

Software Development Kit  
Release Notes  
SDK 5.6.6

December 4, 2009

***Broadcom***  
***Network Switching***

## **Section 1: About This Document**

These are the Release Notes for the Broadcom Network Switching Software Development Kit, Release 5.6.6.

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

## Section 2: Product Documentation

The following documents are available through Broadcom's Customer Support Portal, <http://support.broadcom.com>. They are the primary source of information and should be referenced when using this release:

*Table 1: Product Documentation*

<i>Document</i>	<i>Description</i>
56XX-PG620-R	BCM and BCMX API Reference Guide. This manual describes the theory of operations of the API and all existing BCM and BCMX APIs for this release.
56XX-PG705-R	Stacking Software Guide This guide describes how to use the discovery and stacking applications provided in this release.
56XX-PG810-R	Platform Guide This guide describes the SDK source and Makefile structure, abstraction and porting layers, device specific interactions, and the platform/operating system specific features of the SDK. If this is your first time working with the SDK, start with this document.

## **Section 3: Release Media**

The Software Development Kit is released as a gzipped tar file on the Broadcom Customer Support Portal, <http://support.broadcom.com>. The Network Switching Software Platform Guide, also available on the Customer Support Portal, provides documentation on the various components, the source directory layout, how to build the release for various platforms, and how to customize and port the software to new platforms.

## Section 4: Support

Questions, feedback, and/or suggestions should be sent to your Broadcom FAE.

## Section 5: New in this Release

This section describes feature and device support that is introduced in this release.

### **SPECIAL ATTENTION REQUIRED**

This section lists items that require special attention.

### BCM API SUPPORT MATRIX

Please see the file `SDK-5.6.6-Support-Matrix.xls` in the `sdk/RELDPCS` directory for the documentation describing which BCM API objects are supported on each family of devices.

## LINUX KERNEL MODE SUPPORT FOR XGS CORE DEVICES

- In general, compiling and running the driver in linux kernel mode is NOT supported for XGS Core devices (also known as XCore or SBX) except for BCM88230/BCM88235 and BCM88130 in this release.
- For BCM88230 and BCM88130, Linux kernel mode is supported, but only for the following combination of loadable modules:

```
[linux-kernel-bde.ko linux-uk-proxy.ko linux-bcm-diag-full.ko]
```

- The following combinations may result in unresolved symbols and are still a work in progress, unsupported in this release for XGS Core devices:

```
[linux-kernel-bde.ko linux-bcm-core.ko]
[linux-kernel-bde.ko linux-bcm-core.ko linux-bcm-net.ko]
[linux-kernel-bde.ko linux-bcm-core.ko linux-uk-proxy.ko linux-bcm-
diag.ko]
```

## NEW DEVICES AND SYSTEMS

For any given SDK release(see the following tables), support for certain devices may be provided in Preview or Supported status. Devices in preview status are provided to allow early integration of the customer's application with the SDK APIs that support that device. This software has not been tested on the physical target device and should not be expected to fully function.

Devices in supported status have completed the full QA process and are intended for use in production systems. It is expected that customers integrate the version of the SDK that provides supported status for their use on actual development or production systems.

*Table 2: Supported Switch Devices*

<i>Family</i>	<i>Devices</i>	<i>Description</i>
BCM53280	BCM53282 A0	8-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch
	BCM53283 A0	16-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch
BCM56530	BCM56534 B0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56538 B0	48-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
BCM56685	BCM56685 B0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56689 B0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports

*Table 3: Preview Switch Devices*

<i>Family</i>	<i>Devices</i>	<i>Description</i>
BCM56320	BCM56320 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56321 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56323 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
BCM56330	BCM56333 A0	16-Port GbE Multilayer Switch
	BCM56338 A0	8-Port GbE Multilayer Switch with two 10-GbE/HiGig2 Uplink Ports
BCM56520	BCM56520 B0	24-Port GbE Multilayer Switch
	BCM56522 B0	24-Port GbE Multilayer Switch with Two 10-GbE/HiGig2 Uplink Ports





*Table 3: Preview Switch Devices*

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56526 B0	28-Port GbE Multilayer Switch with Six 10-GbE/HiGig2 Uplink Ports
BCM56630	BCM56630 B0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56636 B0	24-Port GbE + 2-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56638 B0	4-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56639 B0	24-Port GbE + 4-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports

*Table 4: PHYs*

<i>Device</i>	<i>Driver Family</i>	<i>Description</i>	<i>Support Status</i>
BCM54640	54640	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface	Preview
BCM54640E_A0	54640	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface	Preview
BCM54680E_A0	54680	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver	Preview
BCM54682E_A0	54682	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with 2 Copper/Fiber Media Interface	Preview
BCM54685E_A0	54682	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with Copper/Fiber Media Interface	Preview
BCM54880E_A0	54680	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver	Preview
BCM8742	8706	Quad-Channel 10-GbE SFI-to-XAUI(TM) Transceiver	Preview

*Table 5: Reference Designs*

<i>Name</i>	<i>Support Status</i>	<i>Description</i>
BCM956534K24TS	Supported	24xGE + 4 x XAUI/HG (iPass) with BCM56534 switch
BCM956538K49S	Supported	48-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports SVK

*Table 6: CPU and Operating System Combinations*

<i>CPU Subsystem</i>	<i>Operating System</i>	<i>Description</i>
BCM5300X B0	VxWorks 6.6	BSP Provided
BCM5300X B0	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM5300X B0	Linux 2.6.27	Supported with WindRiver Linux 3.0



### SUMMARY OF BCM AND BCMX API CHANGES

This section summarizes BCM and BCMX API changes in this release. Complete documentation is available in the Network Switching Software Programmer's Guide 56XX-PG620-R. (See section 2 earlier in this document for availability).

Unless otherwise mentioned, any newly defined or changed BCM API will have equivalent changes in the BCMX APIs.

### FABRIC

A new global flag `BCM_FABRIC_PACKET_ADJUST_GLOBAL` has been added in this release. It is used to indicate that the global adjust value (can be combined with ingress and egress as appropriate to the device) is to be accessed, rather than one of the indexed adjust values.

```
#define BCM_FABRIC_PACKET_ADJUST_GLOBAL    0x10000000
```

## PORT CONFIGURATION

In order to permit specifying the port class based on port ingress end, the `bcmPortClassIngress` has been added to `bcm_port_class_t` enumeration in addition to the Field Processor stages.

The new class type is enumerated as `bcm_port_class_t`:

*Table 7: bcm\_port\_class\_t*

<i>Class Type</i>	<i>Description</i>
<code>bcmPortClassIngress</code>	Class for ingress basis grouping

## MULTI-DEVICE STACK CONTROL

A new module protocol has been added in `bcm_module_protocol_t` enumeration to support QE40 protocol with 3.125G.

The new module protocol is enumerated as `bcm_module_protocol_t`:

*Table 8: bcm\_module\_protocol\_t*

<i>Protocol Type</i>	<i>Description</i>
<code>bcmModuleProtocol5</code>	QE40 protocol with 3.125G

## SWITCH CONTROL

A new switch control type `bcmSwitchL2SourceDiscardMoveToCpu` has been added in `bcm_switch_control_t` enumeration trap the packet with SRC MAC discard configuration to CPU.

The new switch control type is enumerated as `bcm_switch_control_t`:

*Table 9: bcm\_switch\_control\_t*

<i>Switch Type</i>	<i>Description</i>
<code>bcmSwitchL2SourceDiscardMoveToCpu</code>	SRC MAC discard configuration to CPU

## SOC PROPERTIES

The following SOC properties have been added.

*Table 10: SOC Properties*

<i>Define</i>	<i>Property</i>	<i>Type</i>	<i>Default</i>	<i>Description</i>
spn_BCM56538_4 8G_4X12	bcm56538_48g_4 x12	Chip TDM mode	0	48 GE ports and 4 12G HG ports
spn_BCM56538_4 8G_2X24	bcm56538_48g_2 x24	Chip TDM mode	0	48 GE ports and 2 24G HG ports
spn_BCM56534_2 X12_2X24	bcm56534_2x12_ 2x24	Chip TDM mode	0	24 GE ports, 2 12G HG ports and 2 24G HG ports
spn_AUTO_ENABL E_MAC_LOW_POWE R	auto_enable_ma c_low_power			

## Section 6: Resolved Issues

The following issues are resolved in this release of the SDK.

