

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RA*-A0059A/E	Rev.	1.00
Title	RA6T2 Group Setting Value of ADDOPCRn.SIGNSEL for Self-diagnosis		Information Category	Technical Notification		
Applicable Product	RA6T2 Group	Lot No.	Reference Document	RA6T2 Group User's Manual : Hardware Rev.1.20		
		All				

Setting Value of ADDOPCRn.SIGNSEL for Self-diagnosis function had been modified.

[Modified]

Table 36.9 Operation setting and expected value when self-diagnosis function is used

Self-diagnosis mode	Register setting value				Expected value of A/D conversion data *1 *2
	ADSGDCRx	ADCHCRy		ADDOPCRy	
	DIAGVAL[2:0]	CNVCS[6:0]	AINMD	SIGNSEL	
Self-diagnosis mode 1	100b	0x60	1	0	0x0000 *3
Self-diagnosis mode 2	101b	0x60	1	0	0x8000 *4
Self-diagnosis mode 3	110b	0x60	1	0	0x7FFF *5

Note: x = 0 to 8, y = 0 to 36

Note 1. The expected value is the ideal A/D converter result stored in ADEXDR0.DATA[15:0] or ADFIFODRx.DATA[15:0].

Note 2. The A/D conversion data is the value when 16-bit data format (ADDOPCRn.ADPRC[1:0] = 00b) is selected.

Note 3. The expected value of A/D conversion is the signed data. The A/D conversion result becomes 0x0001 (+1) or more when a positive accuracy error occurs in A/D conversion, and becomes 0xFFFF (-1) or less when a negative accuracy error occurs.

Note 4. When an accuracy error occurs in A/D conversion, the A/D conversion result becomes greater than or equal to 0x8000.

Note 5. When an accuracy error occurs in A/D conversion, the A/D conversion result becomes less than or equal to 0x7FFF.

[Original]

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