SDK 6.5.24

Release Notes

SDK-6.5.24Release Notes

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Section 1: About This Document

This document contains the release notes for DNX devices affected by the Broadcom network switching Software Development Kit (SDK) release 6.5.24.

The document provides a general description of the SDK and its new features. It also describes the DNX chips supported by the release, BCM API additions or changes, resolved issues, and any relevant open issues.

Only new features are described in this document. For a comprehensive review of the DNX SDK features and issues, refer to earlier release notes for SDK 6.5.x.

For the full resolved list (Both Bugs and Improvement), please reference the file SDK-6.5.24-Resolved-Issues-Improvements.xlsx in the RELDOCS directory in the release package.

Section 2: Devices supported in this release

For any given SDK release, support for certain devices may be provided in preview or supported status. Devices in "Supported DNX Switch Devices" have completed the full QA process and are intended for use in production systems. It is expected that customers would integrate the version of the SDK which provides "Supported" status for their use on actual development or production systems.

Devices in "Preview DNX Switch Devices" are provided to allow early integration of the customer's application with the SDK APIs that support that device. This software has not been fully tested on the physical target device and is not expected to fully function.

Section 2.1: Supported DNX Switch Devices

Family Devices	Description
BCM8828X	Q2U - GA quality
BCM8880X/BCM8882X	J2C - GA quality
BCM8848X	Q2A - GA quality
BCM8869X	J2 - GA quality
BCM8879X	Ramon - GA quality
BCM8868X	J+ - GA quality
BCM8837X/BCM8867X	JR - GA quality
BCM8827X	QUX - GA quality
BCM8847X	QAX - GA quality

Section 3: Information per Device

This release is an incremental version for DPP, DNX, DNXF, DFE family devices. The subsequent sections describe the increment in available features compared to 6.5.23, backward-compatible notes, major bug-fixes and known issues.

It is very important to carefully go over the release-notes prior to adapting a new release.

The following sections describe the features validated for this release, known issues and bring-up guidelines.

Section 3.1: DNX-Family

This section includes the following family devices:

- BCM8869X-Family (Jericho2)
- BCM8880X/BCM8882X-Family (Jericho2C)
- BCM8848X-Family (Qumran2A)
- BCM8828X-Family (Qumran2U)

Section 3.1.1: Important Notes

Before integrating the new release, review this section thoroughly.

Section 3.1.1.1: Backward Compatible Important Notes

SW Compatibility Guidelines to 6.5.24

Please go over the list carefully.

Note: This document is written with the assumption that upgrade is done from 6.5.23. In case upgrade is done from older releases, users must first go over previous release notes.

JIRA	Module	Release-note	Affected Devices
SDK-270428	QOS	In "pp vis cos" output, ingress QOS layer is changed from QOS profile layer to the QOS input layer, in some case, they are different, example L2 use L3 mapping.	88480_B0, 88690_B0, 88800_A0
SDK-262077	PMF	TCAM bank allocation can be now per core. The abilty to decide specific core or core_all a new parameter was added to the structure of bank info core_ids. In order to keep backward compatibility, an init function, which is called bcm_field_tcam_bank_info_t_init(), should be called before adding/evacuating a bank ID. Customers that didn't call the init function before, will get different behavior than expected (for example allocation only on core0 and not on both cores).	88480_B0, 88690_B0, 88800_A0

Section 3.1.2: SDK build & load

Compile and set config files:

setenv SDK 'pwd'

Example of Intel GTS CPU compilation:

Copy pre compiled mdb and kaps libraries into the relevant build folder.

For Intel GTS CPU 64b build flavor, Following are the relevant 2 libraries and the

relevant build folder (names in build folder must be libkaps.a & libmdb.a):

mkdir -p \$SDK/build/unix-user/x86-64-fc28/

cp $SDK/libs/bin/dnx/GTS_64B_libkaps.a$ SDK/build/unix-user/x86-64-fc28/libkaps.a cp $SDK/libs/bin/dnx/GTS_64B_libmdb.a$ SDK/build/unix-user/x86-64-fc28/libmdb.a

Additional mdb and kaps libraries flavors can be found under \$SDK/libs/bin/.

Compile SDK

cd \$SDK/systems/linux/user/x86-64-fc28/

make -j 5 MAKE_LOCAL=\$SDK/make/local/dnx/Make.custom.gts

Common config files:

In -fs \$SDK/rc/rc.soc

In -fs \$SDK/rc/dnx.soc

In -fs \$SDK/rc/config-jer2pemla.bcm

In -fs \$SDK/tools/sand/db

In -fs \$SDK/rc/dnx sku

In -fs \$SDK/rc/dnx dram

In -sf \$SDK/rc/cmicfw/linkscan_led_fw.bin

In -sf \$SDK/rc/cmicfw/custom_led.bin

BCM8869X specific links:

In -fs \$SDK/rc/config-jr2.bcm config.bcm

In -fs \$SDK/rc/bcm88690 revB board.bcm

In -sf \$SDK/rc/bcm88690 board.bcm

In -sf \$SDK/rc/bcm88690_legacy_interop_board.bcm

BCM8880X/BCM8882X specific links:

In -fs \$SDK/rc/config-j2c.bcm config.bcm

In -sf \$SDK/rc/bcm88800 board.bcm

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BCM8848X/BCM8828X specific links:

In -fs \$SDK/rc/config-q2a.bcm config.bcm In -fs \$SDK/rc/bcm88480_board.bcm

Run:

./bcm.user

Section 3.2: DNXF-Family (BCM88790-Family)

Section 3.2.1: Important Notes

Before integrating the new release, review this section thoroughly. None

Section 3.2.1.1: Backward Compatible Important Notes

SW Compatibility Guidelines 6.5.23 to 6.5.24

Please go over the list carefully.

Note: This document is written with the assumption that upgrade is done from 6.5.23 to 6.5.24. In case upgrade is done from older releases, users must first go over previous release notes.

None

Section 3.3: DPP-Family - BCM88670/680/470/270 Family GA Release

This release is for:

- BCM88670 (Jericho) family product lines.
- BCM88270 (QUX) family product line
- BCM88470 (QAX) family product line
- BCM88680 (Jericho+) family product line

The subsequent sections describe the increment in available features compared to 6.5.23, major bug-fixes and known issues. Before integrating the new release, review the "Backward compatible important notes" section.

Section 3.3.1: Important Notes

Before integrating the new release, review this section thoroughly.

None

Section 3.3.2: Backward Compatible Important Notes

SW Compatibility Guidelines 6.5.23 to 6.5.24

Note: This document is written with the assumption that upgrade is done from 6.5.23. In case upgrade is done from earlier releases to 6.5.23, it must first go over previous SDK release notes.

None

Section 3.4: DFE-Family - BCM88770 (FE3600) Release

The Broadcom BCM88770 (formerly named BCM88950) is the fourth generation in the DNX product line of Fabric Element (FE) devices.

This is a sustaining release.