Table 11:

Number	Release Note
28687	Support the configuration for the EgressVidRemark table of BCM53115 with vlan translation egress action APIs.
34921	On BCM5651X, BCM5662x, BCM5663X qualifying the LLC field using VFP (stageLookup) using <code>bcm_field_qualify_Llc</code> API would result in incorrect match. <code>bcm_field_qualify_Llc_get</code> would return incorrect data value.
36272	Added missing <code>bcm_custom_stat_trigger_t</code> selectors for BCM5621x/22x devices:RX selectors <code>bcmDbgCntHGHDRE</code> and <code>bcmDbgCntMCIDXE</code> .RX selector <code>bcmDbgCntMACSAEQUALMACDA</code> (BCM5622x only)TX selector <code>bcmDbgCntTSIPL</code>
36273	Advised correct speeds when changing from XE port to HigiG port on BCM56800 platform
36315	Egress shaping on the QE2000 cannot exceed 262 kbits/sec. Added check for this rate. If exceeded, user is warned and shape rate fixed at 262k. Additionally, if traffic is flowing, the shaper must be disabled during any change in shape rate.
36379	Fixed L4 tunnel termination for IPv6 on BCM5663x, BCM5652x and BCM5668x devices.
36425	Fixed SrcMplsGport qualifier for BCM5663x and BCM5662x devices.
36623	Fixed the missing support of <code>bcm_port_class_get()</code> with the case <code>bcmPortClassFieldEgress</code> on BCM5633X devices.
36698	Added update of min and max modid in case of GPORT provided in <code>_bcm_esw_port_modid_egress_resolve</code> routine
36724	Implemented support for calls on remote units for <code>bcm_oam_event_register()</code> and <code>bcm_oam_event_unregister()</code> .
36727	Fixed unknown symbols error when loading <code>linux-kernel-bde.ko</code> <code>linux-bcm-core.ko</code> .
36761	Fixed the block bitmap handling in the CLI implementation of the <code>bcm_l2_addr_add</code> API.
36762	Fixed the detection of the parity error interrupt for the <code>FP_POLICY_TABLE</code> in BCM5622x and BCM5602x devices.
36847	On BCM8802x devices, adjust software CMU driver loop to prevent a false positive timeout on vxWorks.
36848	Fixed init oversight that prevented full ingress length adjust support on BCM88230 devices. Added egress length adjust support. Added <code>FABRIC_PACKET_ADJUST_GLOBAL</code> in order to emulate "global" length adjust support. Added new SOC parameter <code>QE_EGR_SHAPING_ADJUST</code> to control per-higig (or all-higig) egress shaping adjustment(s).
36858	Fixed unconditional prints in QE2000 scoreboard initialization
36889	Counter display for Non-DMA counters with long names overflows a buffer and can crash the system on XGS based devices.
36913	Fixed <code>bcm_field_data_qualifier_packet_format_add</code> API on BCM56820 family devices
36942	Fixed <code>bcm_l3_egress_multipath_find</code> API functionality.
37018	Correctly unlock the Field Control structures during error conditions in the <code>bcm_field_entry_multi_get()</code> API
37059	When BCM88230 devices were connected to BCM88130 and configured for FIC mode, bandwidth was not distributed properly among queues on the same BCM88230 that were configured to go to the same destination port under some specific circumstances of WFQ configuration and each queue received an equal part of the port bandwidth instead of the configured WFQ distribution. This issue has been addressed.
37131	The BM9600 and QE2000 <code>bcm_port_link_status_get()</code> function has been updated to read the 'sticky' state registers for link status of sfi/sci links rather than the instantaneous state registers. This was to catch all error events. Additionally, the <code>link_threshold_soc</code> property for error rate monitoring has been updated so that an error tolerance can be configured in the BM9600/QE2000 devices.
38092	Added input verification code for default vlan profile action
38889	Set correct interface mode for port running 2.5Gbps IEEE mode on BCM56800.
38892	Verify port parameters are valid in <code>bcm_mirror_*</code> APIs.
38954	For <code>bcm_mirror_*</code> APIs, use <code>BCM_E_RESOURCE</code> consistently when the mirror slots are exhausted.





Table 11:

Number	Release Note
39024	Additional frequency support has been added to BCM88025 and can be selected with the following <code>soc_properties: bcm88025_hpp_freq=262500</code> (selects HPP frequency 262.5 MHz) <code>bcm88025_sws_freq=275000</code> (selects SWS frequency 275 MHz)
39108	Prevent input parameters from modification by trunk set API on ROBO chips.
39659	Added protection against uninitialized data being written to <code>VLAN_PROTOCOL</code> in <code>bcm_protocol_port_action_add</code> API.
39666	Fixed an assertion while qualifying on outer VLAN on the external FP.
39724	<code>bcmx_l3_info()</code> was returning L3 information on first switch device rather than common denominator for all switch devices.
39727	<code>bcmx_trunk_chip_info_get()</code> was returning information from first switch device rather than common denominator for all switch devices.
39993	Fixed BCMX handling of devport for remote units.
39994	Ingress shapers did not work properly on BCM88230 devices when the device was configured to run in Hybrid mode.
40149	Added support for serdes 3.125G speed & 8b10b encoding with 533/667MHz ddr for BCM88230
40191	Added stacking support for BCM956636K25S. Use config <code>sdk_xgs3_25g6x=1</code> to enable.
40203	Fixed <code>bcm_field_trx_mirror_ingress_add()</code> API functionality on BCM56130/BCM56320/BCM56330 family devices.
40231	Fixed uRPF index allocation, specific to BCM56524 device family.
40249	Cleaned up diagnostic output that could produce unnecessary messages when writing into some tables on QE-2000 device.
40256	Fixed boundary condition error associated with <code>bcm_tunnel_terminator_add</code> API.
40278	BCM88025 DDR tuning algorithm has been updated to prevent selection of invalid phases.
40283	Put MAC in reset state when disabling phy to prevent possible extra packet caused by serdes disabling logic.
40289	Used local variables instead of modifying input parameters in <code>bcm_l2_cache</code> API.
40294	Fixed logical to physical & physical to logical node mapping state on BCM88130 during SOC initialization.
40299	IPMC API documentation was updated with the following note: On StrateXGS III devices, it's possible for multiple IPMC entries to share the same IPMC index. The preferred method is to use <code>bcm_multicast_create</code> to create an IPMC index, then call <code>bcm_ipmc_add</code> with <code>BCM_IPMC_USE_IPMC_INDEX</code> (see Table 116: IPMC Flags) flag set to associate multiple IPMC entries with the same IPMC index. When the IPMC index is shared, the following fields of <code>bcm_ipmc_add</code> parameter <code>bcm_ipmc_addr_t</code> are also shared: <code>v</code> , <code>ts</code> , <code>port_tgid</code> , <code>mod_id</code> , <code>l2_pbmp</code> , <code>l2_ubmp</code> , and <code>l3_pbmp</code> . Updating any of these fields for an IPMC entry will also affect other IPMC entries that share the same IPMC index. In addition, if an IPMC entry is added with <code>BCM_IPMC_ADD_DISABLED</code> (see Table 116: IPMC Flags) flag set, other IPMC entries that share the same IPMC index will also be disabled. For <code>bcm_ipmc_remove</code> , if the <code>BCM_IPMC_KEEP_ENTRY</code> flag is set, the entry is kept in the IPMC table with V bit cleared. If the entry shares its IPMC index with other IPMC entries, setting the <code>BCM_IPMC_KEEP_ENTRY</code> flag will also clear the V bit for other IPMC entries.
40307	Fixed the unexpected change of port configuration for port discard property when the link status is changed from link down to link up on ROBO chips.
40308	Tuned BCM88235 TDM table configuration in order to achieve line rate for 64-byte packets in configurations that use 48GE and 4XE forwarding ports.
40312	Enabled <code>bcm_cosq_gport_size_set()</code> functionality on BCM88230 devices.
40314	3.125G backplane serdes speed was not working on BCM88235 devices. To support 3.125G backplane serdes speed with BCM88230 devices, the user must set the module protocol for the unit to <code>bcmStackModuleProtocol5</code> (qe40 mode with 3.125g) and <code>backplane_serdes_speed=3125</code> .
40316	Performance enhancements were made to support flexible serdes configuration for hybrid mapping on BCM88230 devices, including updating the local burst size depending upon the number of channels used during the <code>bcm_fabric_crossbar_mapping_set()</code> API.
40321	Added virtual port handling for the <code>bcm_vlan_control_port_set/get</code> APIs.
40323	Fixed qualifying on source class IDs for BCM5662x and BCM5663x devices.
40324	Fixed L2 aging programming of external memory to match the behavior of internal memory
40327	Improve the execution time of VLAN APIs with software shadow on ROBO chips.
40338	On XGS Core devices, Diag Shell command "TX" will move the first 16 bytes of the payload into the higid header. To transmit a packet, follow the example below: <code>tx 1 port=3 pay="0xfb000001200000000200000000000000102030405060203040506070800111212131415160102030405060708090a0ba0a1a2a3a4a5a6a7a8a9aaabacadaeafb0b1b2b3b4b5b6b7b8b9babbbcbdbef" len=80</code>



Table 11:

