Appendix B Landslide C100 Test Server NIC Configurations

This appendix contains important information regarding your shipment of Spirent Landslide compatible network interface cards (NICs). All Landslide test system test ports are located on the SPT-C100 test servers. The NIC configurations in this appendix have been selected to achieve the highest data throughput performance possible. Other configurations are possible, but can result in degraded throughput performance, reordering of port names or other unexpected behavior.

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General

The Landslide C100 appliance operating system discovers installed NICs and assigns logical port names to the NIC ports in a specific order that cannot be overridden. This order is dependent on number, location and type of NIC installed in the C100. This discovery and logical port assignment cannot be changed by the user.

The C100 is based on the Intel® Xeon® "Sandy Bridge" processor family and the associated QPI CPU interconnect. It uses a dual-CPU server architecture where each CPU has its own memory and motherboard slots. By utilizing the Intel® QuickPath Interconnect bus either CPU can access the other CPU's memory and motherboard slots. While the QPI is a high-performance interconnect there can be performance penalties associated with cross-QPI memory or slot accesses.

C100 NIC placement and port assignment is optimized to provide the best attainable performance for the Landslide application.

Supported NICs and IPSec Accelerator Cards

Part Number	Туре	Description	Notes
L-NIC-21	Quad-port, 1Gbps fiber Ethernet server adapter	PCIe 1.0 x4, 1000Base-SX, MM fiber with four (4) LC connectors	Discontinued Use L-NIC-31 for C100
L-NIC-31	Quad-port, 1Gbps fiber Ethernet server adapter	PCIe 2.0 x4/x8/x16 10/100/1000Base-SX	C100 only
L-NIC-22	Quad-port, 1 Gbps copper Ethernet server adapter	PCIe 1.0 x4, 10/100/1000Base-T, CAT 5 UTP	For use in legacy appliances
L-NIC-32	Quad-port, 1Gbps copper Ethernet server adapter	PCIe 2.0 x4/x8/x16 10/100/1000Base-T	C100 only
L-NIC-27	Dual-port, 10 Gbps SFP+ Ethernet adapter with custom FPGS	PCIe 2.0 x8, 10 Gbps SFP+ performance interface with custom FPGA, 10GBASE-SR, 850 nm MMF	NA
L-ACC-004	Quad-core IPSec Accelerator Card	Four core, PCIe x4 IPSec accelerator card	Discontinued Replaced by L-ACC-006
L-ACC-006	IPSec Accelerator Card	PCIe Gen 2.0 x4/x8/x16 IPSec accelerator card	C100 only

Table B-1.	Landslide NIC and IPSec Accelerators
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Note: L-NIC-21 (L-NIC-22) and L-NIC-31 (L-NIC-32) are one-for-one replacements and can be used interchangeably in Landslide C100 test servers

Supported NIC Configurations and Port Names

As viewed from the front of the SPT-C100, motherboard slots are numbered sequentially from one (1) to six (6). Slot 6 is unused. Quad-port 1 Gbps NIC ports and dual-port 10 Gbps AONIC NIC ports are numbered sequentially from top to bottom, as seen when installed.

The standard factory default test server configuration includes two L-NIC-32 quad-port, copper Ethernet NICs installed in slots 2 and 5. These NIC ports are labeled as eth2 through eth9. Optional add-on test server appliances can be configured with from one to four quad-port, 1 Gbps or dual-port, 10 Gbps NICs in any combination.

The L-ACC-004 IPSec accelerator card is discontinued and is no longer available. Landslide continues to support it for legacy systems. *Table B-2* through *Table B-6* provide standardized NIC configurations and Ethernet port labeling for combinations of quad-port, 1 Gbps and dual-port, 10 Gbps NICs. These configurations support zero, one or two L-ACC-004 IPSec accelerator cards.

Table B-7 through *Table B-10* provide NIC configurations and Ethernet port labeling for Landslide servers with the L-ACC-006 IPSec accelerator card installed. The L-ACC-006 is only supported on the Landslide C100 and later appliances. On the Landslide C100, the L-ACC-006 is always installed in slot 5.



Note: Slot 6 is unused.

Slot	Card	Ports
1	Third quad-port, 1 Gbps	eth10, eth11, eth12, eth13
2	First quad-port, 1 Gbps	eth2, eth3, eth4, eth5
3	First L-ACC-004 IPSec Accelerator	NA
4	Fourth quad-port, 1 Gbps	eth14, eth15, eth16, eth17
	or	or
	Second L-ACC-004 IPSec Accelerator	NA
5	Second quad-port, 1 Gbps	eth6, eth7, eth8, eth9

Table B-2. One, two, three or four quad-port 1 Gbps NICs with and without L-ACC-004IPSec Accelerator Card(s), 4x, 8x, 12x, or 16x 1 Gbps ports (with and withoutIPSec)

Table B-3.One quad-port 1 Gbps NIC and one or two dual-port 10 Gbps NICs with and
without L-ACC-004 IPSec Accelerator Card(s), 4x 1 Gbps ports with 2x or 4x 10
Gbps ports (with and without IPSec)

