

SureSPAN™ - OPEN MISSION

SYSTEM SECURITY INFRASTRUCTURE

Secure Multilevel Security (MLS) VHDL IP for Network

L3Harris' SureSPAN Open Mission System Security Infrastructure solution, provides a multi-level, high-assurance, standards-based security solution already designed to be integrated into a mission system architecture.

The SureSPAN security infrastructure addresses the system-level security requirements that span a modern mission system. The SureSPAN solution includes secure, MLS-separated data transport over commercial ethernet switches, a platform-level security manager providing secure startup and root-of-trust capability, and a policy configuration application to allow simple creation of security policy for your system.

SureSPAN can optionally include OpenVPX and SOSA™-aligned NSA Type-1 COMSEC/TRANSEC data-in-transit and data-at-rest encryption solutions to protect your critical mission data.

To ease your higher-level system accreditation, SureSPAN comes with a complete Risk Management Framework artifact package.

PRODUCT FEATURES

MLS Transport Enforcement

- > Securely isolates up to 128 different logical classification/caveats per security policy
- > Uses existing interface FPGAs within today's processing nodes; no additional hardware needed
- > Allows use of COTS ethernet switches
- > Provides up to 40 Gbps traffic throughput per node
- > Interfaces and maintains isolation up to secure hypervisor virtual machines
- > Uses low overhead, standards-based distributed packet labeling with layer 2 encryption/authentication
- > Includes trusted bypass for network administration protocols

SECURITY MANAGER

- > Provides secure system startup and root-of-trust functionality
- > Distributes security policy and keys to the distributed MLS transport enforcement nodes
- > Monitors run-time system operation to assure continuous security
- > For highest assurance, can be hosted on L3Harris Type 1 SureCORE™ processing core

POLICY CONFIGURATION MANAGER

- > Desktop application to easily create a configurable security policy



SPECIFICATIONS

SureSPAN MLS Transport Enforcement

- > VHDL IP for FPGA network interfaces
 - Provided as encrypted RTL
- > Provides 10 Gbps and 40 Gbps ethernet interface options
- > Aligned with NCDSMO RTB v2.1 MLS NIC requirements (MLSWNR)
- > NSA ethernet data encryption standard compatible traffic encryption/authentication (AES-256-GCM)
- > IPv4 & CIPSO data labeling
- > Northbound interface: AXI-Stream
- > Southbound interface: xilinx ethernet MAC
 - Other interface options available
- > Typical Xilinx FPGA usage at 10 Gbps
 - LUTs/FFs: 100K/90K
 - Internal memory: 230 BRAM
 - Clock rate: 156.25 MHz

SureSPAN Security Manager

- > Runtime application
 - Executable for Linux environments and necessary drivers
- > Provides transport enforcement policy root-of-trust
- > Built-in key generation function

SureSPAN Policy Configuration Tool

- > Windows application with GUI
- > Builds the policy file for the runtime security manager

LICENSING

- > Integration License
 - Provides integration and development licenses for your project with unlimited seats
- > End Product License
 - Recurring pricing based on number of ports per system and port speed with quantity discounts
- > Support
 - Monthly or annual arrangements available

SureSPAN™ - Open Mission High - System Security

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This document consists of L3Harris general capabilities information that does not contain controlled technical data.

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1025 W. NASA Boulevard
Melbourne, FL 32919
productsales@L3Harris.com