server is required for harsh environments such as dust, high altitude, fire hazard, earthquake propensity, and high ambient temperatures.

This document details the options available on the Production systems.

III. Production SKUs

Intel® IP Network Servers
Production NSI2U Server (AC Supply) - Product Code **NSIA2100**

SKU (NSIA2100) is a model 1 SKU (2 CPUs, 2 heatsinks. No memory, no hard drives; and no plug-in adapters are provided). Those components must be ordered separately (refer to THOL document – see section IX - Documentation). Also, see Appendix A – Production SKU Configuration, for a list of components included in each Production model 0 SKU.

NSI2U is designed for the Intel® Xeon® Processor with 2M L2 cache at 3.6GHz, 800MHz FSB family of processors. Check the following site for more information on processors supported by NSI2U.

http://support.intel.com/support/telecom/computeboards/nsi2u/index.htm

Note these restrictions:

- Active Fan Heatsinks are not allowed for this product. This product requires active heatsinks, which are included in the Model 1 SKU.
- AC Power cords are not provided with the base system. Customers must procure the power cords independently (for AC systems, order the NA – North American - power cord as indicated).
- Ensure customers have the appropriate technical support and contact before placing the first order.
- Riser Cards: The NSI2U base configuration comes with two risers. One is a Full-height full-length and provides 2 slots of PCI-Express and 1 PCI-X 64/100 MHz. The second riser provides 3 slots of PCI-X 100/64 for Half-height, Half-Length boards. Each of these risers has a dedicated slot, and can not be swapped. A user would only need to order a spare Riser for maintenance support purposes.

Special Note regarding Processors included:

Because the production SKUs of NSI2U now includes two CPUs, customers will not be required to separately procure the CPUs and heatsinks needed for use with the prior SKU [NSIA0100]. This also avoids customers having to procure either the Boxed or tray processors, or the heatsinks.

Intel will use N-0 stepping, or later, of the Intel® Xeon® Processor at 3.6GHz with 2M L2 cache (800MHz FSB) which is compatible with RoHS system shipping requirements.

This is the production SKU that can be ordered (see Appendix A for content of each SKU):

PID order code	Description	RoHS MM#	Minimum Order Size
NSIA2100	Intel® IP Network Server NSI2U including Dual Intel® Xeon® Processor at 3.6 GHz with 2M cache	883852	1

Power Cords are not included. For AC Power cords, order the power cord below. This power cable is RoHS-compliant.

PID	MM#	Comments
PWRCABLEUS	816324	This AC power cable may be ordered by North America (NA) customers. International customers should procure their specific power cords directly.

IV. Production Spares List

These are the Spares that may be ordered with this system. Many of the spares are common to the Intel® Carrier Grade Server TIGI2U product.

PID order code	Description	RoHS MM#	Minimum Order Size
TLPHDCARR02	Drive Trays	880174	1
TLIPWRDISBD	TIGI2U POWER DISTRIBUTION BOARD	880122	1
TLIACPSU003	TIGI2U AC P/S Module	880110	1
NSIFPIOLP03	NSI2U Front Panel IO Board with LED pipe, spare	880103	1
NSICBLMSC03	NSI2U Interconnect Cable spare	884124	1
NSIBEZEL003	NSI2U Bezel (Unpainted) spare, packaged in cartons of 12	880099	12
TLISNKCLP03	TIGI2U CPU HEATSINK W/HARDWARE,SPARE	876481	1
TLIFANSET03	TIGI2U Fan Assembly (SET of 4), SPARE	880117	1
SE7520JR2ATAD2	Jarrell 2 SATA spare (for replacement)	879638	5
NSICBLRET01	NSI2U Cable Management Retention Spare, 48 per carton	874068	48
NSIESCFBR100	NSI2U Fiber escutcheon (unpainted), packaged in cartons of 48	880102	48
NSIESCCPR100	NSI2U Copper escutcheon (unpainted), packaged in cartons of 48	880101	48
ADRPCIEXPR	SR2400 (2U) Full Height PCI-Express riser (two PCI-Express slots, one PCI-X slot). Note: one of three risers (active PCI-X, PCI-X, or PCI-Express*) are required with the SR2400 chassis.	856545	1
ADRLPRISER	Low Profile PCI-X riser (three low profile PCI-X slots).	861836	1

V. Use of NIC in Front capability

The NSI2U enables up to 8 ports of front-accessible Gbit ethernet (either Copper or Fiber) via standard Quad NIC adapters available from Intel. These NIC adapters may be purchased separately via normal distribution channels. The Bypass versions of the NIC adapters include the internal cabling required, but also require the purchase of Escutcheons which modify the shipping blanks provided with the base System.