Number	Release Note
40355	Support <code>bcm_port_phy_control_set()</code> and <code>bcm_port_phy_control_get()</code> on ROBO chips.
40356	A misplaced <code>#ifdef</code> compiler directive was causing incorrect packet size computation in <code>bcm_tx</code> API on devices such as BCM_56102/BCM_56112 family that use DCB type 13.
40358	Support the traverse functions of VLAN translation API for ROBO chips.
40360	Removed update MAC learn limit counters by SW in case MAC Learn limit is disabled.
40365	Field actions of "Bypass Filters" for BCM53280 family chips should only be deployed to the chain slice 3 in double-wide mode of chaining slice 0 and slice 3.
40371	E2ECC color/DP field was not set up correctly between BCM88025 and BCM88230, causing this field to not work properly in systems that included a mix of XGS Core and XGS devices.
40373	A phy probing issue on the 10G ports was resolved by disabling linkscan during initialization.
40377	Invalid parameter to <code>bcmPortControlFrameSpacingStretch</code> will return <code>BCM_E_PARAM</code>
40380	Adjusted default <code>min_util</code> settings for all CoS levels to 100% of a timeslot for BCM88230 devices.
40411	Fixed the payload alignment requirement with IP header for packets sent up to VxWorks protocol on BCM5300X CPU. It will improve the execution time in VxWorks protocol stack.
40413	Fix the issue that the updates of Multicast ARL entries can not be set to the SW ARL shadow once the internal ARL thread is restarted.
40427	Fix the issue that multicast index is forced to 0 if <code>bcm_mcast_join()</code> is called prior to the <code>bcm_robo_mcast_addr_add()</code> on BCM53280 family chips.
40466	Fixed the bit positions of <code>R_NEW_DSCP</code> and <code>Y_NEW_DSCP</code> in the <code>EXT_IFP_ACTION_PROFILE</code> table for BCM5662x devices.
40467	Adjust the allocation of software counter table with regard to the physical port count in the variant BCM53282 and BCM53283 bondings of BCM53280 Family.
40469	Add proper error checking for the case that the environment variable "boardtype" passed from CFE bootloader can not be got when initializing the RTC device through I2C interface in BCM5300X VxWorks BSP. Fixed code to handle the situation that CFE environment parameter, "boardtype", cannot be gotten when initialize the RTC device.
40483	Addressed the following for BCM56930 and BCM88230 devices operating in "Sportster" or Inline mode: 1) improved the internal configuration of TS schedulers and hierarchy 2) fixed assert in <code>bcm_cosq_gport_add</code> 3) fixed VOQ boundary to 0 (like in TME mode). 4) fixed a problem with the requeue interfaces that were not exposed in this mode, causing problems for Multicast traffic.
40485	Diagnostic shell command "dump chg" could cause a crash when trying to access the registers <code>FF_FC_MEM_CONFIG</code> , <code>FF_FC_CONFIG</code> or <code>FC_CREDITS</code> of BCM88230 devices.
40486	Updated the algorithm used in <code>bcm_cosq_gport_bandwidth_set()</code> to calculate <code>max_threshold</code> for egress shapers on BCM88230 devices in order to account for the highest possible bandwidth.
40488	Fixed <code>bcm_field_data_qualifier_packet_format_add</code> API on BCM56820 family devices
40567	Fix the issue that field meter was installed to the wrong entry index in double-wide mode on BCM53280 chips.
40581	Fix the link dropped issue after cable diagnostic is performed on those ports with embedded GbE PHY at 10/100 link speed.
40594	Fix the issue that the PHY configuration was changed unexpectedly due to the cable diagnostic is performed on the GbE port at 10/100 link speed.
40602	Add the support of MAC power saving mode for BCM53101.
40658	Enabled CCM timeouts for RMEPs without having to receive a valid CCM first in the OAM module.

## Section 7: Device and Platform Support

The section describes all devices, platforms, and operating systems that are supported by this release.

### SWITCH DEVICES

*Table 12: Switch Devices*

<i>Family</i>	<i>Devices</i>	<i>Description</i>
BCM5324	BCM5324 A0 BCM5324 A1 BCM5324 A2	Single-Chip L2+ Managed Switch with 24 10/100 Ports + 2 GbE Ports
BCM5347	BCM5347 A0 BCM5347 A1	Managed Switch with 24 10/100 Ports + Four GbE Ports
BCM5348	BCM5348 A0 BCM5348 A1	Single-Chip L2+ Managed Switch with 48 10/100 Ports + Four GbE Ports
BCM5389	BCM5389 A0 BCM5389 A1	8-Port GbE Switch with Integrated SerDes
BCM5395	BCM5395 A0	Multiport Gigabit Ethernet Switch
BCM5396	BCM5396 A0	16-Port GbE Switch with Integrated SerDes
BCM5397	BCM5397 A0	6-Port GbE Switch With 5 Integrated PHYs and LoopDTech
BCM5398	BCM5398 A0	9-Port GbE Switch With 8 Integrated PHYs and LoopDTech
BCM53101	BCM53101 A0	5-Port Fast Ethernet Managed Switch + 1 Fast Ethernet WAN port
BCM53115	BCM53115 A0 BCM53115 A1 BCM53115 B0 BCM53115 B1 BCM53115 C0	5-Port GbE Managed Switch + 1 Gigabit WAN port with integrated serdes
BCM53118	BCM53118 A0 BCM53118 B0 BCM53118 B1	8-Port Gigabit Ethernet Switch
BCM53242	BCM53242 A0 BCM53242 B0 BCM53242 B1 BCM53262 A0 BCM53262 B0 BCM53262 B1	Managed Switch with 24 FE Ports + 2 GbE Interface  Managed Switch with 24 FE Ports + 4 GbE Interface
BCM53280	BCM53282 A0 BCM53283 A0 BCM53284 A0 BCM53286 A0 BCM53288 A0	8-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch 16-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch 24-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch 24-Port Fast Ethernet + 4-Port Gigabit Ethernet Multilayer Switch 24-Port Fast Ethernet + 2-Port Gigabit Ethernet Multilayer Switch with one 2.5GbE Uplink Port
BCM53300	BCM53300 A0	Managed 24-port L2 Switch



Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM53300 A1	
	BCM53301 A0	Managed 16-port L2 Switch
	BCM53301 A1	
	BCM53302 A0	Managed 24-port L2 Switch
	BCM53302 A1	
BCM53310	BCM53312 A0	BCM53312 Integrated Multilayer Switch and CPU
	BCM53312 B0	
	BCM53313 A0	BCM53313 Integrated Multilayer Switch and CPU
	BCM53313 B0	
	BCM53314 A0	BCM53314 Integrated Multilayer Switch and CPU
	BCM53314 B0	
BCM53710	BCM53714 A0	BCM56714 Integrated Multilayer Switch and CPU
	BCM53714 A1	
	BCM53714 A2	
	BCM53716 A0	BCM56716 Integrated Multilayer Switch and CPU
	BCM53716 A1	
	BCM53716 A2	
	BCM53718 A0	BCM56718 Integrated Multilayer Switch and CPU
	BCM53718 A1	
	BCM53718 A2	
BCM53720	BCM53724 A0	Managed 24-port L2 Switch with Integrated CPU
	BCM53724 B0	
	BCM53726 A0	Managed 24-port L2 Switch with Integrated CPU
	BCM53726 B0	
BCM5650	BCM5650 A0	24-Port BCM5650 Integrated Multi-Layer Switch
	BCM5650 B0	
	BCM5650 C0	
	BCM5655 A0	48-Port BCM5655 Integrated Multi-Layer Switch
	BCM5655 B0	
BCM5665	BCM5665 A0	48-Port BCM5665 Integrated Multi-Layer Switch
	BCM5665 B0	
BCM5670	BCM5670 A0	BCM5670 8-Port, 160 Gbps Switch Fabric
	BCM5670 A1	
	BCM5671 A0	BCM5671 4-Port, 80-Gbps Switch Fabric
	BCM5671 A1	
	BCM5671 A2	
BCM5673	BCM5673 A0	10 Gigabit Ethernet/HiGig Multilayer Switch
	BCM5673 A1	
	BCM5673 A2	
BCM5674	BCM5674 A0	Multilayer 2-Port 10 Gigabit Ethernet and HiGig+ Switch
BCM5675	BCM5675 A0	8-Port, 192-Gbps Switch Fabric

Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM5675 A1	
	BCM5676 A0	4-Port, 96-Gbps Switch Fabric
	BCM5676 A1	
BCM5690	BCM5690 A0	Scalable 12-Port Gigabit Ethernet MultiLayer Switch
	BCM5690 A1	
	BCM5690 A2	
	BCM5691 A0	12-Port Gigabit Ethernet MultiLayer Switch
	BCM5691 A1	
	BCM5691 A2	
	BCM5692 A0	Scalable 12-Port Gigabit Ethernet Layer 2 Switch
	BCM5692 A1	
	BCM5692 A2	
	BCM5693 A0	12-Port Gigabit Ethernet Layer 2 Switch
	BCM5693 A1	
	BCM5693 A2	
BCM5695	BCM5695 A0	MultiLayer 12-Port Gigabit Ethernet Stackable Switch
	BCM5695 A1	
	BCM5695 B0	
	BCM5696 A0	Multilayer 12-Port Gigabit Ethernet Switch
	BCM5696 A1	
	BCM5696 B0	
	BCM5697 A0	12-Port Gigabit Ethernet Stackable Layer 2+ Switch
	BCM5697 A1	
	BCM5697 B0	
	BCM5698 A0	12-Port Gigabit Ethernet Layer 2+ Switch
	BCM5698 A1	
	BCM5698 B0	
BCM56010	BCM56014 A0	24-Port Integrated Multilayer Switch and CPU
	BCM56014 A1	
	BCM56014 A2	
	BCM56018 A0	48-Port Integrated Multilayer Switch and CPU
	BCM56018 A1	
	BCM56018 A2	
BCM56020	BCM56024 A0	24-Port Integrated Multilayer Switch and CPU
	BCM56024 B0	
	BCM56025 A0	24-Port Integrated L2 Switch and CPU
	BCM56025 B0	
	BCM56026 A0	24-Port Integrated L2 Switch and CPU
	BCM56026 B0	
BCM56100	BCM56100 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch
	BCM56100 A1	



Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56101 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch with One 10-Gigabit Ethernet/HiGig Port
	BCM56101 A1	
	BCM56102 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch with Two 10-Gigabit Ethernet/HiGig Ports
	BCM56102 A1	
	BCM56105 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch
	BCM56105 A1	
	BCM56106 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch with One 10-Gigabit Ethernet/HiGig Port
	BCM56106 A1	
	BCM56107 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch with Two 10-Gigabit Ethernet/HiGig Ports
	BCM56107 A1	
BCM56110	BCM56110 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch
	BCM56111 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch with One 10-Gigabit Ethernet/HiGig Port
	BCM56112 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Multilayer Switch with Two 10-Gigabit Ethernet/HiGig Ports
	BCM56115 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch
	BCM56116 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch with One 10-Gigabit Ethernet/HiGig Port
	BCM56117 A0	24-Port Fast Ethernet and 2-Port Gigabit Ethernet Layer 2 Switch with Two 10-Gigabit Ethernet/HiGig Ports
BCM56130	BCM56132 A0	24-Port Fast Ethernet Multilayer Switch with Two 10-GbE/HiGig2 and Two 1G/2.5Gb Uplink Ports
	BCM56134 A0	24-Port Fast Ethernet Multilayer Switch with four 1G/2.5Gb Uplink Ports
BCM56210	BCM56212 A0	
	BCM56212 A1	
	BCM56212 A2	
	BCM56213 A0	
	BCM56213 A1	
	BCM56213 A2	
	BCM56214 A0	BCM56214 Integrated Multilayer Switch and CPU
	BCM56214 A1	
	BCM56214 A2	
	BCM56215 A0	
	BCM56215 A1	
	BCM56215 A2	
	BCM56216 A0	BCM56216 Integrated Multilayer Switch and CPU
	BCM56216 A1	
	BCM56216 A2	
	BCM56217 A0	
	BCM56217 A1	
	BCM56217 A2	
	BCM56218 A0	BCM56218 Integrated Multilayer Switch and CPU



Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56218 A1	
	BCM56218 A2	
	BCM56219 A0	BCM56219 Integrated Multilayer Switch and CPU
	BCM56219 A1	
	BCM56219 A2	
BCM56220	BCM56224 A0	24 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56224 B0	24 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56225 A0	24 GbE + 4 x 1 Gb/2.5 Gb, L2+
	BCM56225 B0	24 GbE + 4 x 1 Gb/2.5 Gb, L2+
	BCM56226 A0	16 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56226 B0	16 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56227 A0	16 GbE + 4 x 1 Gb/2.5 Gb, L2+
	BCM56227 B0	16 GbE + 4 x 1 Gb/2.5 Gb, L2+
	BCM56228 A0	8 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56228 B0	8 GbE + 4 x 1 Gb/2.5 Gb, L3/L2+
	BCM56229 A0	8 GbE + 4 x 1 Gb/2.5 Gb, L2+
	BCM56229 B0	8 GbE + 4 x 1 Gb/2.5 Gb, L2+
BCM56300	BCM56300 A0	24-Port Gigabit Ethernet Multilayer Switch
	BCM56300 A1	
	BCM56300 B0	
	BCM56300 B1	
	BCM56301 A0	Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56301 A1	
	BCM56301 B0	
	BCM56301 B1	
	BCM56302 A0	24-Port Gigabit Ethernet Multilayer Switch with Two 10-Gigabit Ethernet/HiGig+ Ports
	BCM56302 A1	
	BCM56302 B0	
	BCM56302 B1	
	BCM56303 A0	24-Port Gigabit Ethernet Multilayer Switch with Three 10 Gigabit Ethernet/HiGig+ Ports
	BCM56303 A1	
	BCM56303 B0	
	BCM56303 B1	
	BCM56304 A0	24-Port Gigabit Ethernet Multilayer Switch with Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56304 A1	
	BCM56304 B0	
	BCM56304 B1	
	BCM56305 A0	24-Port Gigabit Ethernet Multilayer Switch
	BCM56305 A1	
	BCM56305 B0	
	BCM56305 B1	

Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56306 A0	16 Port Gigabit Ethernet Switch
	BCM56306 A1	
	BCM56306 B0	
	BCM56306 B1	
	BCM56307 A0	24-Port GE L2 Switch with Two 10 GE/HiGig+ Ports
	BCM56307 A1	
	BCM56307 B0	
	BCM56307 B1	
	BCM56308 A0	24-Port GE L2 Switch with Three 10 GE/HiGig+ Ports
	BCM56308 A1	
	BCM56308 B0	
	BCM56308 B1	
	BCM56309 A0	24-Port GE L2 Switch with Four 10 GE/HiGig+ Ports
	BCM56309 A1	
	BCM56309 B0	
	BCM56309 B1	
BCM56310	BCM56310 A0	BCM56310 Series 24-Port GbE Multilayer Switch with Four 10-GbE/HiGig+ Uplink Ports
	BCM56311 A0	Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56312 A0	24-Port Gigabit Ethernet Multilayer Switch with Two 10-Gigabit Ethernet/HiGig+ Ports
	BCM56313 A0	24-Port Gigabit Ethernet Multilayer Switch with Three 10-Gigabit Ethernet/HiGig+ Ports
	BCM56314 A0	24-Port Gigabit Ethernet Multilayer Switch with Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56315 A0	BCM56310 Series 24-Port GbE Layer 2 Switch with Four 10-GbE/HiGig+ Uplink Ports
	BCM56316 A0	Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56317 A0	24-Port Gigabit Ethernet Layer 2 Switch with Two 10-Gigabit Ethernet/HiGig+ Ports
	BCM56318 A0	24-Port Gigabit Ethernet Layer 2 Switch with Three 10-Gigabit Ethernet/HiGig+ Ports
	BCM56319 A0	24-Port Gigabit Ethernet Layer 2 Switch with Four 10-Gigabit Ethernet/HiGig+ Ports
BCM56320	BCM56320 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56321 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56323 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
BCM56330	BCM56331 A0	24-Port GbE Multilayer Switch with Four 2.5GbE Uplink Ports
	BCM56333 A0	16-Port GbE Multilayer Switch
	BCM56334 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56338 A0	8-Port GbE Multilayer Switch with two 10-GbE/HiGig2 Uplink Ports
BCM56500	BCM56500 A0	24-Port Gigabit Ethernet Multilayer Switch
	BCM56500 A1	
	BCM56500 B0	
	BCM56500 B1	
	BCM56500 B2	
	BCM56501 A0	Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56501 A1	
	BCM56501 B0	





Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56501 B1	
	BCM56501 B2	
	BCM56502 A0	24-Port GbE Multilayer Switch with Two 10-GbE/HiGig+ Ports
	BCM56502 A1	
	BCM56502 B0	
	BCM56502 B1	
	BCM56502 B2	
	BCM56503 A0	24-Port GbE Multilayer Switch with Three 10-GbE/HiGig+ Ports
	BCM56503 A1	
	BCM56503 B0	
	BCM56503 B1	
	BCM56503 B2	
	BCM56504 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig+ Ports
	BCM56504 A1	
	BCM56504 B0	
	BCM56504 B1	
	BCM56504 B2	
	BCM56505 A0	24-Port GbE Layer 2 Switch
	BCM56505 A1	
	BCM56505 B0	
	BCM56505 B1	
	BCM56505 B2	
	BCM56506 A0	Four 10-Gigabit Ethernet/HiGig+ Ports
	BCM56506 A1	
	BCM56506 B0	
	BCM56506 B1	
	BCM56506 B2	
	BCM56507 A0	24-Port GbE Layer 2 Switch with Two 10-GbE/HiGig+ Ports
	BCM56507 A1	
	BCM56507 B0	
	BCM56507 B1	
	BCM56507 B2	
	BCM56508 A0	24-Port GbE Layer 2 Switch with Three 10-GbE/HiGig+ Ports
	BCM56508 A1	
	BCM56508 B0	
	BCM56508 B1	
	BCM56508 B2	
	BCM56509 A0	24-Port GbE Layer 2 Switch with Four 10-GbE/HiGig+ Ports
	BCM56509 A1	
	BCM56509 B0	
	BCM56509 B1	



Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56509 B2	
BCM56510	BCM56510 A0	24-Port Gigabit Ethernet Multilayer Switch
	BCM56511 A0	Four-Port 10-GbE/HiGig+ Multilayer Switch
	BCM56512 A0	24-Port GbE Multilayer Switch With Two 10-GbE/HiGig+ Ports
	BCM56513 A0	24-Port GbE Multilayer Switch With Three 10-GbE/HiGig+ Ports
	BCM56514 A0	24-Port GbE Multilayer Switch With Four 10-GbE/HiGig+ Ports
BCM56520	BCM56520 A0	24-Port GbE Multilayer Switch
	BCM56520 B0	
	BCM56522 A0	24-Port GbE Multilayer Switch with Two 10-GbE/HiGig2 Uplink Ports
	BCM56522 B0	
	BCM56524 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56524 B0	
	BCM56526 A0	28-Port GbE Multilayer Switch with Six 10-GbE/HiGig2 Uplink Ports
	BCM56526 B0	
BCM56530	BCM56534 B0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56538 B0	48-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
BCM56580	BCM56580 A0	16 x 2.5 GbE + 4 x 10 GbE Ethernet Multilayer Switch
BCM56600	BCM56600 A0	12 x GbE High-Feature Ethernet Multilayer Switch
	BCM56600 B0	
	BCM56600 C0	
	BCM56601 A0	12 x GbE High-Feature Ethernet Multilayer Switch With HiGig+ Uplink
	BCM56601 B0	
	BCM56601 C0	
	BCM56602 A0	10-GbE High-Feature Ethernet Multilayer Switch With HiGig+ Uplink
	BCM56602 B0	
	BCM56602 C0	
	BCM56603 A0	HG+ High-Feature Ethernet Multilayer Proxy
	BCM56603 B0	
	BCM56603 C0	
	BCM56605 A0	12 x GbE High-Feature Ethernet Multilayer Switch
	BCM56605 B0	
	BCM56605 C0	
	BCM56606 A0	12 x GbE High-Feature Ethernet Multilayer Switch With HiGig+ Uplink
	BCM56606 B0	
	BCM56606 C0	
	BCM56607 A0	10-GbE High-Feature Ethernet Multilayer Switch With HiGig+ Uplink
	BCM56607 B0	
	BCM56607 C0	
	BCM56608 A0	HG+ High-Feature Ethernet Multilayer Proxy
	BCM56608 B0	
	BCM56608 C0	
BCM56620	BCM56620 A0	

Table 12: Switch Devices

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56620 A1	
	BCM56620 B0	
	BCM56620 B1	
	BCM56624 A0	49 port 1-GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports and External Table Expansion
	BCM56624 A1	
	BCM56624 B0	
	BCM56624 B1	
	BCM56624 B2	
	BCM56626 A0	25 port 1-GbE Multilayer Ethernet Switch with 6 x 10-GbE/HiGig2 Uplink ports and External Table Expansion
	BCM56626 A1	
	BCM56626 B0	
	BCM56626 B1	
	BCM56626 B2	
	BCM56628 A0	8 port 10-GbE/HiGig2 Multilayer Ethernet Switch with External Table Expansion
	BCM56628 A1	
	BCM56628 B0	
	BCM56628 B1	
	BCM56628 B2	
	BCM56629 B0	25 port 1-GbE Multilayer Ethernet Switch with 8 x 10-GbE/HiGig2 Uplink ports and External Table Expansion
	BCM56629 B1	
BCM56630	BCM56630 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56630 B0	
	BCM56634 A0	48-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56634 B0	
	BCM56636 A0	24-Port GbE + 2-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56636 B0	
	BCM56638 A0	4-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56638 B0	
	BCM56639 A0	24-Port GbE + 4-Port 10-GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56639 B0	
BCM56680	BCM56680 A0	25 port 1-GbE/2.5GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports
	BCM56680 A1	
	BCM56680 B0	
	BCM56680 B1	
	BCM56684 A0	24 port 1-GbE/2.5GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports
	BCM56684 A1	
	BCM56684 B0	
	BCM56684 B1	
BCM56685	BCM56685 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56685 B0	

**Table 12: Switch Devices**

<i>Family</i>	<i>Devices</i>	<i>Description</i>
	BCM56689 A0	24-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports
	BCM56689 B0	
BCM56700	BCM56700 A0	16-Port, 192-Gbps Lossless Switch Fabric
	BCM56701 A0	12-Port, 144-Gbps Lossless Switch Fabric
BCM56720	BCM56720 A0	16 Port, 16-Gbps HiGig2 Switch Fabric
	BCM56721 A0	12 Port, 16-Gbps HiGig2 Switch Fabric
BCM56725	BCM56725 A0	8 Port, 20-Gbps + 4 Port, 16-Gbps HiGig2 Switch Fabric
BCM56800	BCM56800 A0	20-Port 10-Gigabit Ethernet Multilayer Switch
	BCM56801 A0	10-Port 10-Gigabit Ethernet and 8-Port HiGig2/10GbE Multilayer Switch
	BCM56802 A0	16-Port 10-GbE/HiGig2 Multilayer Switch
	BCM56803 A0	12 Port 10GE/HiGig2 Multilayer Switch
BCM56820	BCM56820 A0	24 x 10-GbE + 4 x 1-GbE Multilayer Ethernet Switch
	BCM56820 B0	
	BCM56821 A0	12 x 10-GbE + 8 x HiGig2 + 4 x 1-GbE Multilayer Ethernet Switch
	BCM56821 B0	
	BCM56822 A0	12 x 10-GbE + 4 x 20-Gbps HiGig2 + 4 x 1-GbE Multilayer Ethernet Switch
	BCM56822 B0	
	BCM56823 A0	8 x 10-GbE + 4 x 20-Gbps HiGig2 + 4 x 1-GbE Multilayer Ethernet Switch
	BCM56823 B0	
	BCM56825 B0	16 x 10-GbE + 8 x 20-Gbps HiGig2 + 1 x 1-GbE Multilayer Ethernet Switch
BCM88020	BCM88020 A0	XGS Core (XCore/SBX) Fully Programmable Carrier Packet Processor with 24 GbE Ports, 2 10GbE Ports and 2 SPI Interfaces
	BCM88020 A1	
	BCM88020 A2	
BCM88025	BCM88025 A0	XGS Core (XCore/SBX) Fully Programmable Carrier Packet Processor with 24 GbE Ports, 2 10GbE Ports and 2 SPI Interfaces
BCM88130	BCM88130 A0	XGS Core (XCore/SBX) 630 Gbps Bandwidth Manager and Switching Engine
	BCM88130 A1	
	BCM88130 B0	
BME-3200	BME-3200 A0	XGS Core (XCore/SBX) Fabric Bandwidth Manager with 32 SCI control ports and up to 40 SFI data ports
	BME-3200 B0	
QE-2000	QE-2000 A1	XGS Core (XCore/SBX) Fabric Queueing Engine with 49 SPI 4.2 subports
	QE-2000 A2	
	QE-2000 A3	
	QE-2000 A4	
BCM88230	BCM88230 A0	XGS Core (XCore/SBX) Fabric Queueing Engine with Integrated Traffic Management with 4 HiGig2 ports, 50Gbps
	BCM88235 A0	XGS Core (XCore/SBX) Fabric Queueing Engine with Integrated Traffic Management with 4 HiGig2 ports, 80Gbps
	BCM88231 A0	XGS Core (XCore/SBX) Traffic Manager with 4 HiGig2 ports, 50Gbps
	BCM88236 A0	XGS Core (XCore/SBX) Traffic Manager with 4 HiGig2 ports, 80Gbps
BCM56930	BCM56931 A0	XGS pass-through and standalone Traffic Manager, 4 HiGig2 ports, 50Gbps
	BCM56936 A0	XGS pass-through and standalone Traffic Manager, 4 HiGig2 ports, 80Gbps

