

# Release Notes for Cisco NCS 5500 Series Routers, IOS XR Release 24.4.2


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Revised: September 16, 2025

# Network Convergence System 5500 Series Routers

**Note** Cisco IOS XR Release 24.4.2 is an Extended Maintenance Release of Cisco IOS XR Release 24.4.1 for Cisco NCS 5500 Series routers. For more details on the Cisco IOS XR release model and associated support, see Guidelines for Cisco IOS XR Software.

## What's New in Cisco IOS XR Release 24.4.2

Cisco IOS XR Release 24.4.2 is an extended maintenance release for Cisco NCS 5500 Series routers. There are no new software features or hardware introduced in this release.

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

## Caveats

***Table 1: Cisco NCS 5500 Series Router Specific Bugs***

| Bug ID | Headline |
|---|---|
| CSCwo21515 | Commit fails occurs when configuring flowspec VRF |
| CSCwn93007 | IPv4 Ping fails on non default VRF physical 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 2: Release 24.4.2 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:<br>• Host operating system<br>• System Admin boot image<br>• IOS XR boot image<br>• BGP packages |

| Individually-Installable Optional Packages | | |
|---|---|---|
| **Feature Set** | **Filename** | **Description** |
| Cisco IOS XR Manageability Package | ncs5500-mgbl-3.0.0.0-r2442.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-r2442.x86_64.rpm<br>ncs5500-mpls-te-rsvp-2.2.0.0-r2442.x86_64.rpm | MPLS and MPLS Traffic Engineering (MPLS-TE) RPM. |
| Cisco IOS XR Security Package | ncs5500-k9sec-3.1.0.0-r2442.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-r2442.x86_64.rpm | Support ISIS |
| Cisco IOS XR OSPF package | ncs5500-ospf-2.0.0.0-r2442.x86_64.rpm | Support OSPF |
| Lawful Intercept (LI) Package | ncs5500-li-1.0.0.0-r2442.x86_64.rpm | Includes LI software images |
| Multicast Package | ncs5500-mcast-1.0.0.0-r2442.x86_64rpm | Support Multicast |
| EIGRP | ncs5500-eigrp-1.0.0.0-r2442.x86_64.rpm | Supports Enhanced Interior Gateway Routing Protocol |
| Lawful Intercept Control | ncs5500-lictrl-1.0.0.0-r2442x86_64.rpm | Supports Lawful Intercept Control |
| Healthcheck | ncs5500-healthcheck-1.0.0.0-r2442.x86_64.rpm | Supports System Health Check |

***Table 3: Release 24.4.2 TAR files for Cisco NCS 5500 Series Router***

| Feature Set | Filename |
|---|---|
| NCS 5500 IOS XR Software 3DES | NCS5500-iosxr-k9-24.4.2.tar |
| NCS 5500 IOS XR Software | NCS5500-iosxr-24.4.2.tar |
| NCS 5500 IOS XR Software | NCS5500-docs-24.4.2.tar |

***Table 4: Release 24.4.2 Packages for Cisco NCS 5700 Series Router***

| Feature Set | Filename |
|---|---|
| NCS 5700 IOS XR Software | ncs5700-x64-24.4.2.iso |
| NCS 5700 IOS XR Software (only k9 RPMs) | ncs5700-k9sec-rpms.24.4.2.tar |

| | |
|---|---|
| NCS 5700 IOS XR Software Optional Package | NCS5700-optional-rpms.24.4.2.tar<br>This TAR file contains the following RPMS:<br>• optional-rpms/cdp/*<br>• optional-rpms/eigrp/*<br>• 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 24.4.2
Copyright (c) 2013-2024 by Cisco Systems, Inc.

