

KBP SDK 1.4.10
ARAD/Jericho ADDENDUM

Revision History

Revision	Date	Change Description
KBP-SDK-1.4.10	01/15/17	BCM15K related enhancements and bug fixes
KBP-SDK-1.4.9	10/26/16	Bug fix in SDK packaging. Serdes IP function renaming
KBP-SDK-1.4.8	09/30/16	Jericho + BCM15K support. Aging and Hit Bit support for Jericho+ validated on silicon
KBP-SDK-1.4.7	07/29/16	Jericho+ Internal forwarding support. Jericho + BCM15K support. Preliminary aging and Hit Bit support for Jericho+
KBP-SDK-1.4.6	06/12/16	Jericho+ Internal forwarding support. Jericho + BCM15K support
KBP-SDK-1.4.5	05/01/16	No ARAD/Jericho specific change
KBP-SDK-1.4.4	03/09/16	2M IPv4 forwarding scale and 512K to 1M IPv6 scale support for NLA8865x.
KBP-SDK-1.4.3	01/11/16	NLA8865x verified against Jericho silicon
KBP-SDK-1.4.2	07/27/15	No ARAD/Jericho specific changes
KBP-SDK-1.4.1	03/16/15	Jericho-KAPS support
KBP-SDK-1.4.0	12/19/14	Same as in KBP SDK 1.3.3

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Compatibility with Jericho SDK

- This version of the SDK is compatible with Jericho SDK 6.5.7~~7~~ or newer

DNX SDK 6.5.x is only compatible with 1.4 series of the KBP SDK. The DNX SDK 6.4 series is compatible with both 1.3 and 1.4 series of the KBP SDK.

Please Note: Starting with KBP SDK 1.4.9 the header file device_kaps.h has been removed. There are dependencies in DNX SDK which need to be removed manually when using this version of KBP SDK.

This release also resolves compatibility issue with DNX SDK 6.5.6 and beyond which has serdes IP function name clashes which results in segmentation fault when running with Optimus Prime.

There are no Jericho/BCM15K specific issues fixed in this release. Refer to the generic release notes for details on changes.

Description:

KBP SDK 1.4.8 introduces support for Aging and Hit Bits in Jericho+. This feature has been validated on silicon. It additionally contains all the fixes incorporated for Jericho internal forwarding solution as of KBP SDK 1.3.13 and 1.4.7. This version of the SDK has been verified with two NLA8865x KBPs connected externally to Jericho and BCM15K connected to Jericho, Qumran and Jericho+. A number of feature enhancements for Jericho + NL8865x are available in this release.

The following bugs have also been resolved in this release

- [KBPSDK-2010] Adding 4096 routes to KAPS crash system
- [KBPSDK-2023] Enabling enhanced_fib_scale_prefix_length_ipv6 feature is causing a crash in the KAPS code

Packaging:

The Arad/Jericho SDK package combines all the components of the SDK combined into a single library as expected by the ARAD/Jericho SDK. Please refer to the README.txt packaged in the distributions for additional information.

ARAD + NLA8865x:

The following KBP SDK property has been introduced since KBP SDK 1.3.3 to restrict the issuing of block clears to kbp_device_lock() function. This prevents the block clear operations from interfering with data path traffic in most cases

```
kbp_device_set_property(device, KBP_DEVICE_PRE_CLEAR_ABS, 1);
```

The use of the property requires equivalent patch to be available in ARAD SDK. Please consult ARAD SDK for additional information.

Flow control should be enabled on ARAD NPU. Not enabling it can result in FIFO overflow on KBP side and result in an unrecoverable fatal error. Flow control is always enabled on the KBP. Please consult the ARAD SDK for additional information.

Jericho/Jericho+ Internal Forwarding Engine:

This version of the KBP SDK fully supports the internal forwarding lookup engine in Jericho and Jericho+. All features have been fully tested on Silicon

Jericho + NLA8865x:

Jericho + NLA8865x connectivity has been fully validated. Please ensure all patches to the Jericho SDK pertaining to the KBP have been applied.

Jericho + BCM15K:

Jericho/Qumran and Jericho+ connectivity has been fully validated. Please ensure all patches to Jericho SDK pertaining to BCM15K have been applied.