Table 13: Switch Device Codenames

<i>Product Family</i>	<i>Architecture</i>	<i>Codename</i>
BCM5650	StrataXGS	-
BCM5665	StrataXGS	-
BCM5670	StrataXGS	-
BCM5673	StrataXGS	-
BCM5674	StrataXGS II	-
BCM5675	StrataXGS II	-
BCM5690	StrataXGS	-
BCM5695	StrataXGS II	-
BCM53310	StrataXGS III	Hawkeye
BCM53710	StrataXGS III	Raptor
BCM53720	StrataXGS III	Raven
BCM56010	StrataXGS III	Raptor
BCM56020	StrataXGS III	Raven
BCM56100	StrataXGS III	Felix
BCM56110	StrataXGS III	Felix+
BCM56210	StrataXGS III	Raptor
BCM56220	StrataXGS III	Raven
BCM56300	StrataXGS III	Helix
BCM56310	StrataXGS III	Helix+
BCM56320	StrataXGS IV	Helix3
BCM56330	StrataXGS IV	Enduro
BCM56130	StrataXGS IV	Stardust
BCM56500	StrataXGS III	Firebolt
BCM56510	StrataXGS III	Firebolt2
BCM56520	StrataXGS IV	Apollo
BCM56530	StrataXGS IV	Firebolt3
BCM56580	StrataXGS III	Goldwing
BCM56600	StrataXGS III	Easyrider
BCM56620	StrataXGS IV	Triumph
BCM56629	StrataXGS IV	Triumph
BCM56630	StrataXGS IV	Triumph2
BCM56680	StrataXGS IV	Valkyrie
BCM56685	StrataXGS IV	Valkyrie2
BCM56700	StrataXGS III	Humv
BCM56720	StrataXGS IV	HUMV+
BCM56725	StrataXGS IV	Conqueror
BCM56800	StrataXGS IV	Bradley
BCM56820	StrataXGS IV	Scorpion
BCM56825	StrataXGS IV	Sco320G
BCM88020	XGS Core	Caladan FE-2000
BCM88025	XGS Core	Caladan2
BCM88130	XGS Core	Polaris
BCM88230	XGS Core	Sirius
BCM88235	XGS Core	Sirius+
BCM88231	XGS Core	Sirius TM
BCM88236	XGS Core	Sirius+ TM
BCM56931	XGS Core	Sportster
BCM56936	XGS Core	Sportster+
BCM53101	ROBO	Lotus
BCM53115	ROBO	Vulcan



Table 13: Switch Device Codenames

Product Family	Architecture	Codename
BCM53118	ROBO	Blackbird
BCM53242	ROBO	Harrier
BCM53280	ROBO	Thunderbolt

## PHYS

Table 14: PHYs

Device	Driver Family	Description
BCM5218	522x	10/100Base-TX/FX Octal-PHY(tm) Transceiver
BCM5220	522x	10/100BASE-TX/FX Mini-F(tm) Transceiver
BCM5221	522x	10/100BASE-TX/FX Mini-F(tm) Transceiver
BCM5226	522x	10/100 BASE- TX/FX Hex-PHY(tm) Transceiver
BCM5228	522x	10/100BASE-TX/FX Octal-F(tm) Transceiver
BCM5238	522x	10/100BASE-TX OCTAL-f(tm) Transceiver
BCM5248	522x	10/100BASE-TX Octal-F(tm) Transceiver
BCM5401	5401	10/100/1000BASE-T Gigabit Copper Transceiver
BCM5402	5402	10/100/1000BASE-T Gigabit Copper Transceiver
BCM5404	5404	Quad-Port 10/100/1000BASE-T Gigabit Copper Transceiver
BCM5424	5424	Quad 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM5434	5424	Quad 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM5411	5411	10/100/1000BASE-T Gigabit Copper Transceiver
BCM5421	5421S	10/100/1000BASE-T Gigabit Copper Transceiver
BCM5421S	5421S	10/100/1000BASE-T Gigabit Copper Transceiver with SerDes
BCM5461	5464	10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM5464	5464	Quad-Port 10/100/1000BASE-T Gigabit Copper Transceiver
BCM5464R	5464	Quad-Port 10/100/1000BASE-T Gigabit Copper Transceiver
BCM5464S	5464	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM5464SR	5464	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM5466	5464	Quad-Port 10/100/1000BASE-T Gigabit Copper Transceiver
BCM5466R	5464	Quad-Port 10/100/1000BASE-T Gigabit Copper Transceiver
BCM5466S	5464	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM5466SR	5464	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM5482	5482	Dual-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM5488	5464	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver
BCM54540_A0	54580	Quad 1000/100/10BASE-T Gigabit Ethernet Transceiver (Needs additional software component)
BCM54580_A0	54580	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver (Needs additional software component)
BCM54584_A0	54580	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver (Needs additional software component)
BCM54640	54640	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM54640E_A0	54640	Quad-Port Gigabit Copper Transceiver with Copper/Fiber Media Interface
BCM54680_A0	54680	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM54680E_A0	54680	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM54682E_A0	54682	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with 2 Copper/Fiber Media Interface
BCM54684_D0	54684	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver



**Table 14: PHYs**

<i>Device</i>	<i>Driver Family</i>	<i>Description</i>
BCM54685	54682	Octal QSGMII to 10/100/1000BaseT or Fiber Ethernet Transceiver (Preview)
BCM54685E_A0	54682	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with Copper/Fiber Media Interface
BCM54810_A0	54880	BroadR-Reach Single-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM54880_A0	54880	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with BroadR-Reach support
BCM54880_B0	54880	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver with BroadR-Reach support
BCM54880E_A0	54680	Octal-Port 10/100/1000BASE-T Gigabit Ethernet Transceiver
BCM54881_B0	54880	Octal 10/100Base/Tx Ethernet BroadReach Transceiver
BCM54980_B2	54980	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver
BCM54980_C0	54980	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver
BCM54980_C1	54980	Octal 1000/100/10BASE-T Gigabit Ethernet Transceiver
BCM8040_A2	8040	Eight-Channel Multirate 1-Gbps - 3.2-Gbps Retimer/Switch
BCM8073_A0	8072	Dual-Channel Serial 10-GbE BASE-KR to XAUI Transceiver. Firmware version d502.
BCM8074_A0	8072	Quad-Channel Serial 10-GbE BASE-KR to XAUI Transceiver. Firmware version 010C.
BCM8704	8703	Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with XAUI Interface
BCM8705	8705	Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with WIS Layer and XAUI Interface
BCM8725	8705	Dual Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with WIS Layer and XAUI Interface
BCM8726_A0	8706	Dual Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with XAUI Interface
BCM8726_B1	8706	Dual Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with XAUI(TM) Interface. Firmware version 0x0127
BCM8727_B0	8706	Dual Serial 10-Gigabit Ethernet/Fibre Channel Transceiver with XAUI Interface. Firmware version 0406.
BCM8728_A0	8706	Dual-Channel 10-GbE SFI-to-XAUI(TM) Transceiver with EDC. Firmware version 0409. (Preview)
BCM8742	8706	Quad-Channel 10-GbE SFI-to-XAUI(TM) Transceiver
BCM8747_A0	8706	Quad-Channel 10-GbE SFI-to-XAUI(TM) Transceiver with EDC. Firmware version 0409.
BCM8750_A0	8750	Dual-Channel 10 GbE SFI-to-XFI PHY with EDC
BCM8481_B0	8481	10GBASE-T Transceiver (Firmware version B0 02.10)
BCM8481_C0	8481	10GBASE-T Transceiver (Firmware version C0 02.13)
BCM84812_A0	8481	Dual 10GBASE-T Transceiver. Firmware version 2.13
BCM84821_A0	8481	10GBASE-T Transceiver. Firmware version 2.13 (Preview)
BCM84822_A0	8481	Dual 10GBASE-T Transceiver. Firmware version 2.13
BCM84823_A0	8481	Dual 10GBASE-T Transceiver. Firmware version 2.13

## OPERATING SYSTEMS

The SDK provides the SAL and BDE abstraction implementations necessary for running the SDK on the following operating systems. See the Platform Guide (56XX-PG810-R) for instructions on porting the SDK to another platform.