Build Information:
 Built By     : swtools
 Built On     : Thu Mar 20 05:09:09 PDT 2025
 Built Host   : iox-lnx-118
 Workspace    : /auto/srcarchive11/prod/24.4.2/ncs5500/ws
 Version      : 24.4.2
 Location     : /opt/cisco/XR/packages/
 Label        : 24.4.2

cisco NCS-5500 () processor
System uptime is 57 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-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       1.00      1.00     0.0
```

| | | | | | |
|---|---|---|---|---|---|
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |

| | | | | | |
|---|---|---|---|---|---|
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 0.0 |
| | SATA-SOLIDIGM-240G(A) | NO | 130.00 | 130.00 | 0.0 |
| | SATA-SOLIDIGM-480G(A) | NO | 130.00 | 130.00 | 0.0 |
| NC55-6X200-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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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 | 4.11 | 4.11 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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 |

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                  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
                  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-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       1.00      1.00     0.0
                  SATA-SMART-128G(A)         NO    1535.00   1535.00     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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NC57-24DD         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 |
| | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 0.0 |
| | SATA-SOLIDIGM-240G(A) | NO | 130.00 | 130.00 | 0.0 |
| | SATA-SOLIDIGM-480G(A) | NO | 130.00 | 130.00 | 0.0 |
| NC57-36H-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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 0.0 |
| | SATA-SOLIDIGM-240G(A) | NO | 130.00 | 130.00 | 0.0 |
| | SATA-SOLIDIGM-480G(A) | NO | 130.00 | 130.00 | 0.0 |
| NC57-36H6D-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 |
| | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |

| | | | | | |
|---|---|---|---|---|---|
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| | SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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 | 1.00 | 1.00 | 0.0 |
| SATA-SMART-128G(A) | NO | 1535.00 | 1535.00 | 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-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-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      1.00      1.00      0.0
                    SATA-SMART-128G(A)        NO    1535.00   1535.00     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      1.11      1.11       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     1.11      1.11      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     1.11      1.11      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     1.11      1.11      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
--------------------------------------------------------------------------------------
0/0        NC57-48Q2D-SE-S      0.2   MIFPGA               CURRENT     0.21      0.21
0/0        NC57-48Q2D-SE-S      1.0   TimingIC-A           CURRENT     7.216     7.216
0/0        NC57-48Q2D-SE-S      1.0   TimingIC-B           CURRENT     7.216     7.216
0/0        NC57-48Q2D-SE-S      0.2   ALDRINFPGA           CURRENT     1.06      1.06
0/0        NC57-48Q2D-SE-S      0.2   Bootloader           CURRENT     1.00      1.00
0/0        NC57-48Q2D-SE-S      0.2   DBFPGA               CURRENT     0.14      0.14
0/0        NC57-48Q2D-SE-S      0.2   IOFPGA               CURRENT     0.105     0.105
0/0        NC57-48Q2D-SE-S      0.2   SATA-Micron          CURRENT     1.00      1.00
0/1        NC57-36H-SE          0.201 MIFPGA               CURRENT     0.03      0.03
0/1        NC57-36H-SE          0.201 Bootloader           CURRENT     1.03      1.03
0/1        NC57-36H-SE          0.201 DBFPGA               CURRENT     0.14      0.14
0/1        NC57-36H-SE          0.201 IOFPGA               CURRENT     0.07      0.07
0/1        NC57-36H-SE          0.201 SATA-M5100           CURRENT    75.00     75.00
0/2        NC57-36H6D-S         1.0   MIFPGA               CURRENT     0.40      0.40
