

Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 25.1.1

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Network Convergence System 5500 Series Routers

What's New in Cisco IOS XR Release 25.1.1

Cisco IOS XR Release 25.1.1 is a new feature release for Cisco NCS 5500 Series routers.

For more details on the Cisco IOS XR release model and associated support, see Software Lifecycle Support Statement - IOS XR.

Software Features Enhanced and Introduced

To learn about features introduced in other Cisco IOS XR releases, select the release from the Documentation Landing Page.

Feature	Description
IP Addresses and Services	
Configure DHCPv6 relay source address	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards; NCS 5700 line cards [Mode: Compatibility; Native] You can now select an IPv6 address from the configured relay source-interface to be used as the source address for forwarding packets to a server. By selecting a fixed source address, the need to frequently update firewall rules when new, lower-value IPv6 addresses are added is minimized. Earlier, the router automatically used the lowest numbered IPv6 address configured on that interface as the source address. The feature introduces these changes: **CLI**: • The *dhcpv6 relay source address* variable is introduced in the helper-address (ipv6) command. **YANG Data Model**: Cisco-IOS-XR-ipv6-new-dhcpv6d-cfg.yang (see GitHub, YANG Data Models Navigator)
Interface and Hardware Component	
Enable egress traffic mirroring in non-ETM mode	Introduced in this release on: NCS 5500 modular routers (NCS 5700 line cards [Mode: Compatibility; Native]) We've now made it possible for you to mirror egress (Tx) traffic on VLAN subinterfaces that don't have external TCAM and operate in the non-ETM mode. This functionality enables more options for network configurations and helps improve network management and operational efficiency.

Feature	Description
Minimum-delay bin	Introduced in this release on: NCS 5700 fixed port routers and NCS 5700 line cards [Mode: Native]. For statistics aggregation, you can now configure a distinct width for the first bin to adjust for large propagation delay. By using this feature, you can avoid wasting several bins that would be empty in some unavoidable situations such as delay due to speed of light limitations. The feature introduces these changes: **CLI:** • The **minimum-delay** keyword is introduced in the **aggregate** command. **YANG Data Models:** New XPaths for • `Cisco-IOS-XR-infra-sla-cfg.yang` • `Cisco-IOS-XR-um-ethernet-sla-cfg.yang` • `Cisco-IOS-XR-infra-sla-oper.yang` (see GitHub, YANG Data Models Navigator)
L2VPN and Ethernet Services	
EVPN-IRB ND partial suppression mode	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards; NCS 5700 line cards [Mode: Compatibility; Native]) You can now manage and minimize Neighbor Discovery (ND) for IPv6 traffic on a network segment by configuring partial suppression mode. You can configure EVPN-IRB ARP and ND proxy full or partial suppression modes for these features: • EVPN-IRB multi-homing and • VM Mobility.
Layer 2 fast reroute for VPWS services	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers(NCS 5500 line cards; NCS 5700 line cards [Mode: Native]) You can now ensure faster convergence and uninterrupted service by redirecting the traffic using the EVPN pseudowire (PW) in an Ethernet-Line configuration when a dual-homing link fails.
VLAN tagging on the main bundle or physical interface for L2VPN VPWS	Introduced in this release on: NCS 5500 fixed port routers(select variants only*) You can configure VLAN tagging on main bundle or physical interfaces for Layer 2 point-to-point traffic over static Label Switched Paths (LSP) with GRE tunnels. For L2VPN VPWS, VLAN tags (dummy, signaled, or zero) are always present in the payload when using virtual connection (VC) type 4 (Ethernet VLAN 802.1Q) pseudowires. This allows each VLAN to be configured as a distinct L2VPN connection, enhancing network organization and enabling efficient traffic segmentation. * This feature is supported only on NCS-55A1 series fixed port routers.
Netflow	

Feature	Description
Cross AFI BGP NH Information Element	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards; NCS 5700 line cards [Mode: Compatibility; Native]) IPv4 or IPv6 flows in BGP can now handle next-hop Information Element (IE) across different address families, such as IPv4 and IPv6. This is particularly useful in scenarios where IPv4 and IPv6 networks need to interoperate. These IEs are added to the existing NetFlow or IPFIX template for `record ipv4` and all the IPv4 variant record types: • BgpNextHopIPv6Address (IE 63) • IpNextHopIPv6Address (IE 62) • IpNextHopIPv4Address (IE 15) These IEs are added to the existing NetFlow or IPFIX template for `record ipv6` and all the IPv6 variant record types: • BgpNextHopIPv4Address (IE 18) • IpNextHopIPv6Address (IE 62) • IpNextHopIPv4Address (IE 15) These IEs provide a detailed and structured data that is essential for various network operations and analyses. The feature uses the exiting CLI commands. For more information see, IPFIX Enablement for SRv6 and Services over SRv6 Core.
Programmability	
gNOI Containerz	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards; NCS 5700 line cards [Mode: Native]) The Containerz - gNOI service enables the onboarding and management of third-party applications via gNOI RPCs. Applications can be deployed using Docker images, ensuring easy integration and management. The service offers operations such as starting, stopping, updating containers, and managing docker volumes. This feature simplifies application deployment and management, enhancing operational efficiency. For the specification on gNOI.healthz, see the GitHub repository.
Routing	
IPv6 BFD dampening on Cisco 5700 routers	Introduced in this release on: NCS 5700 fixed port routers; NCS 5700 line cards [Mode: Compatibility; Native] You can now prevent excessive network instability and connectivity fluctuations by enabling BFD dampening on IPv6 sessions. With extending support for IPv6 in addition to IPv4, notifications on unnecessary routing updates and traffic disruptions during link flapping are minimized. This mechanism helps in overall network stability and improves router performance.
Segment Routing	

Feature	Description
Path MTU Discovery for SRv6 Packets on Ingress Provider Edge (PE) Routers, Egress (PE) Router and Provider Core Router Transit Nodes	Introduced in this release on: NCS 5500 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards). You can measure and monitor the packet loss information when one SRv6-enabled router sends an oversized packet to another. This functionality enables a router to send an ICMP error message to the source in such cases, prompting the sender to resend a packet whose size is within the MTU value, thus ensuring the packet moves ahead. The feature is critical for SRv6-enabled routers as these routers do not support packet fragmentation. Previously, a router dropped oversized packets without notifying the source, resulting in packet loss. This feature is enabled by default.
SRv6 policy counters (POL.CP.SL.INT.E)	Introduced in this release on: NCS 5500 fixed port routers; NCS 5700 fixed port routers; NCS 5500 modular routers (NCS 5500 line cards; NCS 5700 line cards [Mode: Compatibility; Native]) The network administrators can now monitor and manage network performance, capacity planning, and traffic engineering by reviewing the policy counters (POL.CP.SL.INT.E) in SRv6-TE. The feature introduces these changes: **CLI:** • **show cef ipv6 accounting**

YANG Data Models Introduced and Enhanced

This release introduces or enhances the following data models. For detailed information about the supported and unsupported sensor paths of all the data models, see the Github repository. To get a comprehensive list of the data models supported in a release, navigate to the Available-Content.md file for the release in the Github repository. The unsupported sensor paths are documented as deviations. For example, openconfig-acl.yang provides details about the supported sensor paths, whereas cisco-xr-openconfig-acl-deviations.yang provides the unsupported sensor paths for openconfig-acl.yang on Cisco IOS XR routers.

You can also view the data model definitions using the YANG Data Models Navigator tool. This GUI-based and easy-to-use tool helps you explore the nuances of the data model and view the dependencies between various containers in the model. You can view the list of models supported across Cisco IOS XR releases and platforms, locate a specific model, view the containers and their respective lists, leaves, and leaf lists presented visually in a tree structure.

