

## **NOT FOR PUBLIC RELEASE**

RTL8363NB

RTL8364NB

RTL8365MB-VC

RTL8367RB-VB

RTL8367SB

**RTL8367S** 

RTL8366SC

RTL8363SC

RTL8370MB

**RTL8310SR** 

RTL8363NB-VB

RTL8364NB-VB

RTL8363SC-VB

# Realtek Unmanaged Switch API Driver Release Note

(CONFIDENTIAL: Development Partners Only)

Rev. 1.3.12

November 24th, 2017



Realtek Semiconductor Corp.

No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan

Tel.: +886-3-578-0211 Fax: +886-3-577-6047

www.realtek.com



#### **COPYRIGHT**

© 2014/2015/2016/2017 Realtek Semiconductor Corp. All rights reserved. No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means without the written permission of Realtek Semiconductor Corp.

#### **TRADEMARKS**

Realtek is a trademark of Realtek Semiconductor Corporation. Other names mentioned in this document are trademarks/registered trademarks of their respective owners.

#### **DISCLAIMER**

Realtek provides this document "as is", without warranty of any kind, neither expressed nor implied, including, but not limited to, the particular purpose. Realtek may make improvements and/or changes in this document or in the product described in this document at any time. This document could include technical inaccuracies or typographical errors.

#### **USING THIS DOCUMENT**

This document is intended for use by the system engineer when integrating with Realtek Switch Software SDK. Though every effort has been made to assure that this document is current and accurate, more information may have become available subsequent to the production of this guide. In that event, please contact your Realtek representative for additional information that may help in the development process.

Switch Product Page 2 / 20 Rev. 1.3.12



#### **REVISION HISTORY**

Revision	Release Date	Summary		
1.3.12	2017/11/24	1.	Fix error port ID checking in API rtk_l2_addr_next_get.	
		2.	Fix error API calling in API in rtk_port_phyEnableAll_set.	
		3.	Revise EEE configuration in driver rtl8367c_setAsicEee100M &	
			rtl8367c_setAsicEeeGiga.	
		4.	Revise Green Ethernet configuration in driver rtl8367c_setAsicGreenEthernet.	
		5.	Revise Power Saving configuration in driver rtl8367c_setAsicPowerSaving.	
		6.	Fix MIB reading to prevent invalid value returned in API	
			rtl8367c_getAsicMIBsCounter.	
		7.	Fix Fiber configuration in driver rtl8367c_setAsicPortExtMode for RTL8370MB.	
1.3.11	2017/06/26	1.	Add pseudo Lock/Unlock protection for every API. Users can redefine them in	
			rtk_switch.h to prevent API calls be interrupted in multi-process environment.	
		2.	Update HSGMII/SGMII configuration in API "rtk_port_macForceLinkExt_set".	
		3.	Return all 32 bits of group IP address in API "rtk_l2_ipMcastAddr_get",	
			"rtk_l2_ipMcastAddr_next_get", "rtk_l2_ipVidMcastAddr_get",	
			"rtk_l2_ipVidMcastAddr_next_get".	
		4.	Revise pointer access coding style in driver "rtl8367c_setAsicEavMacAddress".	
		5.	Revise pointer access coding style in driver "rtl8367c_setAsicL2LookupTb".	
		6.	Revise pointer access coding style in driver "rtl8367c_setAsicMacAddress".	
		7.	Revise pointer access coding style in driver "rtl8367c_setAsicSvlanMC2SConf",	
			"rtl8367c_setAsicSvlanSP2CConf"	



