

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RZ*-A0156A/E	Rev.	1.00
Title	Ethernet Switch (ETHSW) issue about transmit timestamp function		Information Category	Technical Notification		
Applicable Product	RZ/T2M Group RZ/T2ME Group RZ/T2H and RZ/N2H Groups RZ/N2L Group	Lot No.	Reference Document	RZ/T2M Group User's Manual: Hardware Rev.1.30 (R01UH0916EJ0130)		
		All		RZ/T2ME Group User's Manual: Hardware Rev.1.10 (R01UH1062EJ0110) RZ/T2H and RZ/N2H Groups User's Manual: Hardware Rev.1.20 (R01UH1039EJ0120) RZ/N2L Group User's Manual: Hardware Rev.1.40 (R01UH0955EJ0140)		

This document informs the hardware issue about transmit timestamp function in Ethernet Switch (ETHSW).

1. Issue

When a transmission timestamp needs to be obtained for a specific frame, a unique ID can be attached to the management tag, and both the timestamp and the ID are stored in the timestamp FIFO. By retrieving the timestamp and the ID from the timestamp FIFO, it is possible to identify, on a one-to-one basis, which frame the timestamp corresponds to.

However, due to the hardware issue, there is a possibility that the same ID may be consecutively associated with and stored alongside different timestamps.

2. Workaround

For any unique ID, use only the first timestamp read that is associated with that ID. If a second or subsequent timestamp for the same ID is obtained, discard that timestamp.