Feature	Description
Programmability	
openconfig-terminal-device.yang	The openconfig-terminal-device.yang has been updated to support Dial-In mode and Dial-out Mode. • Dial-in Mode: Allows the destination to initiate a session and subscribe to data streams. • Dial-Out Mode: Enables the router to initiate a session to the destination based on subscription settings. This update is across the leaf: • /openconfig-terminal:optical-channel

Feature	Description
openconfig-bfd.yang 0.3.0	The OpenConfig data model supports version 0.3.0. The micro-BFD sessions container provides these operational state parameters: • **Session state**: This indicates the current state of the BFD session, such as **Up**, **Down**, or **Init**. It helps in understanding the operational status of the session. • **Remote session state**: Like the **session** state, but it reflects the state as reported by the remote system. • **Last failure time**: This is a timestamp indicating when the last session failure occurred. • **Failure transitions**: The number of times the session has transitioned from **Up** to **Down** state. • **Local and remote discriminator**: Unique identifiers used to distinguish between multiple BFD sessions on the same interface. • **Local and remote diagnostic code**: Codes that provide information about the reason for the last session state change. • **Remote minimum receive interval**: The minimum interval at which the remote system can receive BFD packets. • **Demand mode requested**: Indicates if the demand mode is requested, which allows BFD to operate without sending periodic control packets. • **Remote authentication enabled**: Shows if authentication is enabled for the remote session. • **Remote control plane independent**: Indicates if the remote session is independent of the control plane. • **Async state parameters**: These include statistics about the last packet transmitted and received, the number of packets transmitted and received, and the number of times a BFD session transitions from a **Down** state to an **Up** state.
Cisco-IOS-XR-infra-sla-cfg.yang	This native yang data model is enhanced to support **BinsMinDelay** and **MinDelayMicroseconds** options under the existing YANG leaf: /cfg/gl/sla/protocols/*protocol*/profiles/*profile*/statistics/*statistic*/aggregation
Cisco-IOS-XR-um-ethernet-sla-cfg.yang	This unified data model is enhanced to support **BinsMinDelay** and **MinDelayMicroseconds** options under the existing YANG leaf: /cfg/gl/sla/protocols/*protocol*/profiles/*profile*/statistics/*statistic*/aggregation

Feature	Description
Cisco-IOS-XR-infra-sla-oper.yang	The existing **bin width** leaf in the Cisco native data model reflects the configured minimum delay value.
Cisco-IOS-XR-um-route-policy-cfg	This unified data model enables you to minimize packet loss, service disruptions, and prevents ECMP OOR conditions by allowing BGP to delay prefix download into the RIB and FIB until it learns all paths from a specific ASN.
Cisco-IOS-XR-um-route-policy-cfg	This unified data model is enhanced with a new container, extended-community-transitive-bandwidth-sets, and new leaves such as rpl-extended-community-transitive-bandwidth-set and set-name. These additions support the BGP DMZ transitive-bandwidth extended community in RPL.
Cisco-IOS-XR-policy-repository-cfg	This native data model is enhanced with a new container, extended-community-transitive-bandwidth-sets, and new leaves such as rpl-extended-community-transitive-bandwidth-set and set-name. These additions support the BGP DMZ bandwidth extended community in transitive mode, allowing bandwidth attributes to be propagated beyond a local AS.
Cisco-IOS-XR-secure-erase-act	This data model allows you to securely erase the solid state drive (SSD) data on a particular card such as a line card or a route processor, or on the entire router.

Hardware Introduced

There are no new hardware introduced in this release.

Features Supported on Cisco NC5700 Line Cards and NCS 5700 Fixed Port Routers

The following table lists the features supported on Cisco NC5700 line cards in compatibility mode (NC5700 line cards with previous generation NCS 5500 line cards in the same NCS 5500 modular routers) and native mode (NCS 5500 modular routers with only NCS 5700 line cards and NCS 5700 fixed port routers).

To enable the native mode on Cisco NCS 5500 series modular routers having Cisco NCS 5700 line cards, use the **hw-module profile npu native-mode-enable** command in the configuration mode. Ensure that you reload the router after configuring the native mode.

Features supported in the native mode are also available on Cisco NCS 5700 fixed port routers.

Table 1: Features Supported on Cisco NC5700 Line Cards

Feature	Compatible Mode	Native Mode
Configure DHCPv6 relay source address	✓	✓
Enable egress traffic mirroring in non-ETM mode	×	✓
EVPN-IRB ARP and ND proxy suppression	×	✓

Feature	Compatible Mode	Native Mode
Layer 2 fast reroute for E-Line service	×	✓
VLAN tagging on the main bundle or physical interface for L2VPN VPWS	×	✓
EVPN-IRB ARP and ND proxy suppression	×	✓
Layer 2 fast reroute for E-Line service	×	✓
VLAN tagging on the main bundle or physical interface for L2VPN VPWS	×	✓
Cross AFI BGP NH Information Element	✓	✓
gNOI Containerz	×	✓
IPv6 BFD dampening on Cisco 5700 routers	✓	✓
Path MTU Discovery for SRv6 Packets on Ingress Provider Edge (PE) Routers, Egress (PE) Router and Provider Core Router Transit Nodes	×	✓
SRv6 policy counters (POL.CP.SL.INT.E)	✓	✓

For the complete list of features supported on Cisco NC57 line cards until Cisco IOS XR Release 25.1.1, see:

- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.4.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.4.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.3.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.3.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.2.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.2.11
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.2.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.1.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.1.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.11.21
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.11.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.11.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.10.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.9.2

- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.9.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.8.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.8.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.7.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.7.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.6.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.6.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.5.3
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.5.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.5.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.4.2
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.4.1
- Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 7.3.1

Caveats

Table 2: Cisco NCS 5500 Series Router Specific Bugs

Bug ID	Headline
CSCwn59481	None of the packets are egressing out on ncs5500 NC57-48Q2D-SE-S LC interface

Release Package

This table lists the Cisco IOS XR Software feature set matrix (packages) with associated filenames.

Visit the Cisco Software Download page to download the Cisco IOS XR software images.

Table 3: Release 25.1.1 Packages for Cisco NCS 5500 Series Router

Composite Package		
Feature Set	**Filename**	**Description**

Cisco IOS XR IP Unicast Routing Core Bundle	ncs5500-mini-x.iso	Contains base image contents that includes: • Host operating system • System Admin boot image • IOS XR boot image • BGP packages
Individually-Installable Optional Packages		
Feature Set	**Filename**	**Description**
Cisco IOS XR Manageability Package	ncs5500-mgbl-3.0.0.0-r2511.x86_64.rpm	Extensible Markup Language (XML) Parser, Telemetry, Netconf, gRPC and HTTP server packages.
Cisco IOS XR MPLS Package	ncs5500-mpls-2.1.0.0-r2511.x86_64.rpm ncs5500-mpls-te-rsvp-2.2.0.0-r2511.x86_64.rpm	MPLS and MPLS Traffic Engineering (MPLS-TE) RPM.
Cisco IOS XR Security Package	ncs5500-k9sec-3.1.0.0-r2511.x86_64.rpm	Support for Encryption, Decryption, Secure Shell (SSH), Secure Socket Layer (SSL), and Public-key infrastructure (PKI)
Cisco IOS XR ISIS package	ncs5500-isis-1.2.0.0-r2511.x86_64.rpm	Support ISIS
Cisco IOS XR OSPF package	ncs5500-ospf-2.0.0.0-r2511.x86_64.rpm	Support OSPF
Lawful Intercept (LI) Package	ncs5500-li-1.0.0.0-r2511.x86_64.rpm	Includes LI software images
Multicast Package	ncs5500-mcast-1.0.0.0-r2511.x86_64rpm	Support Multicast
EIGRP	ncs5500-eigrp-1.0.0.0-r2511.x86_64.rpm	Supports Enhanced Interior Gateway Routing Protocol
Lawful Intercept Control	ncs5500-lictrl-1.0.0.0-r2511x86_64.rpm	Supports Lawful Intercept Control
Healthcheck	ncs5500-healthcheck-1.0.0.0-r2511.x86_64.rpm	Supports System Health Check

Table 4: Release 25.1.1 TAR files for Cisco NCS 5500 Series Router

Feature Set	Filename
NCS 5500 IOS XR Software 3DES	NCS5500-iosxr-k9-25.1.1.tar
NCS 5500 IOS XR Software	NCS5500-iosxr-25.1.1.tar
NCS 5500 IOS XR Software	NCS5500-docs-25.1.1.tar

Table 5: Release 25.1.1 Packages for Cisco NCS 5700 Series Router

Feature Set	Filename

NCS 5700 IOS XR Software	ncs5700-x64-25.1.1.iso
NCS 5700 IOS XR Software (only k9 RPMs)	ncs5700-k9sec-rpms.25.1.1.tar
NCS 5700 IOS XR Software Optional Package	NCS5700-optional-rpms.25.1.1.tar This TAR file contains the following RPMS: • optional-rpms/cdp/* • optional-rpms/eigrp/* • optional-rpms/telnet/*

Determine Software Version

To verify the software version running on the router, use **show version** command in the EXEC mode.

```
Router# show version
Cisco IOS XR Software, Version 25.1.1
Copyright (c) 2013-2025 by Cisco Systems, Inc.

Build Information:
Built By     : swtools
Built On     : Sat Mar 29 02:02:25 PDT 2025
Built Host   : iox-ucs-053
Workspace    : /auto/srcarchive12/prod/25.1.1/ncs5500/ws
Version      : 25.1.1
Location     : /opt/cisco/XR/packages/
Label        : 25.1.1

cisco NCS-5500 () processor
System uptime is 55 minutes
```

Determine Firmware Support

Use the **show hw-module fpd** command in EXEC and Admin mode to view the hardware components with their current FPD version and status. The status of the hardware must be CURRENT; Running and Programed version must be the same.