1.3.10	2017/03/09	1.	Add more error checking in API "rtk_filter_igrAcl_cfg_add",		
			"rtk_dot1x_eapolFrame2CpuEnable_set" & "rtk_led_operation_set".		
		2.	Remove unused error checking in API "rtk_rate_igrBandwidthCtrlRate_set".		
		3.	Add variable initialization in API "rtk_l2_entry_get".		
		4.	Update configuration parameter in API "rtk_port_phyComboPortMedia_set".		
		5.	Update configuration parameter in API "rtk_port_macForceLinkExt_set".		
		6.	Update switch initialization parameter in API rtk_switch_init() for following switch		
			chips		
			RTL8370MB		
			• RTL8310SR		
			RTL8363NB-VB		
			RTL8364NB-VB		
			RTL8363SC-VB		
		7.	Fix error configuration of care tag in API "rtk_filter_igrAcl_cfg_get".		
		8.	Fix error checking in driver "rtl8367c_getAsicEavPortTimeStamp"		
		9.	Fix error checking in driver "rtl8367c_setAsicForceLed" &		
			"rtl8367c_getAsicForceLed"		
		10.	Fix error checking in driver "rtl8367c_setAsicLedOperationMode".		
		11.	Fix error checking in driver "rtl8367c_setAsicVlanPortAndProtocolBased"		
		12.	Fix error checking in driver "rtl8367c_getAsicVlanPortAndProtocolBased".		
		13.	Add more error checking in driver "rtl8367c_setAsicIGMPv1Opeartion",		
			"rtl8367c_setAsicIGMPv2Opeartion", "rtl8367c_setAsicIGMPv3Opeartion"		
		14.	Add more error checking in driver "rtl8367c_setAsicMLDv1Opeartion" &		
			"rtl8367c_setAsicMLDv2Opeartion".		
		15.	Add more error checking in driver "rtl8367c_getAsicMIBsCounter"		
		16.	Update extension port configuration parameter in driver		
			"rtl8367c_setAsicPortForceLinkExt", "rtl8367c_sdsReset",		
			"rtl8367c_getSdsLinkStatus", "rtl8367c_setSgmiiNway" &		
			"rtl8367c_getSgmiiNway"		



	2046/25/5	1	Add support to your suitch and the WDTI COCCAND VOW WDTI COCCAND VOW	
1.3.9	2016/08/04	1.	Add support to new switch product "RTL8363NB-VB", "RTL8364NB-VB" and "RTL8363SC-VB"	
		2.	Fix error boundary check in "rtk_filter_igrAcl_cfg_add".	
		3.	Revise portmask checking in "rtk_led_enable_set".	
		4.	Revise port ID checking in "rtk_led_modeForce_set".	
		5.	Revise port ID checking in "rtk_led_modeForce_get".	
		6.	Add API "rtk_led_serialModePortmask_set".	
		7.	Add API "rtk_led_serialModePortmask_get".	
		8.	Add Chip family checking in "rtk_port_phyComboPortMedia_set".	
		9.	Add Chip family checking in "rtk_port_phyComboPortMedia_get".	
		10.	Add API "rtk_port_sgmiiLinkStatus_get".	
		11.	Add API "rtk_port_sgmiiNway_set" and "rtk_port_sgmiiNway_get".	
		12.	Add support 100Base-X and 1000Base-X in API "rtk_port_macForceLinkExt_set"	
		13.	Fix error array index assignment in API "rtk_svlan_checkAndCreateMbr".	
		14.	Fix error data writing in driver "rtl8367c_setAsicAclRule".	
		15.	Update Green Ethernet configuration in driver "rtl8367c_setAsicGreenEthernet".	
		16.	Add driver "rtl8367c_setAsicLedSerialOutput".	
		17.	Add driver "rtl8367c_getAsicLedSerialOutput".	
		18.	Add driver "rtl8367c_setAsicSdsReg".	
		19.	Add driver "rtl8367c_getAsicSdsReg".	
		20.	Revise reset procedure in "rtl8367c_sdsReset".	
		21.	Add driver "rtl8367c_getSdsLinkStatus".	
		22.	Add driver "rtl8367c_setSgmiiNway".	
		23.	Add driver "rtl8367c_getSgmiiNway".	
		24.	Update driver "rtl8367c_getAsicPortRTCTResult".	
		25.	Add API for managing I2C	
1.3.8	2016/01/29	1.	Update API "rtk_switch_init"	
		2.	Add API "rtk_led_groupAbility_set"	
		3.	Add API "rtk_led_groupAbility_get"	
		4.	Remove endian compile flag in all source files	
1.3.7	2015/10/29	1.	Update API "rtk_switch_init"	
		2.	Update API "rtk_svlan_memberPortEntry_set"	
		3.	Update Driver "rtl8367c_setAsicPortExtMode"	
		4.	Update rtk_types.h for avoiding compiler warning.	
		5.	Add API "rtk_port_sds_reset"	
		6.	Add API "rtk_led_OutputEnable_set"	
		7.	Add API "rtk_led_OutputEnable_get"	
		8.	Update enum definition "rtk_cpu_position_t"	



