

RENESAS TECHNICAL UPDATE

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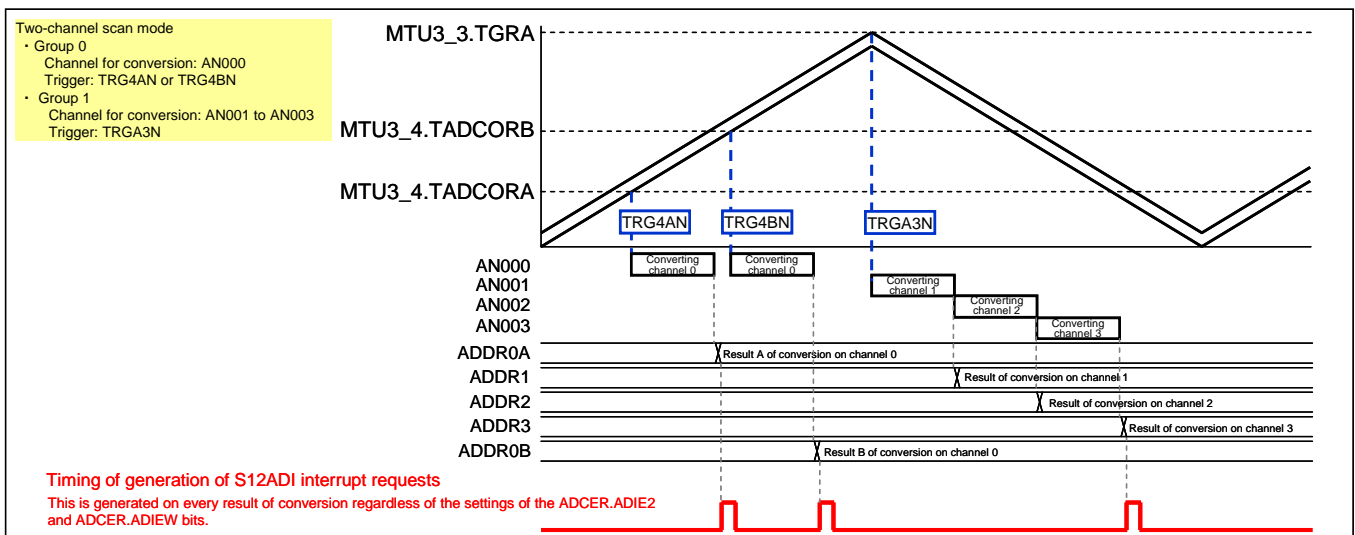
Product Category	MPU/MCU	Document No.	TN-RX*-A044A/E	Rev.	1.00
Title	Point for Caution Regarding Interrupts When Using Double Data Registers in Combination in Two-Channel Scan Mode		Information Category	Technical Notification	
Applicable Product	RX62T Group, RX62G Group	Lot No.	Reference Document	RX62T Group User's Manual: Hardware RX62G Group User's Manual: Hardware	
		All lots			

Thank you for your valued patronage and best wishes for your continued success in business.

We would like to inform you of a point for caution regarding the timing of the generation of interrupt requests by the S12ADI when double data registers are used in combination in two-channel scan mode.

1.1 Point for Caution

When the 12-bit A/D converter (S12ADA) is used with double data registers combined in two-channel scan mode, an S12ADI interrupt request is generated every time conversion is completed regardless of the settings of the two-channel scan interrupt selection bit (ADIE2) and the double-trigger interrupt selection bit (ADIEW) in the A/D control extended register (ADCER).