You can also use the **show fpd package** command in Admin mode to check the fpd versions.

NCS 5500 Fixed Port Routers

```
Router# show fpd package
============================== ================================================
                                      Field Programmable Device Package
                                ================================================
                                           Req      SW       Min Req    Min Req
Card Type            FPD Description       Reload   Ver      SW Ver     Board Ver
==================== ========================= ====== ======= ========= =========
--------------------------------------------------------------------------------
NC55-12X100G-SE-PR   Bootloader(A)             YES     1.20      1.20       0.0
                     IOFPGA(A)                 YES     0.12      0.12       0.0
                     MIFPGA                    YES     0.03      0.03       0.0
                     SATA-INTEL_240G(A)        NO    1132.00   1132.00     0.0
                     SATA-INTEL_480G(A)        NO    1132.00   1132.00     0.0
                     SATA-M1100(A)             NO     50.00     50.00      0.0
                     SATA-M500IT-MC(A)         NO      3.00      3.00      0.0
```

```
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO   1535.00   1535.00      0.0
                    SATA-SMART-AC1C-128G(A)    NO   1402.00   1402.00      0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
--------------------------------------------------------------------------------
NC55-12X100GE-PROT  Bootloader(A)              YES     1.22      1.22      0.0
                    IOFPGA(A)                  YES     0.15      0.15      0.0
                    MIFPGA                     YES     0.09      0.09      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00      0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00      0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO   1535.00   1535.00      0.0
                    SATA-SMART-AC1C-128G(A)    NO   1402.00   1402.00      0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
--------------------------------------------------------------------------------
NC55-18H18F         Bootloader(A)              YES     1.20      1.20      0.0
                    IOFPGA(A)                  YES     0.22      0.22      0.0
                    MIFPGA                     YES     0.03      0.03      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00      0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00      0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO   1535.00   1535.00      0.0
                    SATA-SMART-AC1C-128G(A)    NO   1402.00   1402.00      0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
--------------------------------------------------------------------------------
NC55-24H12F-SE      Bootloader(A)              YES     1.20      1.20      0.0
                    IOFPGA(A)                  YES     0.09      0.09      0.0
                    MIFPGA                     YES     0.03      0.03      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00      0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00      0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO   1535.00   1535.00      0.0
                    SATA-SMART-AC1C-128G(A)    NO   1402.00   1402.00      0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
```

NC55-24X100G-SE	Bootloader(A)	YES	1.20	1.20	0.0
	IOFPGA(A)	YES	0.13	0.13	0.0
	MIFPGA	YES	0.03	0.03	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-32T16Q4H-A	Bootloader(A)	YES	0.05	0.05	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.95	0.95	0.0
	MIFPGA	YES	0.60	0.60	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
	TimingIC-A	YES	7.216	7.216	0.0
	TimingIC-B	YES	7.216	7.216	0.0
NC55-32T16Q4H-AT	Bootloader(A)	YES	0.05	0.05	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.95	0.95	0.0
	MIFPGA	YES	0.60	0.60	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
	TimingIC-A	YES	7.216	7.216	0.0
	TimingIC-B	YES	7.216	7.216	0.0
NC55-36X100G	Bootloader(A)	YES	1.22	1.22	0.0
	IOFPGA(A)	YES	0.15	0.15	0.0
	MIFPGA	YES	0.09	0.09	0.0

	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-36X100G-A-SE	Bootloader(A)	YES	0.15	0.15	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.26	0.26	0.0
	MIFPGA	YES	0.03	0.03	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-36X100G-S	Bootloader(A)	YES	1.20	1.20	0.0
	IOFPGA(A)	YES	0.12	0.12	0.0
	MIFPGA	YES	0.07	0.07	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-5504-FC	Bootloader(A)	YES	1.75	1.75	0.0
	IOFPGA(A)	YES	0.10	0.10	0.0
NC55-5504-FC2	Bootloader(A)	YES	1.13	1.13	0.0
	IOFPGA(A)	YES	0.49	0.49	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0

	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-5508-FC	Bootloader(A)	YES	1.74	1.74	0.0
	IOFPGA(A)	YES	0.17	0.17	0.0
NC55-5508-FC2	Bootloader(A)	YES	1.80	1.80	0.0
	IOFPGA(A)	YES	0.20	0.20	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-5516-FC	Bootloader(A)	YES	1.75	1.75	0.0
	IOFPGA(A)	YES	0.27	0.27	0.0
NC55-5516-FC2	Bootloader(A)	YES	1.80	1.80	0.0
	IOFPGA(A)	YES	0.24	0.24	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-6X100GE-PROT	Bootloader(A)	YES	1.22	1.22	0.0
	IOFPGA(A)	YES	0.15	0.15	0.0
	MIFPGA	YES	0.09	0.09	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0

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                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
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NC55-6X200-DWDM-S   Bootloader(A)              YES     1.20      1.20      0.0
                    CFP2_PORT_0                NO      5.56      5.56      2.1
                    CFP2_PORT_1                NO      5.56      5.56      2.1
                    CFP2_PORT_2                NO      5.56      5.56      2.1
                    CFP2_PORT_3                NO      5.56      5.56      2.1
                    CFP2_PORT_4                NO      5.56      5.56      2.1
                    CFP2_PORT_5                NO      5.56      5.56      2.1
                    DENALI0                    NO     13.48     13.48      0.0
                    DENALI1                    NO     13.48     13.48      0.0
                    DENALI2                    NO     13.48     13.48      0.0
                    IOFPGA(A)                  YES     0.14      0.14      0.0
                    MORGOTH                    YES     5.26      5.26      0.0
                    MSFPGA0                    YES     2.22      2.22      0.0
                    MSFPGA1                    YES     2.22      2.22      0.0
                    MSFPGA2                    YES     2.22      2.22      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
--------------------------------------------------------------------------------
NC55-MOD-A-S        Bootloader(A)              YES     1.03      1.03      0.0
                    DBFPGA(A)                  YES     0.14      0.14      0.0
                    IOFPGA(A)                  YES     0.14      0.14      0.0
                    MIFPGA                     YES     0.16      0.16      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
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NC55-MOD-A-SE-S     Bootloader(A)              YES     1.03      1.03      0.0
                    DBFPGA(A)                  YES     0.14      0.14      0.0
                    IOFPGA(A)                  YES     0.14      0.14      0.0
                    MIFPGA                     YES     0.16      0.16      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
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	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-MPA-12T-S	MPAFPGA	YES	0.28	0.28	0.0
NC55-MPA-1TH2H-S	CFP2-D-DCO_2	NO	38.27397	38.27397	0.1
	CFP2-D10-DCO_2	NO	67.30726	67.30726	0.1
	CFP2-D15-DCO_2	NO	67.30726	67.30726	0.1
	CFP2-DE-DCO_2	NO	38.27397	38.27397	0.1
	CFP2-DETS-DCO_2	NO	38.27397	38.27397	0.1
	CFP2-DS-DCO_2	NO	38.27397	38.27397	0.1
	CFP2-DS100-DCO_2	NO	38.27397	38.27397	0.1
	MPAFPGA	YES	0.54	0.54	0.0
NC55-MPA-2TH-HX-S	CFP2-D-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-D-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-D10-DCO_0	NO	67.30726	67.30726	0.1
	CFP2-D10-DCO_1	NO	67.30726	67.30726	0.1
	CFP2-D15-DCO_0	NO	67.30726	67.30726	0.1
	CFP2-D15-DCO_1	NO	67.30726	67.30726	0.1
	CFP2-DE-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DE-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DETS-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DETS-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DS-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DS-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DS100-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DS100-DCO_1	NO	38.27397	38.27397	0.1
	MPAFPGA	YES	0.54	0.54	0.0
NC55-MPA-2TH-S	CFP2-D-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-D-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-D10-DCO_0	NO	67.30726	67.30726	0.1
	CFP2-D10-DCO_1	NO	67.30726	67.30726	0.1
	CFP2-D15-DCO_0	NO	67.30726	67.30726	0.1
	CFP2-D15-DCO_1	NO	67.30726	67.30726	0.1
	CFP2-DE-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DE-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DETS-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DETS-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DS-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DS-DCO_1	NO	38.27397	38.27397	0.1
	CFP2-DS100-DCO_0	NO	38.27397	38.27397	0.1
	CFP2-DS100-DCO_1	NO	38.27397	38.27397	0.1
	MPAFPGA	YES	0.54	0.54	0.0
NC55-MPA-4H-HD-S	MPAFPGA	YES	0.55	0.55	0.0
NC55-MPA-4H-HX-S	MPAFPGA	YES	0.54	0.54	0.0
NC55-MPA-4H-S	MPAFPGA	YES	0.54	0.54	0.0
NC55-OIP-2	CPLD-MPAFPGA	YES	2.00	2.00	0.0
	MPAFPGA	YES	5.00	5.00	0.0
NC55-OIP-4	MPAFPGA	YES	0.10	0.10	0.0
NC55-PWR-3KW-2HV	DT-LogicMCU(A)	NO	3.01	3.01	0.2
	DT-PriMCU(A)	NO	3.00	3.00	0.2
	DT-SecMCU(A)	NO	3.01	3.01	0.2

