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RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-770-A146A/E	Rev.	1.00
Title	The error correction and notes about receive processing of multi-buffer frame of Gigabit Ethernet Controller		Information Category	Technical Notification		
Applicable Product	SH7763 Group	Lot No.		SH7763 User'sManual: Hardware (R01UH0349EJ0300)		
		All	Reference Document			

We would like to inform you of the error correction and notes about receive processing of multi-buffer frame of Gigabit Ethernet Controller.

1. Description of the RMSA0 bit is corrected

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Description of the RMSA0 bit in the Receive/Relay Function Set Register (Port 0) (TSU_FWSL0) is corrected as follows.

[Error]

Sets the processing method when the SA (sourceaddress) of a frame received from port 0 is not registered in the entry table.

- 0: Frame is not received
- 1: Frame is received

[Correction]

Sets the processing method of a frame received from port 0.

- 0: Frame is received according to setup of the CAM function.
- 1: Frame is received regardless of setup of the CAM function.
- 2. Description of the RMSA1 bit is corrected

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Description of the RMSA1 bit in the Receive/Relay Function Set Register (Port 1) (TSU_FWSL1) is corrected as follows.

[Error]

Sets the processing method when the SA (sourceaddress) of a frame received from port 1 is not registered in the entry table.

- 0: Frame is not received
- 1: Frame is received

[Correction]

Sets the processing method of a frame received from port 1.

- 0: Frame is received according to setup of the CAM function.
- 1: Frame is received regardless of setup of the CAM function.



 ${\it 3. Notes about receive processing of multi-buffer frame (single-frame/multi-descriptor)}.$

[Notice]

When the receive descriptor is newly added after the receive descriptor empty and DMA transfer of a receiving frame is resumed, it becomes impossible to perform DMA transfer normally in receive processing of multi-buffer frame (single-frame/multi-descriptor).

Please perform the following workaround or use all receive data of one frame in a one receive buffer(single-frame/single-descriptor) in receive processing.

[Occurring Conditions]

When the receive descriptor is empty in receive processing of multi-buffer frame (single-frame/multi-descriptor). [Workaround]

When using receive processing of multi-buffer frame (single-frame/multi-descriptor), please perform as either of following.

- (1) Don't empty the receive descriptor.
- (2) When the receive descriptor is empty, execute a software reset by means of the SWRT and SWRR bits in the E-DMAC mode register (EDMR).