0/2        NC57-36H6D-S         1.0   TimingIC-A           CURRENT     7.216     7.216
0/2        NC57-36H6D-S         1.0   TimingIC-B           CURRENT     7.216     7.216
0/2        NC57-36H6D-S         1.0   Bootloader           CURRENT     0.02      0.02
0/2        NC57-36H6D-S         1.0   DBFPGA               CURRENT     0.14      0.14
0/2        NC57-36H6D-S         1.0   IOFPGA               CURRENT     0.52      0.52
0/2        NC57-36H6D-S         1.0   SATA-Micron          CURRENT     1.00      1.00
0/3        NC55-36X100G-A-SE    1.0   MIFPGA               CURRENT     0.03      0.03
0/3        NC55-36X100G-A-SE    1.0   Bootloader           CURRENT     0.15      0.15
0/3        NC55-36X100G-A-SE    1.0   DBFPGA               CURRENT     0.14      0.14
0/3        NC55-36X100G-A-SE    1.0   IOFPGA               CURRENT     0.26      0.26
0/3        NC55-36X100G-A-SE    1.0   SATA-M600-MCT        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-Micron          CURRENT     1.00      1.00
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-Micron          CURRENT     1.00      1.00
0/FC0      NC55-5504-FC2        0.3   Bootloader           CURRENT     1.13      1.13
0/FC0      NC55-5504-FC2        0.3   IOFPGA               CURRENT     0.49      0.49
0/FC0      NC55-5504-FC2        0.3   SATA-INTEL_240G      CURRENT  1132.00   1132.00
0/FC1      NC55-5504-FC2        0.3   Bootloader           CURRENT     1.13      1.13
0/FC1      NC55-5504-FC2        0.3   IOFPGA               CURRENT     0.49      0.49
0/FC1      NC55-5504-FC2        0.3   SATA-INTEL_240G      CURRENT  1132.00   1132.00
0/FC2      NC55-5504-FC2        0.3   Bootloader           CURRENT     1.13      1.13
0/FC2      NC55-5504-FC2        0.3   IOFPGA               CURRENT     0.49      0.49
0/FC2      NC55-5504-FC2        0.3   SATA-INTEL_240G      CURRENT  1132.00   1132.00
0/FC3      NC55-5504-FC2        1.0   Bootloader           CURRENT     1.13      1.13
0/FC3      NC55-5504-FC2        1.0   IOFPGA               CURRENT     0.49      0.49
0/FC3      NC55-5504-FC2        1.0   SATA-Micron          CURRENT     1.00      1.00
0/FC4      NC55-5504-FC2        0.3   Bootloader           CURRENT     1.13      1.13
0/FC4      NC55-5504-FC2        0.3   IOFPGA               CURRENT     0.49      0.49
0/FC4      NC55-5504-FC2        0.3   SATA-INTEL_240G      CURRENT  1132.00   1132.00
0/FC5      NC55-5504-FC2        0.3   Bootloader           CURRENT     1.13      1.13
0/FC5      NC55-5504-FC2        0.3   IOFPGA               CURRENT     0.49      0.49
0/FC5      NC55-5504-FC2        0.3   SATA-INTEL_240G      CURRENT  1132.00   1132.00
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 5: Compatibility Matrix***

| Cisco IOS XR | Crosswork | EPNM |
|---|---|---|
| Release 24.4.2 | Crosswork Optimization Engine 6.0 | Evolved Programmable Network Manager 7.1.1 |

# Important Notes

- 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).

Before starting the software upgrade, use the **show install health** command in the admin mode. This command validates if the statuses of all relevant parameters of the system are ready for the software upgrade without interrupting the system.

**Note**

- If you use a TAR package to upgrade from a Cisco IOS XR release prior to 7.x, the output of the **show install health** command in admin mode displays the following error messages:

```
sysadmin-vm:0_RSP0# show install health
. . .
ERROR /install_repo/gl/xr -rw-r--r--. 1 8413 floppy 3230320 Mar 14 05:45 <platform>-isis-2.2.0.0-r702.x86_64
ERROR /install_repo/gl/xr -rwxr-x---. 1 8413 165 1485781 Mar 14 06:02 <platform>-k9sec-3.1.0.0-r702.x86_64
ERROR /install_repo/gl/xr -rw-r--r--. 1 8413 floppy 345144 Mar 14 05:45 <platform>-li-1.0.0.0-r702.x86_64
```

You can ignore these messages and proceed with the installation operation.

- Quad configurations will be lost when you perform a software downgrade on a NCS-55A1-48Q6H device from IOS XR Release 7.5.1 onwards to a release prior to IOS XR Release 7.5.1 due to non-backward compatibility change. The lost configuration can be applied manually after the downgrade.

**Note** A quad is a group of four ports with common speeds, 1G/10G or 25G. You can configure the ports speed for a qua the **hw-module quad** command.

## 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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