NC55-PWR-3KW-DC	DT-SecMCU(A)	NO	4.12	4.12	0.1
NC55-PWR-4.4KW-DC	QCS-LogicMCU(A)	NO	3.00	3.00	0.1
	QCS-PriMCU(A)	NO	3.00	3.00	0.1
	QCS-SecMCU(A)	NO	3.00	3.00	0.1
NC55-RP	Bootloader(A)	YES	9.31	9.31	0.0
	IOFPGA(A)	YES	0.09	0.09	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-RP-E	Bootloader(A)	YES	1.24	1.24	0.0
	IOFPGA(A)	YES	0.23	0.23	0.0
	OMGFPGA(A)	YES	0.61	0.61	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-RP-PROTO	Bootloader(A)	YES	9.31	9.31	0.0
	IOFPGA(A)	YES	0.06	0.06	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC55-RP2-E	Bootloader(A)	YES	0.09	0.09	0.0
	IOFPGA(A)	YES	0.50	0.50	0.0
	OMGFPGA(A)	YES	0.52	0.52	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0

	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
	TimingIC-A	YES	7.216	7.216	0.0
	TimingIC-B-0	YES	7.216	7.216	0.0
	TimingIC-B-1	YES	7.216	7.216	0.0
NC55-SC	Bootloader(A)	YES	1.74	1.74	0.0
	IOFPGA(A)	YES	0.11	0.11	0.0
NC57-1600W-ACFW	PriMCU-ACFW(A)	NO	1.02	1.02	0.0
	SecMCU-ACFW(A)	NO	1.07	1.07	0.0
NC57-1600W-DCFW	PriMCU-DCFW(A)	NO	1.07	1.00	0.0
NC57-18DD-SE	Bootloader(A)	YES	1.03	1.03	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.24	0.24	0.0
	MIFPGA	YES	0.11	0.11	0.0
	QDD_BRT_FW_C0_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P01	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P02	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P03	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P04	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P05	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P06	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P07	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P08	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P09	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P10	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P11	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P12	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P13	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P14	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P15	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P16	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P17	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P18	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P19	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P20	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P21	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P22	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P23	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P24	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P25	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P26	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P27	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P28	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P29	YES	70.130	70.130	0.0
	QDD_FW_C0_P00	YES	61.23	61.23	0.0
	QDD_FW_C0_P01	YES	61.23	61.23	0.0
	QDD_FW_C0_P02	YES	61.23	61.23	0.0
	QDD_FW_C0_P03	YES	61.23	61.23	0.0
	QDD_FW_C0_P04	YES	61.23	61.23	0.0
	QDD_FW_C0_P05	YES	61.23	61.23	0.0
	QDD_FW_C0_P06	YES	61.23	61.23	0.0