1.3.6	2015/08/10	1.	Update API "rtk_port_phyComboPortMedia_set"
		2.	Update API "rtk_switch_init"
		3.	Update API "rtk_port_macForceLinkExt_set"
		4.	Update API "rtk_l2_addr_next_get"
		5.	Update API "rtk_stat_port_get" & rtk_stat_port_getAll"
		6.	Update driver "rtl8367c_setAsicPortRTCTEnable"
1.3.5	2015/06/05	1.	Add supporting for new switch:
			RTL8363SC, RTL8370MB, RTL8310SR
		2.	Update API "rtk_filter_igrAcl_cfg_get"
		3.	Add new API "rtk_port_rtctDisable_set"
		4.	Update API "rtk_qos_schedulingQueue_set"
		5.	Update API "rtk_rate_egrQueueBwCtrlRate_set"
		6.	Update API "rtk_switch_init"
		7.	Update API "rtk_port_phyAutoNegoAbility_set" & "rtk_port_phyAutoNegoAbility_get"
		8.	Update driver "rtl8367c_setAsicPHYReg" & "rtl8367c_getAsicPHYReg"
		9.	Add driver "rtl8367c_setAsicPortRTCTDisable"
		10.	Update driver "rtl8367c_setAsicAprMeter" & "rtl8367c_getAsicAprMeter"
		11.	Update driver "rtl8367c_setAsicSvlanDmacCvidSel"
		12.	Update driver "rtl8367c_getAsicSvlanDmacCvidSel"
1.3.4	2015/01/06	1.	Add support new switch "RTL8366SC"
		2.	Enable Dynamic router porting learning in API "rtk_igmp_init"
		3.	Update Fiber port parameter in API "rtk_port_phyComboPortMedia_set"
		4.	Update QoS parameter in API "rtk_qos_init"
		5.	Modify Configuration in API "rtk_rldp_config_set"
		6.	Update HSGMII parameter in API "rtk_switch_init"
		7.	Update HSGMII parameter in driver "rtl8367c_setAsicPortExtMode"
1.3.3	2014/10/08	1.	Update API rtk_switch_init
		2.	Update API rtk_port_phyComboPortMedia_set
		3.	Update API rtk_port_macForceLinkExt_set
		4.	Update API rtk_port_macForceLinkExt_get
		5.	Update API rtk_port_phyStatus_get
		6.	Update Driver rtl8367c_setAsicPortRTCT
		7.	Update Driver rtl8367c_setAsicEavPortInterruptStatus
		8.	Update Driver rtl8367c_getAsicEavPortInterruptStatus
		9.	Update Driver rtl8367c_setAsicEavPortEnable
		10.	Update Driver rtl8367c_getAsicEavPortEnable
		11.	Update Driver rtl8367c_getAsicEavPortTimeStamp



1.3.2	2014/07/21	1.	Update API rtk_switch_init
1.5.2		2.	Update API rtk_port_phyComboPortMedia_set
		3.	Update API rtk_port_phyComboPortMedia_get
		4.	Update API rtk_port_macForceLinkExt_set
		5.	Update API rtk_port_macStatus_get
		6.	Update API rtk_qos_init
		7.	Update API rtk_stat_port_getAll
1.3.1	2014/06/09	1.	Update API rtk_eee_portEnable_set to control EEE
1.5.1	201 1, 00, 03	2.	Update API rtk_port_phyAutoNegoAbility_set
		3.	Update API rtk_port_phyAutoNegoAbility_get
		4.	Update API rtk_port_phyForceModeAbility_set
		5.	Update API rtk_port_phyForceModeAbility_get
		6.	Update API rtk_port_phyStatus_get
		7.	Update API rtk_port_phyReg_set
		8.	Update API rtk_port_phyReg_get
		9.	Update API rtk_port_phyEnableAll_set
		10.	Update API rtk_switch_init
		11.	Update API rtk_switch_greenEthernet_set
		12.	Update API rtk_switch_greenEthernet_get
		13.	Update driver rtl8367c_asicdrv_eee.c
		14.	Update driver rtl8367c_asicdrv_green.c
		15.	Update driver rtl8367c_asicdrv_port.c
		16.	Update driver rtl8367c_asicdrv_phy.c
		17.	Add driver rtl8367c_asicdrv_oam.c
		18.	Add driver rtl8367c_asicdrv_oam.h
		19.	Add driver rtl8367c_asicdrv_rldp.c
		20.	Add driver rtl8367c_asicdrv_rldp.h
1.3.0	2014/03/17	1.	First release

