

Customer Notification

ETHERNET PHY

Single Channel Industrial PHY with PTP

Operating Precautions

UPD60610 / UPD60611

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Table of Contents

- A) Table of Operating Precautions5
- B) Description of Operating Precautions6
- C) Valid Specification7
- D) Revision History8

A) Table of Operating Precautions

Table A-1 Table description

No.	Outline	Order code	uPD60610	uPD60611
		Rank ^{Note}	n. a .	n. a.
1	When PTP is set to 1-Step Mode Ethernet reception does not work	✓	✗	✗
2	In RMI mode received data may be corrupted	✗	✗	✗

✓: Not applicable

✗: applicable

The rank is indicated by the letter appearing at the 5th position from the left in the lot number, marked on each product.

B) Description of Operating Precautions

No.1	When PTP is set to 1-Step Mode Ethernet reception does not work
<p><u>Details</u> When the PTP module is set to one step mode by setting the ONE_STEP mode bit in the PTP_Config_n register the RXCLK is inverted to its normal operation. Thus MII data is output from the device at the same time the valid clock edge changes and data is latched by the MAC just when the data value is changing leading to corrupted reception.</p> <p><u>Workaround</u> For evaluation purposes it is possible to connect the TXCLK signal instead of the RXCLK signal to the MAC. However this results in a slightly increased Bit Error Rate and must not be used in Mass Production devices.</p>	

No. 2	In RMII mode received data may be corrupted
<p><u>Details</u> The RMII interface may receive corrupted data due to an issue in the internal MII/RMII converter.</p> <p><u>Workaround</u> Do not use the RMII interface in production devices. For evaluation purpose note that some frames may get lost or received with a faulty CRC.</p>	

C) Valid Specification

Item	Date published	Document No.	Document Title
1	July 2012	R19UH0082ED0100	Single PHY ASSP User Manual

D) Revision History

Item	Date published	Document No.	Comment
1	July 2012	R19TU0003ED0100	1 st release