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                 QDD_FW_C0_P07              YES    61.23     61.23      0.0
                 QDD_FW_C0_P08              YES    61.23     61.23      0.0
                 QDD_FW_C0_P09              YES    61.23     61.23      0.0
                 QDD_FW_C0_P10              YES    61.23     61.23      0.0
                 QDD_FW_C0_P11              YES    61.23     61.23      0.0
                 QDD_FW_C0_P12              YES    61.23     61.23      0.0
                 QDD_FW_C0_P13              YES    61.23     61.23      0.0
                 QDD_FW_C0_P14              YES    61.23     61.23      0.0
                 QDD_FW_C0_P15              YES    61.23     61.23      0.0
                 QDD_FW_C0_P16              YES    61.23     61.23      0.0
                 QDD_FW_C0_P17              YES    61.23     61.23      0.0
                 QDD_FW_C0_P18              YES    61.23     61.23      0.0
                 QDD_FW_C0_P19              YES    61.23     61.23      0.0
                 QDD_FW_C0_P20              YES    61.23     61.23      0.0
                 QDD_FW_C0_P21              YES    61.23     61.23      0.0
                 QDD_FW_C0_P22              YES    61.23     61.23      0.0
                 QDD_FW_C0_P23              YES    61.23     61.23      0.0
                 QDD_FW_C0_P24              YES    61.23     61.23      0.0
                 QDD_FW_C0_P25              YES    61.23     61.23      0.0
                 QDD_FW_C0_P26              YES    61.23     61.23      0.0
                 QDD_FW_C0_P27              YES    61.23     61.23      0.0
                 QDD_FW_C0_P28              YES    61.23     61.23      0.0
                 QDD_FW_C0_P29              YES    61.23     61.23      0.0
                 SATA-INTEL_240G(A)         NO   1132.00   1132.00      0.0
                 SATA-INTEL_480G(A)         NO   1132.00   1132.00      0.0
                 SATA-M1100(A)              NO     50.00     50.00      0.0
                 SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                 SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                 SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                 SATA-M5100(A)              NO     75.00     75.00      0.0
                 SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                 SATA-M600-MU(A)            NO      6.00      6.00      0.0
                 SATA-Micron(A)             NO      4.00      4.00      0.0
                 SATA-SMART-128G(A)         NO   1535.00   1535.00      0.0
                 SATA-SMART-AC1C-128G(A)    NO   1402.00   1402.00      0.0
                 SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                 SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
--------------------------------------------------------------------------------
NC57-24DD        Bootloader(A)              YES     1.03      1.03      0.0
                 DBFPGA(A)                  YES     0.14      0.14      0.0
                 IOFPGA(A)                  YES     0.24      0.24      0.0
                 MIFPGA                     YES     0.11      0.11      0.0
                 QDD_BRT_FW_C0_P00          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P01          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P02          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P03          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P04          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P05          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P06          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P07          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P08          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P09          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P10          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P11          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P12          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P13          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P14          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P15          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P16          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P17          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P18          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P19          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P20          YES   70.130    70.130      0.0
                 QDD_BRT_FW_C0_P21          YES   70.130    70.130      0.0
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                    QDD_BRT_FW_C0_P22          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P23          YES    70.130    70.130     0.0
                    QDD_FW_C0_P00              YES    61.23     61.23      0.0
                    QDD_FW_C0_P01              YES    61.23     61.23      0.0
                    QDD_FW_C0_P02              YES    61.23     61.23      0.0
                    QDD_FW_C0_P03              YES    61.23     61.23      0.0
                    QDD_FW_C0_P04              YES    61.23     61.23      0.0
                    QDD_FW_C0_P05              YES    61.23     61.23      0.0
                    QDD_FW_C0_P06              YES    61.23     61.23      0.0
                    QDD_FW_C0_P07              YES    61.23     61.23      0.0
                    QDD_FW_C0_P08              YES    61.23     61.23      0.0
                    QDD_FW_C0_P09              YES    61.23     61.23      0.0
                    QDD_FW_C0_P10              YES    61.23     61.23      0.0
                    QDD_FW_C0_P11              YES    61.23     61.23      0.0
                    QDD_FW_C0_P12              YES    61.23     61.23      0.0
                    QDD_FW_C0_P13              YES    61.23     61.23      0.0
                    QDD_FW_C0_P14              YES    61.23     61.23      0.0
                    QDD_FW_C0_P15              YES    61.23     61.23      0.0
                    QDD_FW_C0_P16              YES    61.23     61.23      0.0
                    QDD_FW_C0_P17              YES    61.23     61.23      0.0
                    QDD_FW_C0_P18              YES    61.23     61.23      0.0
                    QDD_FW_C0_P19              YES    61.23     61.23      0.0
                    QDD_FW_C0_P20              YES    61.23     61.23      0.0
                    QDD_FW_C0_P21              YES    61.23     61.23      0.0
                    QDD_FW_C0_P22              YES    61.23     61.23      0.0
                    QDD_FW_C0_P23              YES    61.23     61.23      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
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NC57-36H-SE         Bootloader(A)              YES     1.03      1.03      0.0
                    DBFPGA(A)                  YES     0.14      0.14      0.0
                    IOFPGA(A)                  YES     0.07      0.07      0.0
                    MIFPGA                     YES     0.03      0.03      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
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NC57-36H6D-S        Bootloader(A)              YES     0.02      0.02      0.0
                    DBFPGA(A)                  YES     0.14      0.14      0.0
                    IOFPGA(A)                  YES     0.52      0.52      0.0
                    MIFPGA                     YES     0.40      0.40      0.0
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                    QDD_BRT_FW_C0_P24          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P25          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P26          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P27          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P28          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P29          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P30          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P31          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P32          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P33          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P34          YES    70.130    70.130     0.0
                    QDD_BRT_FW_C0_P35          YES    70.130    70.130     0.0
                    QDD_FW_C0_P24              YES    61.23     61.23      0.0
                    QDD_FW_C0_P25              YES    61.23     61.23      0.0
                    QDD_FW_C0_P26              YES    61.23     61.23      0.0
                    QDD_FW_C0_P27              YES    61.23     61.23      0.0
                    QDD_FW_C0_P28              YES    61.23     61.23      0.0
                    QDD_FW_C0_P29              YES    61.23     61.23      0.0
                    QDD_FW_C0_P30              YES    61.23     61.23      0.0
                    QDD_FW_C0_P31              YES    61.23     61.23      0.0
                    QDD_FW_C0_P32              YES    61.23     61.23      0.0
                    QDD_FW_C0_P33              YES    61.23     61.23      0.0
                    QDD_FW_C0_P34              YES    61.23     61.23      0.0
                    QDD_FW_C0_P35              YES    61.23     61.23      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
                    TimingIC-A                 YES     7.216     7.216     0.0
                    TimingIC-B                 YES     7.216     7.216     0.0
-------------------------------------------------------------------------------
NC57-48Q2D-S        ALDRINFPGA(A)              YES     1.06      1.06      0.0
                    Bootloader(A)              YES     1.00      1.00      0.0
                    DBFPGA(A)                  YES     0.14      0.14      0.0
                    IOFPGA(A)                  YES     0.105     0.105     0.0
                    MIFPGA                     YES     0.21      0.21      0.0
                    SATA-INTEL_240G(A)         NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)         NO    1132.00   1132.00     0.0
                    SATA-M1100(A)              NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)          NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)        NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)        NO      4.00      4.00      0.0
                    SATA-M5100(A)              NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)           NO      5.00      5.00      0.0
                    SATA-M600-MU(A)            NO      6.00      6.00      0.0
                    SATA-Micron(A)             NO      4.00      4.00      0.0
                    SATA-SMART-128G(A)         NO    1535.00   1535.00     0.0
                    SATA-SMART-AC1C-128G(A)    NO    1402.00   1402.00     0.0
                    SATA-SOLIDIGM-240G(A)      NO    130.00    130.00      0.0
                    SATA-SOLIDIGM-480G(A)      NO    130.00    130.00      0.0
                    TimingIC-A                 YES     7.216     7.216     0.0
                    TimingIC-B                 YES     7.216     7.216     0.0
-------------------------------------------------------------------------------
NC57-48Q2D-SE-S     ALDRINFPGA(A)              YES     1.06      1.06      0.0
```

	Bootloader(A)	YES	1.00	1.00	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.105	0.105	0.0
	MIFPGA	YES	0.21	0.21	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
	TimingIC-A	YES	7.216	7.216	0.0
	TimingIC-B	YES	7.216	7.216	0.0
NC57-MOD-RP2-E	Bootloader(A)	YES	0.14	0.14	0.0
	IOFPGA	YES	0.51	0.51	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
NC57-MOD-S	Bootloader(A)	YES	2.03	2.03	0.0