### **Unmanaged Switch API Driver V1.3.12 Release Note**

Revision	Release Date	Summary	
1.3.12	2017/11/24	1. Fix error port ID checking.	
		2. Revise configuration for EEE, Green Ethernet & Power Saving.	
		3. Fix Fiber configuration for RTL8370MB.	

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:

I.	RTL8363NB	VIII.	RTL8367S
II.	RTL8364NB	IX.	RTL8366SC
III.	RTL8365MB-VC	X.	RTL8363SC
IV.	RTL8367RB-VB	XI.	RTL8370MB
٧.	RTL8367SB	XII.	RTL8310SR
VI.	RTL8363NB-VB	XIII.	RTL8363SC-VB
VII.	RTL8364NB-VB		

#### Changes

- 1. Update the following API.
  - √ rtk\_l2\_addr\_next\_get
  - √ rtk\_port\_phyEnableAll\_set
- 2. Update the following driver.
  - √ rtl8367c\_setAsicEee100M
  - √ rtl8367c\_setAsicEeeGiga
  - ✓ rtl8367c\_setAsicGreenEthernet
  - √ rtl8367c\_setAsicPowerSaving
  - √ rtl8367c\_getAsicMIBsCounter
  - ✓ rtl8367c\_setAsicPortExtMode



### **Unmanaged Switch API Driver V1.3.11 Release Note**

Revision	Release Date	Summary	
1.3.11	2017/06/26	1. Add pseudo Lock/Unlock protection for every API. Users can redefine	
		them in rtk_switch.h to prevent API calls be interrupted in multi-process	
		environment.	
		2. Update HSGMII/SGMII configuration.	
		3. Return all 32 bits of group IP address in API for retrieving multicast group.	

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:

I.	RTL8363NB	VIII.	RTL8367S
II.	RTL8364NB	IX.	RTL8366SC
III.	RTL8365MB-VC	X.	RTL8363SC
IV.	RTL8367RB-VB	XI.	RTL8370MB
٧.	RTL8367SB	XII.	RTL8310SR
VI.	RTL8363NB-VB	XIII.	RTL8363SC-VB
VII.	RTL8364NB-VB		

#### Changes

- 1. Update the following API.
  - ✓ rtk\_port\_macForceLinkExt\_set
  - √ rtk\_l2\_ipMcastAddr\_get & rtk\_l2\_ipMcastAddr\_next\_get
  - √ rtk\_l2\_ipVidMcastAddr\_get & rtk\_l2\_ipVidMcastAddr\_next\_get
- 2. Update the following driver.
  - √ rtl8367c\_setAsicEavMacAddress
  - √ rtl8367c\_setAsicL2LookupTb
  - √ rtl8367c\_setAsicMacAddress
  - √ rtl8367c\_setAsicSvlanMC2SConf & rtl8367c\_setAsicSvlanSP2CConf

Switch Product Page 9 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.10 Release Note**

Revision	Release Date	Summary	
1.3.10	2017/03/09	Update API "rtk_switch_init" for updating initialization parameter for	
		RTL8370MB, RTL8310SR, RTL8363SC-VB, RTL8363NB-VB,	
		RTL8364NB-VB	
		2. Add more error checking in API & driver to return fail reason.	
		3. Update configuration for combo port.	
		4. Update configuration for external port.	

