

Troubleshoot "QSFP28 not detected in inventory" - NCS1004 Software Release 711 and 721

Contents

[Introduction](#)

[Problem](#)

[Isolation of the Issue](#)

[Solution](#)

Introduction

This document describes how to identify inventory discrepancies of optics in NCS1004 and offers a solution to address the issue.

Problem

Several ports do not appear in the `show inventory` command output. This issue affects both Cisco and non-Cisco optics and has been observed on various line cards and devices.

Isolation of the Issue

If you use the command `show inventory location 0/*`, you do not see the information for this optics.

But, if you use the command `show controllers optics location R/S/I/P` - you see information for optics like PID, Serial number, Name, and more as shown in the image.

```
RP/0/RP0/CPU0: [redacted] #show inventory location 0/0
Mon Mar  6 00:40:57.095 UTC
NAME: "0/0", DESCR: "NCS1K4 12x QSFP28 2 Trunk C-Band DWDM card"
PID: NCS1K4-1.2T-K9      , VID: V01, SN: CAT2311B1GX

NAME: "0/0-Optics0/0/0/2", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S    , VID: V02, SN: FNS23130783

NAME: "0/0-Optics0/0/0/5", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S    , VID: V02, SN: FNS231305VA

NAME: "0/0-Optics0/0/0/7", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S    , VID: V02, SN: FNS24270LEN

NAME: "0/0-Optics0/0/0/8", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S    , VID: V02, SN: FNS23130SUZ

NAME: "0/0-Optics0/0/0/9", DESCR: "Cisco 100G QSFP28 LR4-S Pluggable Optics Module"
PID: QSFP-100G-LR4-S    , VID: V02, SN: FNS23130788
```

Update for the location 0/0/0/3 is not seen.

RP/0/RP0/CPU0: [REDACTED] show controllers optics 0/0/0/3



Controller State: Up

Transport Admin State: In Service

Laser State: On

LED State: Green

Parameter	High Alarm	Low Alarm	High Warning	Low Warning
Rx Power Threshold(dBm)	12.0	-12.0	0.0	0.0
Tx Power Threshold(dBm)	12.0	-10.1	0.0	0.0
LBC Threshold(mA)	N/A	N/A	0.00	0.00

LBC High Threshold = 98 %
Polarization parameters not supported by optics

Total TX Power = 8.26 dBm

Total RX Power = 1.42 dBm

Lane	Laser Bias	TX Power	RX Power	Output Frequency
1	70.8 %	2.24 dBm	-4.59 dBm	231.39 THz
2	71.3 %	2.36 dBm	-4.51 dBm	230.59 THz
3	71.6 %	2.05 dBm	-4.69 dBm	229.79 THz
4	70.7 %	2.28 dBm	-4.58 dBm	230.25 THz

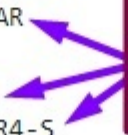
Transceiver Vendor Details

```

Form Factor      : QSFP28
Name             : CISCO-FINISAR
Part Number      : 10-3146-02
Rev Number       : A
Serial Number    : FNS23130787
PID              : QSFP-100G-LR4-S
VID              : V02
Date Code(yy/mm/dd) : 19/03/24
Fiber Connector Type: LC
Otn Application Code: Not Set
Sonet Application Code: Not Set

```

The details are shown here



Details of the optics are displayed.

Solution

Workaround is to perform issue a warm reload from the admin with the command `hw-module location 0/0 reload warm`. Software Defect: Cisco bug ID [CSCvww73152](#)NCS1004 QSFP28 are not detected in inventory.

Found version: 7.1.1 and 7.2.1

Resolved: 731