	DBFPGA(A)	YES	0.14	0.14	0.0
	IOFPGA(A)	YES	0.42	0.42	0.0
	MIFPGA	YES	0.18	0.18	0.0
	QDD_BRT_FW_C0_P08	YES	70.130	70.130	0.0
	QDD_BRT_FW_C0_P09	YES	70.130	70.130	0.0
	QDD_FW_C0_P08	YES	61.23	61.23	0.0
	QDD_FW_C0_P09	YES	61.23	61.23	0.0
	SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
	SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
	SATA-M1100(A)	NO	50.00	50.00	0.0
	SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
	SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
	SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
	SATA-M5100(A)	NO	75.00	75.00	0.0
	SATA-M600-MCT(A)	NO	5.00	5.00	0.0
	SATA-M600-MU(A)	NO	6.00	6.00	0.0
	SATA-Micron(A)	NO	4.00	4.00	0.0
	SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
	SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
	SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
	SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
	TimingIC-A	YES	7.216	7.216	0.0
	TimingIC-B	YES	7.216	7.216	0.0
NC57-MPA-12L-S	MPAFPGA	YES	0.28	0.28	0.0

NC57-MPA-1FH1D-S	CFP2-M25-DCO_1	NO	67.30726	67.30726	0.1
	MPAFPGA	YES	0.80	0.80	0.0
	QDD_BRT_FW_C1_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C2_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C3_P00	YES	70.130	70.130	0.0
	QDD_FW_C1_P00	YES	61.23	61.23	0.0
	QDD_FW_C2_P00	YES	61.23	61.23	0.0
	QDD_FW_C3_P00	YES	61.23	61.23	0.0
NC57-MPA-2D4H-S	MPAFPGA	YES	0.07	0.07	0.0
	QDD_BRT_FW_C1_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C1_P01	YES	70.130	70.130	0.0
	QDD_BRT_FW_C1_P02	YES	70.130	70.130	0.0
	QDD_BRT_FW_C1_P03	YES	70.130	70.130	0.0
	QDD_BRT_FW_C2_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C2_P01	YES	70.130	70.130	0.0
	QDD_BRT_FW_C2_P02	YES	70.130	70.130	0.0
	QDD_BRT_FW_C2_P03	YES	70.130	70.130	0.0
	QDD_BRT_FW_C3_P00	YES	70.130	70.130	0.0
	QDD_BRT_FW_C3_P01	YES	70.130	70.130	0.0
	QDD_BRT_FW_C3_P02	YES	70.130	70.130	0.0
	QDD_BRT_FW_C3_P03	YES	70.130	70.130	0.0
	QDD_FW_C1_P00	YES	61.23	61.23	0.0
	QDD_FW_C1_P01	YES	61.23	61.23	0.0
	QDD_FW_C1_P02	YES	61.23	61.23	0.0
	QDD_FW_C1_P03	YES	61.23	61.23	0.0
	QDD_FW_C2_P00	YES	61.23	61.23	0.0
	QDD_FW_C2_P01	YES	61.23	61.23	0.0
	QDD_FW_C2_P02	YES	61.23	61.23	0.0
	QDD_FW_C2_P03	YES	61.23	61.23	0.0
	QDD_FW_C3_P00	YES	61.23	61.23	0.0
	QDD_FW_C3_P01	YES	61.23	61.23	0.0
	QDD_FW_C3_P02	YES	61.23	61.23	0.0
	QDD_FW_C3_P03	YES	61.23	61.23	0.0
	QDD_OLS_A_C1_P00	NO	2.07	2.07	0.0
	QDD_OLS_A_C1_P01	NO	2.07	2.07	0.0
	QDD_OLS_A_C1_P02	NO	2.07	2.07	0.0
	QDD_OLS_A_C1_P03	NO	2.07	2.07	0.0
	QDD_OLS_A_C2_P00	NO	2.07	2.07	0.0
	QDD_OLS_A_C2_P01	NO	2.07	2.07	0.0
	QDD_OLS_A_C2_P02	NO	2.07	2.07	0.0
	QDD_OLS_A_C2_P03	NO	2.07	2.07	0.0
	QDD_OLS_A_C3_P00	NO	2.07	2.07	0.0
	QDD_OLS_A_C3_P01	NO	2.07	2.07	0.0
	QDD_OLS_A_C3_P02	NO	2.07	2.07	0.0
	QDD_OLS_A_C3_P03	NO	2.07	2.07	0.0
	QDD_OLS_C_C1_P00	NO	1.00	1.00	0.0
	QDD_OLS_C_C1_P01	NO	1.00	1.00	0.0
	QDD_OLS_C_C1_P02	NO	1.00	1.00	0.0
	QDD_OLS_C_C1_P03	NO	1.00	1.00	0.0
	QDD_OLS_C_C2_P00	NO	1.00	1.00	0.0
	QDD_OLS_C_C2_P01	NO	1.00	1.00	0.0
	QDD_OLS_C_C2_P02	NO	1.00	1.00	0.0
	QDD_OLS_C_C2_P03	NO	1.00	1.00	0.0
	QDD_OLS_C_C3_P00	NO	1.00	1.00	0.0
	QDD_OLS_C_C3_P01	NO	1.00	1.00	0.0
	QDD_OLS_C_C3_P02	NO	1.00	1.00	0.0
	QDD_OLS_C_C3_P03	NO	1.00	1.00	0.0
NCS-57C3-MOD-SYS	ALDRINFPGA(A)	YES	1.04	1.04	0.0
	Bootloader(A)	YES	0.16	0.16	0.0
	DBFPGA(A)	YES	0.56	0.56	0.0
	IOFPGA	YES	0.101	0.101	0.0

MIFPGA	YES	0.19	0.19	0.0
SATA-INTEL_240G(A)	NO	1132.00	1132.00	0.0
SATA-INTEL_480G(A)	NO	1132.00	1132.00	0.0
SATA-M1100(A)	NO	50.00	50.00	0.0
SATA-M500IT-MC(A)	NO	3.00	3.00	0.0
SATA-M500IT-MU-A(A)	NO	5.00	5.00	0.0
SATA-M500IT-MU-B(A)	NO	4.00	4.00	0.0
SATA-M5100(A)	NO	75.00	75.00	0.0
SATA-M600-MCT(A)	NO	5.00	5.00	0.0
SATA-M600-MU(A)	NO	6.00	6.00	0.0
SATA-Micron(A)	NO	4.00	4.00	0.0
SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
SSFP_E1F_0	NO	13.01	13.01	0.0
SSFP_E1F_1	NO	13.01	13.01	0.0
SSFP_E1F_10	NO	13.01	13.01	0.0
SSFP_E1F_11	NO	13.01	13.01	0.0
SSFP_E1F_12	NO	13.01	13.01	0.0
SSFP_E1F_13	NO	13.01	13.01	0.0
SSFP_E1F_14	NO	13.01	13.01	0.0
SSFP_E1F_15	NO	13.01	13.01	0.0
SSFP_E1F_16	NO	13.01	13.01	0.0
SSFP_E1F_17	NO	13.01	13.01	0.0
SSFP_E1F_18	NO	13.01	13.01	0.0
SSFP_E1F_19	NO	13.01	13.01	0.0
SSFP_E1F_2	NO	13.01	13.01	0.0
SSFP_E1F_20	NO	13.01	13.01	0.0
SSFP_E1F_21	NO	13.01	13.01	0.0
SSFP_E1F_22	NO	13.01	13.01	0.0
SSFP_E1F_23	NO	13.01	13.01	0.0
SSFP_E1F_24	NO	13.01	13.01	0.0
SSFP_E1F_25	NO	13.01	13.01	0.0
SSFP_E1F_26	NO	13.01	13.01	0.0
SSFP_E1F_27	NO	13.01	13.01	0.0
SSFP_E1F_28	NO	13.01	13.01	0.0
SSFP_E1F_29	NO	13.01	13.01	0.0
SSFP_E1F_3	NO	13.01	13.01	0.0
SSFP_E1F_30	NO	13.01	13.01	0.0
SSFP_E1F_31	NO	13.01	13.01	0.0
SSFP_E1F_32	NO	13.01	13.01	0.0
SSFP_E1F_33	NO	13.01	13.01	0.0
SSFP_E1F_34	NO	13.01	13.01	0.0
SSFP_E1F_35	NO	13.01	13.01	0.0
SSFP_E1F_36	NO	13.01	13.01	0.0
SSFP_E1F_37	NO	13.01	13.01	0.0
SSFP_E1F_38	NO	13.01	13.01	0.0
SSFP_E1F_39	NO	13.01	13.01	0.0
SSFP_E1F_4	NO	13.01	13.01	0.0
SSFP_E1F_40	NO	13.01	13.01	0.0
SSFP_E1F_41	NO	13.01	13.01	0.0
SSFP_E1F_42	NO	13.01	13.01	0.0
SSFP_E1F_43	NO	13.01	13.01	0.0
SSFP_E1F_44	NO	13.01	13.01	0.0
SSFP_E1F_45	NO	13.01	13.01	0.0
SSFP_E1F_46	NO	13.01	13.01	0.0
SSFP_E1F_47	NO	13.01	13.01	0.0
SSFP_E1F_5	NO	13.01	13.01	0.0
SSFP_E1F_6	NO	13.01	13.01	0.0
SSFP_E1F_7	NO	13.01	13.01	0.0
SSFP_E1F_8	NO	13.01	13.01	0.0
SSFP_E1F_9	NO	13.01	13.01	0.0
SSFP_OC3_STM1_0	NO	12.01	12.01	0.0

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                    SSFP_OC3_STM1_1           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_10          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_11          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_12          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_13          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_14          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_15          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_16          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_17          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_18          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_19          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_2           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_20          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_21          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_22          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_23          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_24          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_25          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_26          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_27          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_28          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_29          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_3           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_30          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_31          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_32          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_33          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_34          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_35          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_36          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_37          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_38          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_39          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_4           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_40          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_41          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_42          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_43          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_44          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_45          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_46          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_47          NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_5           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_6           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_7           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_8           NO     12.01     12.01      0.0
                    SSFP_OC3_STM1_9           NO     12.01     12.01      0.0
                    TimingIC-A                YES    23.112    23.112     0.0
                    TimingIC-B                YES     7.216     7.216     0.0
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NCS-57C3-MODS-SYS   ALDRINFPGA(A)             YES     1.04      1.04      0.0
                    Bootloader(A)             YES     0.16      0.16      0.0
                    DBFPGA(A)                 YES     0.56      0.56      0.0
                    IOFPGA                    YES     0.101     0.101     0.0
                    MIFPGA                    YES     0.19      0.19      0.0
                    SATA-INTEL_240G(A)        NO    1132.00   1132.00     0.0
                    SATA-INTEL_480G(A)        NO    1132.00   1132.00     0.0
                    SATA-M1100(A)             NO     50.00     50.00      0.0
                    SATA-M500IT-MC(A)         NO      3.00      3.00      0.0
                    SATA-M500IT-MU-A(A)       NO      5.00      5.00      0.0
                    SATA-M500IT-MU-B(A)       NO      4.00      4.00      0.0
                    SATA-M5100(A)             NO     75.00     75.00      0.0
                    SATA-M600-MCT(A)          NO      5.00      5.00      0.0
                    SATA-M600-MU(A)           NO      6.00      6.00      0.0
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SATA-Micron(A)	NO	4.00	4.00	0.0
SATA-SMART-128G(A)	NO	1535.00	1535.00	0.0
SATA-SMART-AC1C-128G(A)	NO	1402.00	1402.00	0.0
SATA-SOLIDIGM-240G(A)	NO	130.00	130.00	0.0
SATA-SOLIDIGM-480G(A)	NO	130.00	130.00	0.0
SSFP_E1F_0	NO	13.01	13.01	0.0
SSFP_E1F_1	NO	13.01	13.01	0.0
SSFP_E1F_10	NO	13.01	13.01	0.0
SSFP_E1F_11	NO	13.01	13.01	0.0
SSFP_E1F_12	NO	13.01	13.01	0.0
SSFP_E1F_13	NO	13.01	13.01	0.0
SSFP_E1F_14	NO	13.01	13.01	0.0
SSFP_E1F_15	NO	13.01	13.01	0.0
SSFP_E1F_16	NO	13.01	13.01	0.0
SSFP_E1F_17	NO	13.01	13.01	0.0
SSFP_E1F_18	NO	13.01	13.01	0.0
SSFP_E1F_19	NO	13.01	13.01	0.0
SSFP_E1F_2	NO	13.01	13.01	0.0
SSFP_E1F_20	NO	13.01	13.01	0.0
SSFP_E1F_21	NO	13.01	13.01	0.0
SSFP_E1F_22	NO	13.01	13.01	0.0
SSFP_E1F_23	NO	13.01	13.01	0.0
SSFP_E1F_24	NO	13.01	13.01	0.0
SSFP_E1F_25	NO	13.01	13.01	0.0
SSFP_E1F_26	NO	13.01	13.01	0.0
SSFP_E1F_27	NO	13.01	13.01	0.0
SSFP_E1F_28	NO	13.01	13.01	0.0
SSFP_E1F_29	NO	13.01	13.01	0.0
SSFP_E1F_3	NO	13.01	13.01	0.0
SSFP_E1F_30	NO	13.01	13.01	0.0
SSFP_E1F_31	NO	13.01	13.01	0.0
SSFP_E1F_32	NO	13.01	13.01	0.0
SSFP_E1F_33	NO	13.01	13.01	0.0
SSFP_E1F_34	NO	13.01	13.01	0.0
SSFP_E1F_35	NO	13.01	13.01	0.0
SSFP_E1F_36	NO	13.01	13.01	0.0
SSFP_E1F_37	NO	13.01	13.01	0.0
SSFP_E1F_38	NO	13.01	13.01	0.0
SSFP_E1F_39	NO	13.01	13.01	0.0
SSFP_E1F_4	NO	13.01	13.01	0.0
SSFP_E1F_40	NO	13.01	13.01	0.0
SSFP_E1F_41	NO	13.01	13.01	0.0
SSFP_E1F_42	NO	13.01	13.01	0.0
SSFP_E1F_43	NO	13.01	13.01	0.0
SSFP_E1F_44	NO	13.01	13.01	0.0
SSFP_E1F_45	NO	13.01	13.01	0.0
SSFP_E1F_46	NO	13.01	13.01	0.0
SSFP_E1F_47	NO	13.01	13.01	0.0
SSFP_E1F_5	NO	13.01	13.01	0.0
SSFP_E1F_6	NO	13.01	13.01	0.0
SSFP_E1F_7	NO	13.01	13.01	0.0
SSFP_E1F_8	NO	13.01	13.01	0.0
SSFP_E1F_9	NO	13.01	13.01	0.0
SSFP_OC3_STM1_0	NO	12.01	12.01	0.0
SSFP_OC3_STM1_1	NO	12.01	12.01	0.0
SSFP_OC3_STM1_10	NO	12.01	12.01	0.0
SSFP_OC3_STM1_11	NO	12.01	12.01	0.0
SSFP_OC3_STM1_12	NO	12.01	12.01	0.0
SSFP_OC3_STM1_13	NO	12.01	12.01	0.0
SSFP_OC3_STM1_14	NO	12.01	12.01	0.0
SSFP_OC3_STM1_15	NO	12.01	12.01	0.0
SSFP_OC3_STM1_16	NO	12.01	12.01	0.0
SSFP_OC3_STM1_17	NO	12.01	12.01	0.0
SSFP_OC3_STM1_18	NO	12.01	12.01	0.0