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:

I.	RTL8363NB	VIII.	RTL8367S
II.	RTL8364NB	IX.	RTL8366SC
III.	RTL8365MB-VC	X.	RTL8363SC
IV.	RTL8367RB-VB	XI.	RTL8370MB
V.	RTL8367SB	XII.	RTL8310SR
VI.	RTL8363NB-VB	XIII.	RTL8363SC-VB
VII.	RTL8364NB-VB		

#### Changes

- 1. Update the following API.
  - √ rtk\_switch\_init
  - ✓ rtk\_port\_phyComboPortMedia\_set
  - √ rtk\_filter\_igrAcl\_cfg\_add
  - √ rtk\_port\_macForceLinkExt\_set
  - √ rtk\_dot1x\_eapolFrame2CpuEnable\_set
  - √ rtk\_led\_operation\_set
  - ✓ rtk\_rate\_igrBandwidthCtrlRate\_set
  - √ rtk\_l2\_entry\_get

Switch Product Page 10 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.9 Release Note**

Revision	Release Date	Summary	
1.3.9	2016/08/04	1. Add support to new switch product "RTL8363NB-VB", "RTL8364NB-VB"	
		and "RTL8363SC-VB"	
		2. Add Serial LED support.	
		3. Add 100Base-X and 1000Base-X support	
		4. Add Serdes status API	
		5. Error Fixed	

#### The package includes:

- Z · Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming quide.
- 丙、 API\_Source Realtek API and driver source code.

I.	RTL8363NB	VIII.	RTL8367S
II.	RTL8364NB	IX.	RTL8366SC
III.	RTL8365MB-VC	Х.	RTL8363SC
IV.	RTL8367RB-VB	XI.	RTL8370MB
٧.	RTL8367SB	XII.	RTL8310SR
VI.	RTL8363NB-VB	XIII.	RTL8363SC-VB
VII.	RTL8364NB-VB		

#### **Changes**

- 1. Add the following API.
  - ✓ rtk led serialModePortmask set & rtk led serialModePortmask get
  - √ rtk\_port\_sgmiiLinkStatus\_get
  - ✓ rtk\_port\_sgmiiNway\_set & rtk\_port\_sgmiiNway\_get
  - ✓ rtk\_i2c\_init, rtk\_i2c\_data\_write, rtk\_i2c\_data\_read, rtk\_i2c\_mode\_set & rtk\_i2c\_mode\_get
  - √ rtk\_i2c\_gpioPinGroup\_set & rtk\_i2c\_gpioPinGroup\_get
- 2. Update the following API.
  - √ rtk\_switch\_init
  - rtk\_port\_phyComboPortMedia\_set & rtk\_port\_phyComboPortMedia\_get
  - √ rtk\_filter\_igrAcl\_cfg\_add
  - √ rtk\_led\_enable\_set, rtk\_led\_modeForce\_set & rtk\_led\_modeForce\_get
  - ✓ rtk\_port\_macForceLinkExt\_set



### **Unmanaged Switch API Driver V1.3.8 Release Note**

Revision	Release Date	Summary
1.3.8	2016/01/29	1. Remove Endian Compiler flag in all source files.
		<ol><li>Update API "rtk_igmp_groupInfo_get" for getting IGMP group</li></ol>
		information
		<ol><li>Add API "rtk_led_groupAbility_set" &amp; "rtk_led_groupAbility_get"</li></ol>
		4. Update API "rtk_switch_init" for updating initialization parameter for
		RTL8370MB & RTL8310SR.

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:

I.	RTL8363NB	VI.	RTL8367S
II.	RTL8364NB	VII.	RTL8366SC
III.	RTL8365MB-VC	VIII.	RTL8363SC
IV.	RTL8367RB-VB	IX.	RTL8370MB
V	RTI 8367SB	Χ	RTI 8310SR

#### **Changes**

- 1. Add the following API.
  - √ rtk\_led\_groupAbility\_set
  - √ rtk\_led\_groupAbility\_get
- 2. Update the following API.
  - √ rtk\_switch\_init
- 3. Remove endian compiler flag in all source files

Switch Product Page 12 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.7 Release Note**

Revision	Release Date	Summary
1.3.7	2015/10/29	1. Update SVLAN Deletion procedure
		2. Update HSGMII port configuration
		3. Add initial parameter for RTL8367S
		4. Update rtk_types.h for avoiding compiler warning.
		5. Add API "rtk_port_sds_reset"
		6. Add API "rtk_led_OutputEnable_set" & "rtk_led_OutputEnable_get"
		7. Update enum definition "rtk_cpu_position_t"

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:

I.	RTL8363NB	VI.	RTL8367S
II.	RTL8364NB	VII.	RTL8366SC
III.	RTL8365MB-VC	VIII.	RTL8363SC
IV.	RTL8367RB-VB	IX.	RTL8370MB
V.	RTI 8367SB	Χ.	RTI 8310SR