As an example, for use of the Copper Gb NIC-in-Front, please also order NSIESCCPR100, which comes packaged in quantity of 48. The NIC come in packages of 5 units each. Orders placed are for individual escutcheons.

Intel LAD NIC Order Codes (all order codes below are RoHS):

PID order code	Description	MM#	Minimum Order Size
EXPI9014PTBLK	Quad Copper Gb Bypass NIC,5 PACK	876697	5
EXPI9024PTBLK	Quad Copper Gb Bypass NIC in Front,5 PACK	876699	5
EXPI9014PFBLK	Quad Fiber Gb Bypass NIC,5 PACK	876696	5
EXPI9024PFBLK	Quad Fiber Gb Bypass NIC in Front,5 PACK	876694	5

VI. Rack Mounts

Two sets of rack mounts and one set of Slide Rail Enabling Kit are offered with this product.

The first rack mount kit, TMLCMOUNT21, is a set of mounts, which is used for mounting TIGPR2U, TIGPT1U, **NSI2U**, and TIGI2U servers to a 2-post Central Office type 19" wide rack. These mounts are L-shaped brackets.

The second set of rack mount kits consist of two different styles. TMLPMOUNT51 is used for mounting TIGPR2U, TIGPT1U, NSI2U, and TIGI2U servers to a 2-post or 4-post 19" wide rack. These racks are considered standard EIA (universal hole spacing) racks. TMLPMOUNT52 is used for mounting these servers to a 2-post or 4-post 23" wide rack. These racks could be standard EIA (universal hole spacing) or ETSI (European) racks. Although the mounts are designed as rails, they are not sliding rails.

The third set is an enabling kit (not the actual mount), which can be used if customers intend to use sliding rails for their rack. In that case, customers can use the TMLPSLIDE01 kit, which has the appropriate hardware to be used with sliding rails such as Accuride rails model 305-A-LR. The Accuride sliding rails have to be procured independently by the OEM customers or end users. Note using slide rails may result in non-compliance with seismic zone 4 requirements of NEBS-3 certification. All other rack mounts are NEBS-3 and seismic zone-4 certified. Installation instructions are included in the mount and spare kits.

PID	Description	RoHS MM#	Minimum Order Quantity
TMLCMOUNT21	Rack mount kit, 19inch 2 post rack – "L" bracket - 1U & 2U	881904	10
TMLPMOUNT51	Rack mount kit, 19inch 2 & 4 post rack, stop feature, universal EIA - 1U & 2U	881934	1
TMLPMOUNT52	Rack mount kit, 23inch 2 & 4 post rack, stop feature, universal EIA/ETSI - 1U & 2U	881935	1
TMLPSLIDE01	Rack mount slide rail kit, 19inch 4 post, (for use with Accuride Slide Rail #305-A-LR) Customer must separately purchase the Accuride Slide rail.	881915	10

TMLPMOUNT41	2/4 Piece19”Rack Mount kit	881907	10

Although these mounts have been designed for industry standard racks, please consult with your Intel Field Application or Sales Engineer before selecting racks for these servers.

VII. Documentation

Support.Intel.Com Users:
Product information including specifications, compatibility, user’s guides, drivers, firmware, and software associated with the Intel® Network Server NSI2U is available from Intel® Customer Support.

Intel® Network Server NSI2U support web site:
http://support.intel.com/support/motherboards/server/nsi2u/ or
http://www.intel.com/design/telecom/products/cbp/ipserver/9935/overview.htm

Appendix A. Base Systems Configuration

NSI2U Production SKU Configuration

Component	Configuration AC
Chassis (NEBS-3 and ETSI certified)	1
Telecom Baseboard (dual Intel® Xeon® 2M cache, 800MHz FSB) – CPUs not included	1
FH-FL PCI-X Bracket	1
FH-FL PCI-Express(2)- PCI-X(1) Riser	1
HH-HL PCI-X Bracket	1
HH-HL PCI-X Riser	1
AC power supply (600W)	1
Power Supply Filler Panel	1
Power Cable	-
Server Deployment Toolkit (CD)	1
Quick Start Guide	1
Memory	-
Hard Disk Drive	-
Drive Trays	2
CPU	2
Heatsink(s)	2
Rack Mount kit	-

Note: For either of these SKUs to be functional, one or more of the following is required:

Power cord, Memory, Hard Drive, OS

Each system could also require the following, depending on the configuration:

Additional Power Supply and Power cord, Rack mounts.

Optionally a USB Floppy can be used [no spare order code exists for this item].

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