**Table 15: Operating Systems**

<i>Operating System</i>
VxWorks 5.5



Table 15: Operating Systems

<i>Operating System</i>
VxWorks 6.2
VxWorks 6.4
VxWorks 6.5
VxWorks 6.6
Linux 2.4.20 User Mode
Linux 2.4.20 Kernel Resident Mode
Linux 2.6.14 User Mode
Linux 2.6.14 Kernel Resident Mode
Linux 2.6.21 User Mode
Linux 2.6.21 Kernel Resident Mode
Linux 2.6.25 User Mode
Linux 2.6.25 Kernel Resident Mode
Linux 2.6.27 User Mode
Linux 2.6.27 Kernel Resident Mode
POSIX Compliant (SAL ONLY)

## CPU SUBSYSTEMS

Table 16: CPU Subsystems

<i>CPU Subsystem</i>	<i>Description</i>
BCM95836	CPCI 32-bit MIPS with BCM5836 Processor
BCM98245	CPCI 32-bit PPC with Motorola 8245 Processor
BCM91125	CPCI 32/64-bit MIPS with BCM1125 SiByte Processor
BCM98548XMC	XMC 32-bit PPC with Freescale 8548 Processor
BCM953003C	XMC 32-bit MIPS with BCM53003 Processor
BCM5621X	Integrated MIPS CPU on BCM5621X Switch Devices
BCM5622X	Integrated MIPS CPU on BCM5622X Switch Devices
BCM5331X	Integrated MIPS CPU on BCM5331X Switch Devices

## CPU AND OPERATING SYSTEM COMBINATIONS

The following CPU and Operating System combinations are supported by the SDK (in addition to the above):

Table 17: CPU and Operating System Combinations

<i>CPU Subsystem</i>	<i>Operating System</i>	<i>Description</i>
BCM95836	VxWorks 5.5	BSP Provided
BCM95836	Linux 2.4.20	Supported with MontaVista 3.1 Preview kit
BCM95836	Linux 2.6.14	Supported with Windriver Linux 1.5
BCM95836	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM98245	VxWorks 5.5	BSP Provided





Table 17: CPU and Operating System Combinations

<i>CPU Subsystem</i>	<i>Operating System</i>	<i>Description</i>
BCM98245	VxWorks 6.2	BSP Provided
BCM98245	Linux 2.4.20	Supported with MontaVista 3.1 Preview kit
BCM98245	Linux 2.6.14	Supported with WindRiver Linux 1.4/1.5
BCM98245	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM91125	VxWorks 5.5	BSP Provided
BCM91125	VxWorks 6.2	BSP Provided
BCM91125	VxWorks 6.4	BSP Provided
BCM91125	Linux 2.4.20	Supported with MontaVista 3.1 Preview kit
BCM91125	Linux 2.6.10	Supported with MontaVista 4.0 Professional
BCM91125	Linux 2.6.14	Supported with WindRiver Linux 1.5
BCM91125	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM5621X	VxWorks 5.5	BSP Provided
BCM5621X	VxWorks 6.4	BSP Provided
BCM5621X	Linux 2.6.14	Supported with WindRiver Linux 1.5 <code>bcm_ntswics</code>
BCM5621X	Linux 2.6.21	Supported with WindRiver Linux 2.0 <code>bcm_ntswics</code>
BCM5331X	VxWorks 5.5	BSP Provided
BCM5331X	VxWorks 6.4	BSP Provided
BCM5331X	Linux 2.6.14	Supported with WindRiver Linux 1.5 <code>bcm_ntswics</code>
BCM5331X	Linux 2.6.21	Supported with WindRiver Linux 2.0 <code>bcm_ntswics</code>
BCM98548XMC	VxWorks 6.4	BSP Provided
BCM98548XMC	VxWorks 6.5	BSP Provided
BCM98548XMC	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM98548XMC	Linux 2.6.27	Supported with WindRiver Linux 3.0. Note: Additional patches for issues WIND00172598 and WIND00161649 are required. Contact your WindRiver support personnel for these patches and other WindRiver information.
Generic X86	Linux 2.6.25/2.6.27	
BCM5300X	VxWorks 6.6	BSP Provided
BCM5300X	Linux 2.6.21	Supported with WindRiver Linux 2.0
BCM5300X	Linux 2.6.27	Supported with WindRiver Linux 3.0

## REFERENCE DESIGNS

The following Switch Reference Designs are available from Broadcom and are supported in the SDK.

Table 18: Reference Designs

<i>Platform</i>	<i>Description</i>
BCM953001R24M	24-port FE + 2-port GE 53242 SW Ref. Design with BCM53001 Processor
BCM953115R5GM	5-port GE + 1-port serdes 53115 Ref. Design
BCM95324R24GM	24-port FE + 2-port GE 5324 SW Ref. Design



Table 18: Reference Designs

Platform	Description
BCM953242R24M	24-port FE + 2-port GE 53242 SW Ref. Design
BCM953262R24M	24-port FE + 4-port GE 53262 SW Ref. Design
BCM953284R	24-port FE + 2-port GE 53284 SW Ref. Design
BCM953286R	24-port FE + 4-port GE 53286 SW Ref. Design
BCM95347R24M	24-port FE + 4 GE 5348 - 5836 CPU Managed Switch Ref. Design
BCM95348R48M	48-port FE + 4 GE 5348 - 5836 CPU Managed Switch Ref. Design
BCM95395R5GM	5-port GE 5395 Switch Ref Design - Managed (BCM5836)
BCM95396R16GM	16-port GE + 1-port FE(SFP) 5396 Switch Ref Design - Managed (BCM5836)
BCM953300	24-port GE 53300 Switch Ref Design
BCM953302	48-port GE 53302 Switch Ref Design
BCM953314K	24-port GE - 53314 System Verification Kit
BCM953314R24GS	24-port GE - 53314 Switch Ref Design
BCM956018K48T	48-port FE + 2-port GE + 2-port HGL(CAT 7) - 56018 SVK
BCM956024K24T	24-port FE + 4-port HGL(CAT 7) - 56024 SVK
BCM956102R48XS	48-port FE + 4 port GE 56102 SW Ref Design w/2-HiGig/10GE
BCM956112R48XS-02	48-port FE + 4 port GE 56112 SW Ref Design w/2-HiGig/10GE - PPC8245
BCM956132K	24-port FE 56132 SW SVK Design w/ two 10GE/HiGig2 and two 1G/2.5Gb Uplink Ports
BCM956214R26T	26-port GE (2 TX/SX) + 2-port HGL(CAT 7) - 56214 Reference Design
BCM956219K50T	50-port GE + 2-port HGL(CAT 7) - 56218 - PPC8245 SVK
BCM956218K50T	50-port GE + 2-port HGL(CAT 7) - 56218 System Verification Kit
BCM956224K24T	24-port GE + 4-port HGL(CAT 7) - 56224 SVK
BCM956224R24F	24-port GE + 4-port GE SFP - BCM56224 Reference board.
BCM956300R24	24-port GE 56300 Switch Ref Design
BCM956304R24XS	24-port GE (2 TX/SX) 56304 SW Ref Des w/2-HiGig + 2-10GE
BCM956314R24ST	24-port GE + 4 HiGig/2.5GE(CAT 7) 56314 Ref Design
BCM956314R24XST	24-port GE + 4 10GE/HiGig/2.5GE(CX4) - 56314 Ref Design
BCM956334K_02/BCM956334K_03	24xGE + 4x10G/13HG (iPass) with BCM56334 switch
BCM956500R24	24-port GE 56500 Switch Ref Design
BCM956504R24XS	24-port GE (2 TX/SX) 56504 SW Ref Des w/2-HiGig + 2-10GE
BCM956504R48XSP	48-port GE (12 w/POE) 56504 Switch Ref Design 4 - HiGig/10GE
BCM95650K24	24-port FE + 4 port GE Switch Development Kit
BCM95650R24	24-port FE + 4 port GE (TX or SFP) Reference Design
BCM956514R24XST	24-port GE + 4 10GE/HiGig/2.5GE(CX4) - 56514 Ref Design
BCM956514R48XSP	48-port GE (12 w/POE) 56514 Switch Ref Design 4 - HiGig/10GE
BCM956580K16TXS	16-port 2.5G SFP Fibre + 4 HiGig/10GE 56580 SDK
BCM956601K12D	12-port GE + 1-HiGig 56601 DDR SDRAM SDK
BCM956601K12N	12-port GE + 1-HiGig 56601 Netlogic TCAM SDK
BCM956602KXSN	1-HiGig + 1-10GE 56602 Netlogic TCAM SDK
BCM95665K48	48-port FE + 4 port GE TX/SX + 1HiGig Switch Development Kit
BCM956700K16S	16-port HiGig CX4 56700 SDK
BCM95670K8	8-port 5670 GE Switch Development Kit
BCM95673K2S	2 x 5673 10-GE + HiGig Switch Development Kit
BCM95673R8	8-port 5673 10 GE XFP Switch Reference Design
BCM95673R8CX4	8-port 5673 10 GE CX4 Switch Reference Design
BCM95675K8	8-port 5675 GE Switch Development Kit
BCM95675K8U	8-port 5675 GE Switch Development Kit - PPC8245
BCM956800K20X	20-port 10 GE CX4 56800 SDK
BCM95690K24S	24-port 5690 GE Switch Development Kit w/2HiGig
BCM95690K24	24-port 5690 GE Switch Development Kit



