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RTL8363 Series
RTL8364 Series
RTL8365 Series
RTL8366 Series
RTL8367 Series
RTL8370 Series
RTL8310SR

Realtek Unmanaged Switch API Driver

Release Note

(CONFIDENTIAL: Development Partners Only)

Rev. 1.4.3
29th April, 2022

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TRADEMARKS

DISCLAIMER

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.

REVISION HISTORY

Revision	Release Date	Summary
1.4.0	2020/06/11	1. First release
1.4.1	2021/08/11	1. Add Fiber 2.5G support in rtl8367d DAL. 2. Add RGMII mode support in API rtk_port_phyComboPortMedia_set in rtl8367d DAL. 3. Add API rtk_port_fiberAbility_set / rtk_port_fiberAbility_get in rtl8367d DAL. 4. Update HSGMII/SGMII/Fiber parameter in rtl8367d DAL for better compatibility. 5. Remove Green Ethernet support in rtl8367d DAL. 6. Turn off auto-nego ability when user forces Fiber to 1G in rtl8367c DAL.
1.4.2	2021/11/30	1. Fix error #include in dal_rtl8367d_eee.c 2. Fix wrong number return when calling rtk_l2_limitLearningCnt_set in rtl8367d DAL 3. Add MDI/MDIX API 4. Add GPIO API 5. Add PHY TestMode API 6. Add RTCT support in rtl8367d DAL
1.4.3	2022/04/29	1. Update initialization parameter and set all meters to max value in rtl8367d DAL to prevent TX packet stopped if user doesn't configure meter's rate. 2. Add serial LED support in rtl8367c & rtl8367d DAL. 3. Update HSGMII/SGMII configuration in rtl8367c DAL. 4. Enable interrupt pin I/O setting in rtl8367d DAL. 5. Add RTK API rtk_port_phyLinkDownPowerSaving_set/get. 6. Add RTK API rtk_port_phyGreenEthernet_set/get. 7. Add RTK API rtk_port_maxPacketLength_set/get.

Unmanaged Switch API Driver V1.4.3 Release Note

Revision	Release Date	Summary
1.4.3	2022/04/29	Initialization parameter update. Meter / LED / Interrupt / SGMII / HSGMII configuration change New API added.

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:

● RTL8363NB	● RTL8363SC
● RTL8364NB	● RTL8370MB
● RTL8365MB-VC	● RTL8310SR
● RTL8367RB-VB	● RTL8363SC-VB
● RTL8367SB	● RTL8366SD
● RTL8363NB-VB	● RTL8367S-VB
● RTL8364NB-VB	● RTL8367RB-VC
● RTL8367S	● RTL8367SC
● RTL8366SC	● RTL8365MB-VD

Changes

1. Update initialization parameter and set all meters to max value in rtl8367d DAL to prevent TX packet stopped if user doesn't configure meter's rate.

2. Add serial LED support in rtl8367c & rtl8367d DAL.

3. Update HSGMII/SGMII configuration in rtl8367c DAL.

4. Enable interrupt pin I/O setting in rtl8367d DAL.

5. Add RTK API rtk_port_phyLinkDownPowerSaving_set/get.

6. Add RTK API rtk_port_phyGreenEthernet_set/get.

7. Add RTK API rtk_port_maxPacketLength_set/get.

Unmanaged Switch API Driver V1.4.2 Release Note

Revision	Release Date	Summary
1.4.2	2021/11/30	Error fix. New API added.

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:

   - RTL8363NB
   - RTL8364NB
   - RTL8365MB-VC
   - RTL8367RB-VB
   - RTL8367SB
   - RTL8363NB-VB
   - RTL8364NB-VB
   - RTL8367S
   - RTL8366SC

   - RTL8363SC
   - RTL8370MB
   - RTL8310SR
   - RTL8363SC-VB
   - RTL8366SD
   - RTL8367S-VB
   - RTL8367RB-VC
   - RTL8367SC
   - RTL8365MB-VD

Changes

1. Fix error #include in dal_rtl8367d_eee.c

2. Fix wrong number return when calling rtk_l2_limitLearningCnt_get in rtl8367d DAL

3. Add MDI/MDIX API

4. Add GPIO API

5. Add PHY TestMode API

6. Add RTCT support in rtl8367d DAL

Unmanaged Switch API Driver V1.4.1 Release Note

Revision	Release Date	Summary
1.4.1	2021/08/11	New APIs added & parameter update Fiber 2.5G support

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:

● RTL8363NB	● RTL8363SC
● RTL8364NB	● RTL8370MB
● RTL8365MB-VC	● RTL8310SR
● RTL8367RB-VB	● RTL8363SC-VB
● RTL8367SB	● RTL8366SD
● RTL8363NB-VB	● RTL8367S-VB
● RTL8364NB-VB	● RTL8367RB-VB
● RTL8367S	● RTL8367SC
● RTL8366SC	● RTL8365MB-VD

Changes

1. Add Fiber 2.5G support in rtl8367d DAL.

2. Add RGMII mode support in API rtk_port_phyComboPortMedia_set in rtl8367d DAL.

3. Add API rtk_port_fiberAbility_set / rtk_port_fiberAbility_get in rtl8367d DAL.

4. Update HSGMII/SGMII/Fiber parameter in rtl8367d DAL for better compatibility.

5. Remove Green Ethernet support in rtl8367d DAL.

6. Turn off auto-nego ability when user forces Fiber to 1G in rtl8367c DAL.

Unmanaged Switch API Driver V1.4.0 Release Note

Revision	Release Date	Summary
1.4.0	2020/06/11	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:

● RTL8363NB	● RTL8363SC
● RTL8364NB	● RTL8370MB
● RTL8365MB-VC	● RTL8310SR
● RTL8367RB-VB	● RTL8363SC-VB
● RTL8367SB	● RTL8366SD
● RTL8363NB-VB	● RTL8367S-VB
● RTL8364NB-VB	● RTL8367RB-VB
● RTL8367S	● RTL8367SC
● RTL8366SC	● RTL8365MB-VD

Changes

1.　First Release