```
                     SSFP_OC3_STM1_19          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_2           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_20          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_21          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_22          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_23          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_24          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_25          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_26          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_27          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_28          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_29          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_3           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_30          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_31          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_32          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_33          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_34          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_35          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_36          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_37          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_38          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_39          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_4           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_40          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_41          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_42          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_43          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_44          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_45          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_46          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_47          NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_5           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_6           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_7           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_8           NO     12.01     12.01      0.0
                     SSFP_OC3_STM1_9           NO     12.01     12.01      0.0
                     TimingIC-A                YES    23.112    23.112     0.0
                     TimingIC-B                YES     7.216     7.216     0.0
```

NCS 5700 Fixed Port Routers

```
Router# show fpd package
================================ ================================================
                                        Field Programmable Device Package
                                 ================================================
                                           Req     SW      Min Req   Min Req
Card Type            FPD Description       Reload  Ver     SW Ver  Board Ver
================== ========================== ====== ======= ======== =========
--------------------------------------------------------------------------------
NCS-57B1-5DSE-SYS    ADM1_Config               NO      0.53      0.53      0.0
                     ADM2_Config               NO      0.53      0.53      0.0
                     ADM3_Config               NO      0.53      0.53      0.0
                     IoFpga                    YES     0.09      0.09      0.0
                     IoFpgaGolden              YES     0.09      0.08      0.0
                     Primary-BIOS              YES     1.11      1.11      0.0
                     SsdIntelS4510             YES    11.20     11.20      0.0
                     ssdIntelS4520             YES     1.30      1.30      0.0
                     SsdMicron5300             YES     0.01      0.01      0.0
                     StdbyFpga                 YES     0.24      0.24      0.0
                     StdbyFpgaGolden           YES     0.24      0.24      0.0
                     TamFw                     YES     6.05      6.05      0.0
                     TamFwGolden               YES     6.05      6.05      0.0
--------------------------------------------------------------------------------
NCS-57B1-6D24-SYS    ADM1_Config               NO      0.96      0.96      0.0
```

	ADM2_Config	NO	0.96	0.96	0.0
	ADM3_Config	NO	0.96	0.96	0.0
	IoFpga	YES	0.09	0.09	0.0
	IoFpgaGolden	YES	0.09	0.08	0.0
	Primary-BIOS	YES	1.11	1.11	0.0
	SsdIntelS4510	YES	11.20	11.20	0.0
	ssdIntelS4520	YES	1.30	1.30	0.0
	SsdMicron5300	YES	0.01	0.01	0.0
	StdbyFpga	YES	0.24	0.24	0.0
	StdbyFpgaGolden	YES	0.24	0.24	0.0
	TamFw	YES	6.05	6.05	0.0
	TamFwGolden	YES	6.05	6.05	0.0
NCS-57C1-48Q6-SYS	ADM1_Config	YES	0.07	0.07	0.0
	ADM2_Config	YES	0.07	0.07	0.0
	IoFpga	YES	0.53	0.53	0.0
	IoFpgaGolden	YES	0.47	0.47	0.0
	Primary-BIOS	YES	3.07	3.07	0.0
	SsdIntelS4510	YES	11.32	11.32	0.0
	ssdIntelS4520	YES	1.30	1.30	0.0
	SsdMicron5300	YES	0.01	0.01	0.0
	StdbyFpga	YES	0.32	0.32	0.0
	StdbyFpgaGolden	YES	0.31	0.31	0.0
	TamFw	YES	7.17	7.17	0.0
	TamFwGolden	YES	7.10	7.10	0.0
NCS-57D2-18DD-SYS	ADM1-DBConfig	YES	1.92	1.92	0.0
	ADM2-DBConfig	YES	1.92	1.92	0.0
	ADM3-DBConfig	YES	1.92	1.92	0.0
	ADM4-MBConfig	YES	1.92	1.92	0.0
	ADM5-MBConfig	YES	1.92	1.92	0.0
	ADM6-MBConfig	YES	1.92	1.92	0.0
	FtFpga	NO	0.20	0.20	0.0
	FtFpgaGolden	NO	0.20	0.00	0.0
	IoFpga	YES	0.06	0.06	0.0
	IoFpgaDB	YES	0.07	0.07	0.0
	IoFpgaGolden	YES	0.05	0.05	0.0
	IoFpgaGoldenDB	YES	0.05	0.05	0.0
	Primary-BIOS	YES	4.10	4.10	0.0
	SsdIntelS4510	YES	11.32	11.32	0.0
	ssdIntelS4520	YES	1.30	1.30	0.0
	SsdMicron5300	YES	0.01	0.01	0.0
	StdbyFpga	YES	0.96	0.96	0.0
	StdbyFpgaGolden	YES	0.83	0.83	0.0
	TamFw	YES	7.09	7.09	0.0
	TamFwGolden	YES	7.09	7.09	0.0
PSU1100W-ACPI	EM-PrimMCU	NO	1.01	1.01	0.0
	EM-SecMCU	NO	1.05	1.05	0.0
PSU2KW-ACPE	PO-PrimMCU	NO	1.03	1.03	0.0
	PO-SecMCU	NO	1.10	1.10	0.0
PSU2KW-ACPI	PO-PrimMCU	NO	1.03	1.03	0.0
	PO-SecMCU	NO	1.13	1.13	0.0
	QC-PrimMCU	NO	2.00	2.00	0.0
	QC-SecMCU	NO	4.00	4.00	0.0
PSU2KW-DCPE	PO-PrimMCU	NO	1.11	1.11	0.0
PSU2KW-DCPI	PO-PrimMCU	NO	1.11	1.11	0.0
PSU950W-DCPI	EM-PrimMCU	NO	1.00	1.00	0.0

This sample output is for **show hw-module fpd** command from the Admin mode:

```
sysadmin-vm:0_RP0# show hw-module fpd
Auto-upgrade:Enabled
                                                                      FPD Versions
                                                                      ==============
Location   Card type             HWver FPD device       ATR Status    Running   Programd
-------------------------------------------------------------------------------------
0/1        NC55-36X100G-A-SE     1.0   MIFPGA               CURRENT     0.03      0.03
0/1        NC55-36X100G-A-SE     1.0   Bootloader           CURRENT     0.15      0.15
0/1        NC55-36X100G-A-SE     1.0   DBFPGA               CURRENT     0.14      0.14
0/1        NC55-36X100G-A-SE     1.0   IOFPGA               CURRENT     0.26      0.26
0/1        NC55-36X100G-A-SE     1.0   SATA-M500IT-MU-A     CURRENT     5.00      5.00
0/5        NC55-36X100G-A-SE     1.0   MIFPGA               CURRENT     0.03      0.03
0/5        NC55-36X100G-A-SE     1.0   Bootloader           CURRENT     0.15      0.15
0/5        NC55-36X100G-A-SE     1.0   DBFPGA               CURRENT     0.14      0.14
0/5        NC55-36X100G-A-SE     1.0   IOFPGA               CURRENT     0.26      0.26
0/5        NC55-36X100G-A-SE     1.0   SATA-M500IT-MU-A     CURRENT     5.00      5.00
0/RP0      NC55-RP2-E            1.0   TimingIC-A           CURRENT     7.216     7.216
0/RP0      NC55-RP2-E            1.0   TimingIC-B-0         CURRENT     7.216     7.216
0/RP0      NC55-RP2-E            1.0   TimingIC-B-1         CURRENT     7.216     7.216
0/RP0      NC55-RP2-E            1.0   Bootloader           CURRENT     0.09      0.09
0/RP0      NC55-RP2-E            1.0   IOFPGA               CURRENT     0.50      0.50
0/RP0      NC55-RP2-E            1.0   OMGFPGA              CURRENT     0.52      0.52
0/RP0      NC55-RP2-E            1.0   SATA-INTEL_240G      CURRENT   1132.00   1132.00
0/RP1      NC55-RP2-E            1.0   TimingIC-A           CURRENT     7.216     7.216
0/RP1      NC55-RP2-E            1.0   TimingIC-B-0         CURRENT     7.216     7.216
0/RP1      NC55-RP2-E            1.0   TimingIC-B-1         CURRENT     7.216     7.216
0/RP1      NC55-RP2-E            1.0   Bootloader           CURRENT     0.09      0.09
0/RP1      NC55-RP2-E            1.0   IOFPGA               CURRENT     0.50      0.50
0/RP1      NC55-RP2-E            1.0   OMGFPGA              CURRENT     0.52      0.52
0/RP1      NC55-RP2-E            1.0   SATA-INTEL_240G      CURRENT   1132.00   1132.00
0/FC0      NC55-5508-FC          1.0   Bootloader           CURRENT     1.74      1.74
0/FC0      NC55-5508-FC          1.0   IOFPGA               CURRENT     0.17      0.17
0/FC1      NC55-5508-FC          1.1   Bootloader           CURRENT     1.74      1.74
0/FC1      NC55-5508-FC          1.1   IOFPGA               CURRENT     0.17      0.17
0/FC2      NC55-5508-FC          0.305 Bootloader           CURRENT     1.74      1.74
0/FC2      NC55-5508-FC          0.305 IOFPGA               CURRENT     0.17      0.17
0/FC3      NC55-5508-FC          1.1   Bootloader           CURRENT     1.74      1.74
0/FC3      NC55-5508-FC          1.1   IOFPGA               CURRENT     0.17      0.17
0/FC4      NC55-5508-FC          1.1   Bootloader           CURRENT     1.74      1.74
0/FC4      NC55-5508-FC          1.1   IOFPGA               CURRENT     0.17      0.17
0/FC5      NC55-5508-FC          1.0   Bootloader           CURRENT     1.74      1.74
0/FC5      NC55-5508-FC          1.0   IOFPGA               CURRENT     0.17      0.17
0/SC0      NC55-SC               2.0   Bootloader           CURRENT     1.74      1.74
0/SC0      NC55-SC               2.0   IOFPGA               CURRENT     0.11      0.11
0/SC1      NC55-SC               2.0   Bootloader           CURRENT     1.74      1.74
0/SC1      NC55-SC               2.0   IOFPGA               CURRENT     0.11      0.11
```

Compatibility Matrix for EPNM and Crosswork with Cisco IOS XR Software

The compatibility matrix lists the version of EPNM and Crosswork that are supported with Cisco IOS XR Release in this release.

Table 6: Compatibility Matrix

Cisco IOS XR	Crosswork	EPNM
Release 25.1.1	Crosswork Optimization Engine 6.0	Evolved Programmable Network Manager 7.1.1

Important Notes

- Cisco IOS XR Release 25.1.1 is the last release to support new features in compatibility mode. While future releases will continue to support existing features in compatibility mode, new features will not be added. To leverage new features on Cisco NCS 5500 series modular routers with Cisco NCS 5700 line cards in upcoming releases, enable native mode by using the **hw-module profile npu native-mode-enable** command in configuration mode
- The total number of bridge-domains (2*BDs) and GRE tunnels put together should not exceed 1518. Here the number 1518 represents the multi-dimensional scale value.
- The offline diagnostics functionality is not supported in NCS 5500 platform. Therefore, the **hw-module service offline location** command will not work. However, you can use the **(sysadmin)# hw-module shutdown location** command to bring down the LC.

Licensing

Starting with Cisco IOS XR Release 24.1.1, Smart Licensing Using Policy (SLP) is the default Licensing model. When you upgrade to the Cisco IOS XR Release 24.1.1 release or later, the Smart Licensing Using Policy is enabled by default.

You can migrate your devices to Smart Licensing with Policy model, see *Migrating from Smart Licensing to Smart Licensing Using Policy*, Smart Licensing Using Policy on Cisco IOS XR Routers.

We recommend that you update to the latest version of SSM On-Prem or Cisco Smart Licensing Utility.



Note SSM On-Prem and CSSM both support SLP devices and SL devices. SLP devices and SL devices can coexist in a network. The Smart Licensing (SL) model is available in releases Cisco IOS XR Release 7.11.1 and earlier.

Supported Transceiver Modules

To determine the transceivers that Cisco hardware device supports, refer to the Transceiver Module Group (TMG) Compatibility Matrix tool.

Upgrading Cisco IOS XR Software

Cisco IOS XR Software is installed and activated from modular packages, allowing specific features or software patches to be installed, upgraded, or downgraded without affecting unrelated processes. Software packages can be upgraded or downgraded on all supported card types, or on a single card (node).

Production Software Maintenance Updates (SMUs)

A production SMU is a SMU that is formally requested, developed, tested, and released. Production SMUs are intended for use in a live network environment and are formally supported by the Cisco TAC and the relevant development teams. Software bugs identified through software recommendations or Bug Search Tools are not a basis for production SMU requests.

For information on production SMU types, refer the Production SMU Types section of the *IOS XR Software Maintenance Updates (SMUs)* guide.

Cisco IOS XR Error messages

To view, search, compare, and download Cisco IOS XR Error Messages, refer to the Cisco IOS XR Error messages tool.

Cisco IOS XR MIBs

To determine the MIBs supported by platform and release, refer to the Cisco IOS XR MIBs tool.

Related Documentation

The most current Cisco NCS 5500 router documentation is located at the following URL:

https://www.cisco.com/c/en/us/td/docs/iosxr/ios-xr.html

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