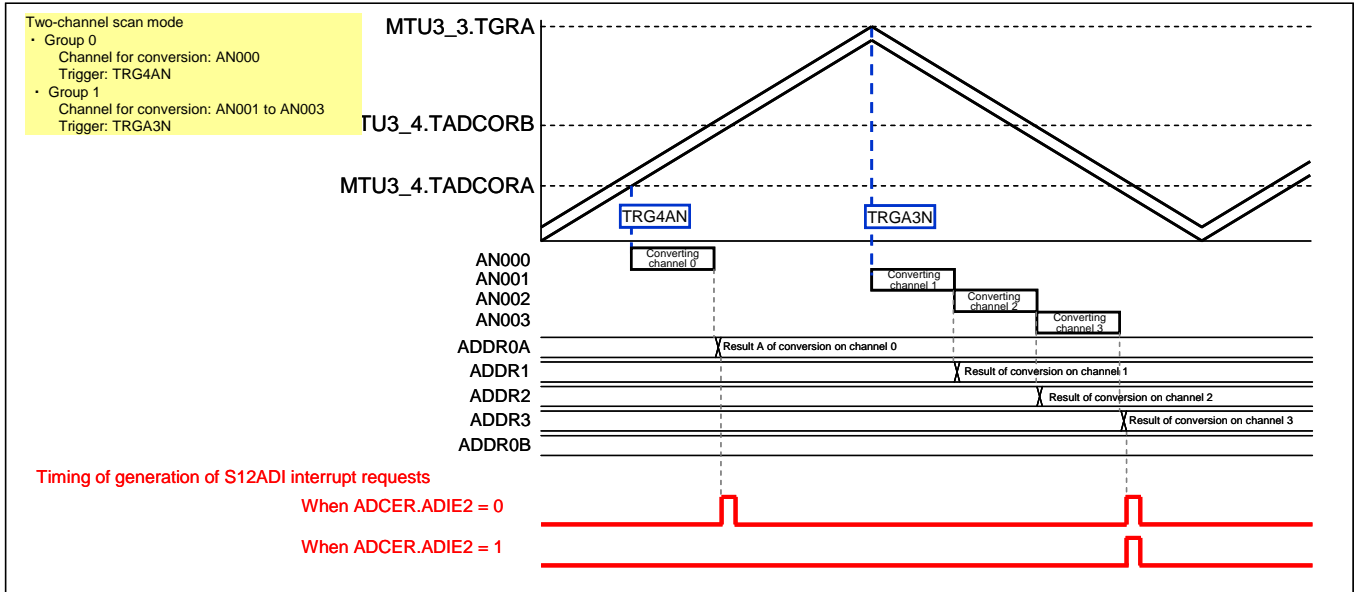
Example of Operation when Double Data Registers are Used in Combination in Two-Channel Scan Mode

1.2 Action from Here

We will reflect this point in the hardware manuals for the RX62T and RX62G the next time they are revised.

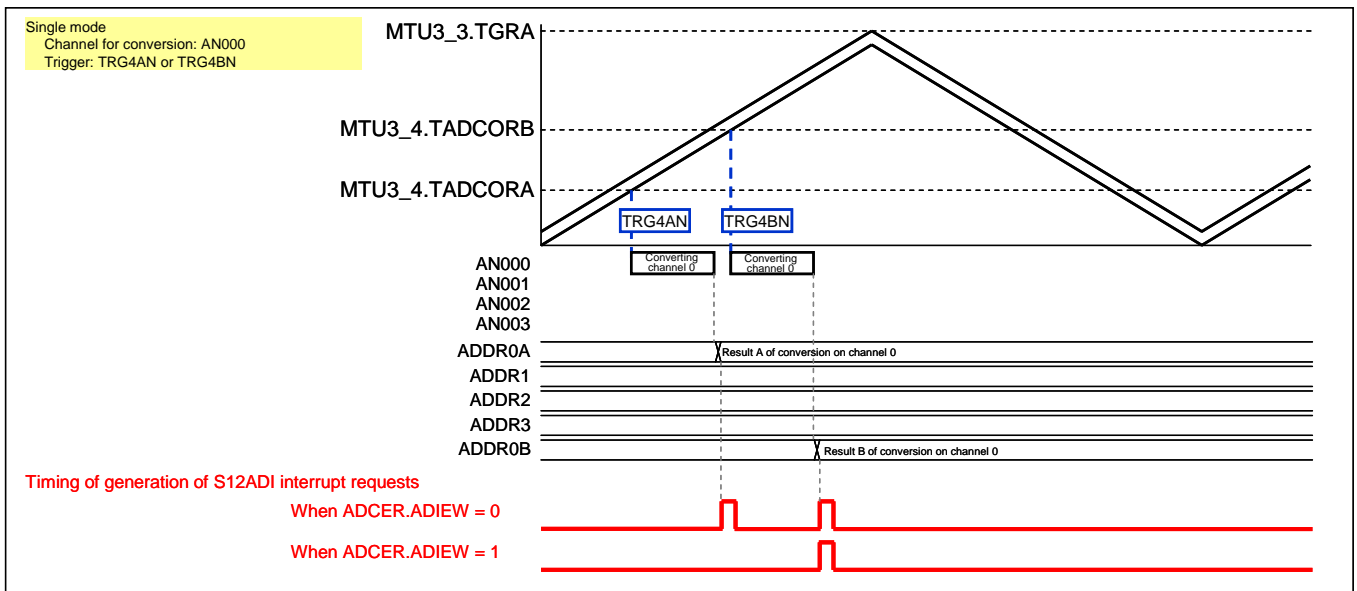
1.3 Supplementary Explanations

(a) When double data registers are not used for A/D conversion in two-channel scan mode, S12ADI interrupts are generated in accord with the setting of the ADCER.ADIE2 bit.



Example of Operation in Two-Channel Scan Mode

(b) When double data registers are used for A/D conversion in single mode or in one-cycle scan mode, S12ADI interrupts are generated in accord with the setting of the ADCER.ADIEW bit.



Example of Operation when Double Data Registers are in Use