

**Customer Notification** 

# ETHERNET PHY

# **Dual Channel Industrial PHY with PTP**

**Operating Precautions** 

μPD60620 / μPD60620A / μPD60621A

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#### A) Table of Operating Precautions

No.	Outline				
		Order code	uPD60620	uPD60620A	uPD60621A
1	In RMII mode received frame may get lost.		$\checkmark$	×	×
2	Autocrossover does not work as specified in IEEE802.3.		×	×	×

 Table A-1 Table of Operating Precautions

✓: Not applicable

x: applicable

## B) Description of Operating Precautions

No. 1	In RMII mode received data may be corrupted
	<u>Details</u> In RMII mode, received frame may get lost at MAC input due to an issue in the internal MII/RMII converter.
	<u>Workaround</u> Do not use the RMII interface in production devices. For evaluation purpose note that some frames may get lost.

No. 2	Autocrossover does not work as specified in IEEE802.3
	DetailsIEEE802.3 requires the PHY to send FLP signals on the TX and RX lines when performing Autocrossover at randomized time distances and changing continuously between TX and RX lines. These signals are only sent on the TX line and the distance between two bursts is not randomized. Changes between TX and RX are only done when a signal is detected on the TX line indicating that both PHY are sending on the same line.
	<u>Workaround</u> There is no workaround required. Due to differences in the crystals autocrossover will work as expected under all circumstances except if two PHYs are connected to each other that are running on exactly the same clock. This may be the case if the two channels of a two channel PHY are directly connected to each other, in this case Autocrossover will never end.

### C) Valid Specification

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1	1 December 2012 R19UH0083ED0100		Dual PHY ASSP User Manual

### D) Revision History

item	Date published	Document No.	Comment
1	February 2013	R19TU0004ED0100	1 <sup>st</sup> release

