



REALTEK

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RTL9301

Power Consumption

Rev. 1.0
2017/02/24

DUT INFORMATION

DUT-RTL No.	RTL9301	Lot No./DateCode	G927EE GG36
Note :	RTL9301_QA_BOARD_P4L_V1.0 RTL9301_DEMO_BOARD_P4L_V1.2		

Release Revision History

Revision	Release Date	Summary
1.0	2017/2/24	First Release

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1. Power Consumption Measurement

Objective of test:

To measure the total current consumption under 100% Full Loading and IDLE state.

Equipment of test:

- Power supply: Agilent E3648A
- DUT: RTL9301_QA_BOARD_P4L_V1.0
- Packet generator: Ixia Packet Generator.

Setup & Test procedure:

- Connect all UTP from packet generator.
- Set the test traffic as: ring, random data, 1518 bytes length, 96 bit-time IPG, 100% utilization continue free run at room temperature.
- Record the power consumption (supply current) under following case after measuring current value is stable.

1.1. RTL9301 power consumption

LED condition:

- 2 LEDs per port (one single-color Link, and one single-color Act) on when operation at 1000M/100M/10M speed.
- 3 LEDs per port (one single-color Link, and two single-color Act) on when operation at 10G speed.

1.1.1. Power consumption at 25 °C ambient temperature

	1.1	3.3	1.5	Total Power
	(mA)	(mA)	(mA)	(mW)
24G+4*10G Link	3241	88	51	3932
24G+4*10G Ack	3728	88	51	4467.7
Link down	3077	88	51	3751.6

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