Slot	Card	Ports
1	First dual-port, 10 Gbps (AONIC)	eth6, eth7
2	Quad-port, 1 Gbps	eth2, eth3, eth4, eth5
3	First L-ACC-004 IPSec Accelerator	NA
4	Second dual-port, 10 Gbps (AONIC)	eth8, eth9
	or	or
	Second L-ACC-004 IPSec Accelerator	NA
5	Empty	NA

Table B-4.Two quad-port 1 Gbps NICs and one or two dual-port 10 Gbps NICs with and
without L-ACC-004 IPSec Accelerator Card(s), 8x 1 Gbps ports with 2x or 4x 10
Gbps ports (with and without IPSec)

Slot	Card	Ports
1	First dual-port, 10 Gbps (AONIC)	eth10, eth11
2	Quad-port, 1 Gbps	eth2, eth3, eth4, eth5
3	First L-ACC-004 IPSec Accelerator	NA
4	Second dual-port, 10 Gbps (AONIC)	eth12, eth13
	or	or
	Second L-ACC-004 IPSec Accelerator	NA
5	Quad-port, 1 Gbps	eth6, eth7, eth8, eth9

Table B-5. One, two, three or four dual-port 10 Gbps NICs with or without L-ACC-004 IPSec Accelerator Card(s), 2x, 4x, 6x or 8x 10 Gbps ports (with and withoutIPSec)

Slot	Card	Ports
1	Third dual-port, 10 Gbps (AONIC)	eth6, eth7
2	First dual-port, 10 Gbps (AONIC)	eth2, eth3
3	First L-ACC-004 IPSec Accelerator	NA
4	Fourth dual-port, 10 Gbps (AONIC)	eth8, eth9
	or	or
	Second L-ACC-004 IPSec Accelerator	NA
5	Second dual-port, 10 Gbps (AONIC)	eth4, eth5

Table B-6.Three quad-port 1 Gbps NICs and one dual-port 10 Gbps NIC with and without
L-ACC-004 IPSec Accelerator Card, 12x 1 Gbps ports and 2x 10 Gbps ports
(with and without IPSec)

Slot	Card	Ports
1	Third quad-port, 1 Gbps	eth10, eth11, eth12, eth13
2	First quad-port, 1 Gbps	eth2, eth3, eth4, eth5
3	L-ACC-004 IPSec Accelerator	NA
4	Dual-port, 10 Gbps (AONIC)	eth14, eth15
5	Second quad-port, 1 Gbps	eth6, eth7, eth8, eth9

Table B-7.	One, two, three or four quad-port 1 Gbps NICs with L-ACC-006 IPSec
	Accelerator Card, 4x, 8x, 12x, or 16x 1 Gbps ports with IPSec

Third quad-port, 1 Gbps	eth10, eth11, eth12, eth13
First quad-port, 1 Gbps	eth2, eth3, eth4, eth5
Second quad-port, 1 Gbps	eth6, eth7, eth8, eth9
Fourth quad-port, 1 Gbps	eth14, eth15, eth16, eth17
L-ACC-006 IPSec Accelerator	NA
	First quad-port, 1 Gbps Second quad-port, 1 Gbps Fourth quad-port, 1 Gbps

Table B-8.One dual-port 10 Gbps NIC and one, two or three quad-port 1 Gbps NICs with
L-ACC-006 IPSec Accelerator Card, 2x 10 Gbps ports and 4x, 8x or 12x 1 Gbps
ports with IPSec

Slot	Card	Ports
1	Second quad-port, 1 Gbps	eth8, eth9, eth10, eth11
2	Dual-port, 10 Gbps (AONIC)	eth2, eth3
3	First quad-port, 1 Gbps	eth4, eth5, eth6, eth7
4	Third quad-port, 1 Gbps	eth12, eth13, eth14, eth15
5	L-ACC-006 IPSec Accelerator	NA

Table B-9.Two dual-port 10 Gbps NICs and one or two quad-port 1 Gbps NICs with L-ACC-
006 IPSec Accelerator Card, 4x 10 Gbps ports and 4x or 8x 1 Gbps ports with
IPSec

Slot	Card	Ports
1	First quad-port, 1 Gbps	eth6, eth7, eth8, eth9
2	First dual-port, 10 Gbps (AONIC)	eth2, eth3
3	Second dual-port, 10 Gbps (AONIC)	eth4, eth5
4	Second quad-port, 1 Gbps	eth10, eth11, eth12, eth13
5	L-ACC-006 IPSec Accelerator	NA

Table B-10. One, two, three or four dual-port 10 Gbps NICs with L-ACC-006 IPSecAccelerator Card, 2x, 4x, 6x or 8x 10 Gbps ports with IPSec

Slot	Card	Ports
1	Third dual-port, 10 Gbps (AONIC)	eth6, eth7
2	First dual-port, 10 Gbps (AONIC)	eth2, eth3
3	Second dual-port, 10 Gbps (AONIC)	eth4, eth5
4	Fourth dual-port, 10 Gbps (AONIC)	eth8, eth9
5	L-ACC-006 IPSec Accelerator	NA