#### Changes

- 1. Add the following API.
  - √ rtk\_port\_sds\_reset
  - √ rtk\_led\_OutputEnable\_set
  - √ rtk\_led\_OutputEnable\_get
- 2. Update the following API.
  - √ rtk\_switch\_init
  - ✓ rtk\_svlan\_memberPortEntry\_set
- 3. Update the following driver
  - √ rtl8367c\_setAsicPortExtMode
- 4. Update the following definition
  - √ rtk\_cpu\_position\_t

Switch Product Page 13 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.6 Release Note**

Revision	Release Date		Summary
1.3.6	2015/08/10	1.	Update Fiber Port configuration
		2.	Update HSGMII port configuration
		3.	Update initial parameter for RTL8370MB, RTL8310SR
		4.	Update MIB API for RTL8370MB, RTL8310SR

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek Unmanaged Switch ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - I. RTL8363NB
  - II. RTL8364NB
  - III. RTL8365MB-VC
  - IV. RTL8367RB-VB
  - V. RTL8367SB
  - VI. RTL8366SC
  - VII. RTL8363SC
  - VIII. RTL8370MB
  - IX. RTL8310SR

#### Changes

- 1. Update the following API.
  - √ rtk\_switch\_init
  - ✓ rtk\_port\_phyComboPortMedia\_set
  - √ rtk\_port\_macForceLinkExt\_set
  - √ rtk\_l2\_addr\_next\_get
  - √ rtk\_stat\_port\_get & rtk\_stat\_port\_getAll
- 2. Update the following driver
  - √ rtl8367c setAsicPortRTCTEnable

Switch Product Page 14 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.5 Release Note**

Revision	Release Date		Summary
1.3.5	2015/06/05	1.	Add new switch supporting
		2.	Fix Queue Weight Setting
		3.	Fix Meter ID checking
		4.	Add RTCT Disable API

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - I. RTL8363NB
  - II. RTL8364NB
  - III. RTL8365MB-VC
  - IV. RTL8367RB-VB
  - V. RTL8367SB
  - VI. RTL8366SC
  - VII. RTL8363SC
  - VIII. RTL8370MB
  - IX. RTL8310SR

#### <u>Changes</u>

- 1. Update the following API.
  - √ rtk\_switch\_init
  - √ rtk\_filter\_igrAcl\_cfg\_get
  - √ rtk\_port\_rtctDisable\_set
  - √ rtk\_qos\_schedulingQueue\_set
  - ✓ rtk\_rate\_egrQueueBwCtrlRate\_set
  - ✓ rtk\_port\_phyAutoNegoAbility\_set & rtk\_port\_phyAutoNegoAbility\_get
- 2. Update the following driver
  - √ rtl8367c\_setAsicPHYReg & rtl8367c\_getAsicPHYReg
  - √ rtl8367c\_setAsicAprMeter & rtl8367c\_getAsicAprMeter
  - ✓ rtl8367c\_setAsicSvlanDmacCvidSel & rtl8367c\_setAsicSvlanDmacCvidSel
  - √ rtl8367c\_setAsicPortRTCTDisable

Switch Product Page 15 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.4 Release Note**

Revision	Release Date		Summary
1.3.4	2015/01/06	1.	Add new switch supporting
		2.	Enable Dynamic router port learning
		3.	Update API & driver for HSGMII & Fiber port configuration
		4.	Update API for QoS & RLDP configuration

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - ✓ Switch chips:
    - I. RTL8363NB
    - II. RTL8364NB
    - III. RTL8365MB-VC
    - IV. RTL8367RB-VB
    - V. RTL8367SB
    - VI. RTL8366SC

#### **Changes**

- 1. Update the following API.
  - √ rtk\_switch\_init
  - ✓ rtk\_port\_phyComboPortMedia\_set
  - √ rtk\_igmp\_init
  - √ rtk\_qos\_init
  - √ rtk\_rldp\_config\_set
- 2. Update the following driver
  - ✓ rtl8367c\_setAsicPortExtMode

Switch Product Page 16 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.3 Release Note**

Revision	Release Date		Summary
1.3.3	2014/10/08	1.	Update API & driver for HSGMII & Fiber port configuration
		2.	Update API & driver for PHY status reading
		3.	Update initialization parameter