Table 18: Reference Designs

Platform	Description
BCM95690P24REF	24-port 5690 GE + 5671 w/2HiGig Ports Reference Design
BCM95690R24	24-port 5690 GE Ports Reference Design
BCM95690R24S	24-port 5690 GE + 5671 w/2HiGig Ports Reference Design
BCM95690R48S	48-port 5690 GE + 5670 w/4HiGig Ports Reference Design
BCM95690R48X2S	48-port 5690 GE + 5670 w/2-HiGig Ports + 2-10-GE Ports Ref. Design
BCM95691K12	12-port 5691 GE Switch Development Kit
BCM95695K24	24-port 5695 GE Switch Development Kit
BCM95695R24S	24-port 5695 GE + 5671 w/2HiGig Ports Reference Design
BCM95695R24X2S	24-port 5695 GE + 2-port 5675 HiGig + 2-port 5674 10GE CX4
BCM95695R48X2S	48-port 5695 GE + 5670 w/2-HiGig Ports + 2-10-GE Ports Ref. Design
BCM91125CFM16	BCM956010CS Dual 5675 Fabric + 1125H CPU
BCM91125CFM8	BCM956006CS Single 5675 Fabric + 1125H CPU
BCM956501LM	12-port 10GE CX4 56501/5675 Line Module
BCM956504LM	48-port GE 56504 Line Module
BCM956700CFM16	16-HiGig 56700 Fabric + BCM1125 CPU Module
BCM95674LM	6-port 10GE CX4 5674/5675 Line Module
BCM956802LM	12-port 10GE CX4 56802 Line Module
BCM95695LM	48-port GE 5695/5675 Line Module
BCM956802CFM8	BCM956006CS 56802 Fabric + 8 10GE + 1125H CPU
BCM956680K24TS_02/BCM956680K24TS_05	25 port 1-GbE/2.5GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports SVK
BCM956624K49TS_02/ BCM956624K49TS_05	49 port 1-GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports and External Table Expansion SVK
BCM956624R49S_02	49 port 1-GbE Multilayer Ethernet Switch with 4 x 10-GbE SFP+ Uplink ports BCM56624 reference board
BCM956634K49S_02	49xGE + 4 x XAUI/HG (iPass) with BCM56634 switch
BCM956636K25S_02	24x1GE + 2x12HG + 4x16HG (iPass) with BCM56636 switch
BCM956638K8XS_02	4x12HG + 4x16HG (iPass) with BCM56638 switch
BCM956639K25S_02	24x1GE + 8x10G (iPass) with BCM56639 switch
BCM956526K29S_02	28x1GE + 6x12HG (iPass) with BCM56526 switch
BCM956685K24TS_02	24 port 1-GbE/2.5GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports SVK
BCM956820K24XG_02/BCM956820K24XG_05	24 x 10-GbE + 4 x 1-GbE Multilayer Ethernet Switch SVK
BCM956820R24XG_02	24 x 10-GbE + 4 x 1-GbE BCM56820 Multilayer Ethernet Switch Reference board with SFP+ interface.
BCM956825K24XG_02	16 x 10-GbE + 8 x 20-Gbps HG2 + 1 x 1-GbE Multilayer Ethernet Switch Reference board.
BCM956720K16S_02/BCM956720K16S_05	16-Port, 256-Gbps Switch Fabric + 4 x 1-GbE SVK
BCM956725K16S_02/BCM956725K16S_05	8-Port (20Gbps) + 4-port (16Gbps) Switch Fabric + 4 x 1-GbE SVK
BCM988020QSK24X2	Carrier Ethernet 24-port GE + 2-port 10GbE Reference Design (also known as Metrocore)
BCM988130FK24X2	Carrier Ethernet 24-port GE + 2-port 10GbE Reference Design (also known as Polaris Line card)
BCM988025QSK24X2	Carrier Ethernet 24-port GE + 2-port 10GbE Reference Design (also known as C2 SVK)
BCM988130K_02	BCM88130 SVK with 96 fabric serdes connections (24 iPass ports)
BCM988235K_02	BCM88235 SVK with 4 HiGig2 ports (4 iPass), 2 flow control ports (2 iPass)
BCM953724R26WS	26-Port, 26-Gbps Integrated Multilayer Switch and CPU
BCM956628K8TS	8 port 10-GbE/HiGig2 Multilayer Ethernet Switch with External Table Expansion
BCM956620K24TS	24 port 1-GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports



*Table 18: Reference Designs*

<i>Platform</i>	<i>Description</i>
BCM956684K24TS	24 port 1-GbE/2.5GbE Multilayer Ethernet Switch with 4 x 10-GbE/HiGig2 Uplink ports
BCM956725K16S	8 Port, 20-Gbps + 4 Port, 16-Gbps HiGig2 Switch Fabric
BCM956626K8TS	25 port 1-GbE Multilayer Ethernet Switch with 6 x 10-GbE/HiGig2 Uplink ports and External Table Expansion
BCM956629K24S	25 port 1-GbE Multilayer Ethernet Switch with 8 x 10-GbE/HiGig2 Uplink ports and External Table Expansion
BCM956224R50T	50-port GE + 2-port HGL(CAT 7) - 2 X BCM56224
BCM956024R50T	48-port FE + 2-port GE + 2-port HGL(CAT 7) - 2 X BCM56024
BCM956524K24S_02	24xGE + 4 x XAUI/HG (iPass) with BCM56524 switch
BCM956521K_02	24-Port GbE Multilayer Switch with 10 GbE/HiGig2 Uplink Ports
BCM98727MC	16 port Ipass to SFP+ Media Converter
BCM956534K24TS	24xGE + 4 x XAUI/HG (iPass) with BCM56534 switch
BCM956538K49S	48-Port GbE Multilayer Switch with Four 10-GbE/HiGig2 Uplink Ports SVK

Note: The flash sizes of some old BCM53XX platforms are 4 MBytes only. As the code size of SDK increases, the 4 MB flash is not enough for this release. Replace the flash to 8 MB or above for those reference designs.

## Section 8: SDK Externally Licensed Software Components

SDK contains a number of third-party externally licensed software components. This appendix contains information regarding these components, the license for each of these components, and where these components are used in SDK.

*Table 19: EXTERNALLY LICENSED SOFTWARE COMPONENTS*

<i>Component</i>	<i>Origin</i>	<i>Location in source tree</i>	<i>License terms and conditions</i>
EDITLINE	/afs/athena.mit.edu/contrib/sipb/src/editline	src/sal/appl/editline	See (EDITLINE License terms and conditions) ( <a href="#">page 37</a> )

### EDITLINE LICENSE TERMS AND CONDITIONS

This package was obtained from the following location, and was modified for purposes of inclusion into the SOC diagnostics shell.

Removed files:

MANIFEST Make.os9 Makefile os9.h sysos9.c testit.c unix.h

Added files:

sysvxworks.c Makefile

Changed functionality:

Merged unix.h into editline.h  
M-P and M-N now behave like tcsh.  
list\_history(count) routine displays history  
Commented out completion  
Changed rl\_complete and rl\_list\_possib into caller-settable  
global functions  
Don't ring bell on TAB if word is already complete

-----  
Index of /afs/athena.mit.edu/contrib/sipb/src/editline

[ ]	Name	Last modified	Size	Description
[DIR]	Parent Directory	11-May-99 03:40	-	
[ ]	MANIFEST	07-Jul-97 11:20	1k	
[ ]	Make.os9	07-Jul-97 11:20	1k	
[ ]	Makefile	01-Sep-97 00:34	2k	
[ ]	complete.c	07-Jul-97 11:20	4k	
[ ]	editline.3	07-Jul-97 11:20	5k	
[ ]	editline.c	07-Jul-97 11:20	25k	
[ ]	editline.h	07-Jul-97 11:20	2k	
[ ]	os9.h	07-Jul-97 11:20	1k	
[ ]	sysos9.c	07-Jul-97 11:20	1k	



[ ]	sysunix.c	07-Jul-97 11:20	3k
[ ]	testit.c	07-Jul-97 11:20	1k
[ ]	unix.h	07-Jul-97 11:20	1k

-----  
\$Revision: 1.1.2.2 \$

This is a line-editing library. It can be linked into almost any program to provide command-line editing and recall.

It is call-compatible with the FSF readline library, but it is a fraction of the size (and offers fewer features). It does not use standard I/O. It is distributed under a "C News-like" copyright.

Configuration is done in the Makefile. Type "make testit" to get a small slow shell for testing.

This contains some changes since the posting to comp.sources.misc:

- Bugfix for completion on absolute pathnames.
- Better handling of M-n versus showing raw 8bit chars.
- Better signal handling.
- Now supports termios/termio/sgttyb ioctl's.
- Add M-m command to toggle how 8bit data is displayed.

The following changes, made since the last public release, come from J.G. Vons <vons@cesar.crbcal.sinet.slb.com>:

- History-searching no longer redraws the line wrong
- Added ESC-ESC as synonym for ESC-?
- SIGQUIT (normally ^) now sends a signal, not indicating EOF.
- Fixed some typo's and unclear wording in the manpage.
- Fixed completion when all entries shared a common prefix.
- Fixed some meta-char line-redrawing bugs.

Enjoy,

Rich \$alz  
<rsalz@osf.org>

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