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - ✓ Switch chips:
    - I. RTL8363NB
    - II. RTL8364NB
    - III. RTL8365MB-VC
    - IV. RTL8367RB-VB
    - V. RTL8367SB

#### Changes

- 1. Update the following API.
  - √ rtk\_switch\_init
  - √ rtk\_port\_phyComboPortMedia\_set
  - √ rtk\_port\_macForceLinkExt\_set
  - √ rtk\_port\_macForceLinkExt\_get
  - ✓ rtk\_port\_phyStatus\_get
- 2. Update the following driver
  - √ rtl8367c setAsicPortRTCT
  - ✓ rtl8367c\_setAsicEavPortInterruptStatus
  - √ rtl8367c\_getAsicEavPortInterruptStatus
  - √ rtl8367c setAsicEavPortEnable
  - √ rtl8367c\_getAsicEavPortEnable
  - √ rtl8367c\_getAsicEavPortTimeStamp

Switch Product Page 17 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.2 Release Note**

Revision	Release Date	Summary	
1.3.2	2014/07/21	1. Update API & driver for port & statistic function	
		2. Update initialization parameter	

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - ✓ Switch chips:
    - I. RTL8363NB
    - II. RTL8364NB
    - III. RTL8365MB-VC
    - IV. RTL8367RB-VB
    - V. RTL8367SB

#### **Changes**

- 1. Update the following API.
  - √ rtk\_switch\_init
  - ✓ rtk\_port\_phyComboPortMedia\_set
  - ✓ rtk\_port\_phyComboPortMedia\_get
  - √ rtk\_port\_macForceLinkExt\_set
  - ✓ rtk\_port\_macStatus\_get
  - √ rtk\_qos\_init
  - √ rtk\_stat\_port\_getAll

Switch Product Page 18 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.1 Release Note**

Revision	Release Date	Summary
1.3.1	2014/06/09	1. Update API & driver for port function
		2. Add OAM & RLDP driver

#### The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek Unmanaged Switch ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - ✓ Switch chips:
    - I. RTL8363NB
    - II. RTL8364NB
    - III. RTL8365MB-VC
    - IV. RTL8367RB-VB
    - V. RTL8367SB

#### **Changes**

- 1. Update the following API.
  - √ rtk\_eee\_portEnable\_set
  - rtk\_port\_phyAutoNegoAbility\_set & rtk\_port\_phyAutoNegoAbility\_get
  - rtk\_port\_phyForceModeAbility\_set & rtk\_port\_phyForceModeAbility\_get
  - ✓ rtk port phyStatus get
  - √ rtk\_port\_phyReg\_set & rtk\_port\_phyReg\_get
  - √ rtk\_port\_phyEnableAll\_set
  - √ rtk\_switch\_init
  - ✓ rtk switch greenEthernet set & rtk switch greenEthernet get
- 2. Update the following driver
  - √ rtl8367c\_asicdrv\_eee.c
  - √ rtl8367c\_asicdrv\_green.c
  - √ rtl8367c\_asicdrv\_port.c
  - ✓ rtl8367c\_asicdrv\_phy.c
- 3. Add the following driver
  - ✓ rtl8367c asicdrv oam.c & rtl8367c asicdrv oam.h
  - √ rtl8367c\_asicdrv\_rldp.c & rtl8367c\_asicdrv\_rldp.h

Switch Product Page 19 / 20 Rev. 1.3.12



### **Unmanaged Switch API Driver V1.3.0 Release Note**

Revision	Release Date	Summary
1.3.0	2014/03/17	1. First Release

The package includes:

- 1. Realtek\_Unmanaged\_Switch\_API\_Document.pdf Realtek Unmanaged Switch API
- 2. Realtek\_Unmanaged\_Switch\_ProgrammingGuide.pdf Realtek Unmanaged Switch programming guide.
- 3. API\_Source Realtek API and driver source code.
- 4. Supported chips:
  - ✓ Switch chips:
    - I. RTL8363NB
    - II. RTL8364NB
    - III. RTL8365MB-VC
    - IV. RTL8367RB-VB
    - V. RTL8367SB

**Changes** 

N/A

Switch Product Page 20 / 20 Rev. 1.3.12