[Notes]

Solution Toolkit QE for AFE[RA] V1.0.0: Development Assistance Tool for Analog Front End

R20TS0709EJ0100 Rev.1.00 May. 16, 2021

Outline

When using of the products in the title, note the following points.

- 1. Notes on displaying the A/D conversion value of a specific channel on ADC16.
- 2. Restrictions on obtaining A/D conversion values for high output data rates on ADC16
- 1. Notes on displaying the A/D conversion value of a specific ADC16 channel

1.1 Applicable Products

Solution Toolkit QE for AFE[RA] V1.0.0: Development Assistance Tool for Analog Front End

1.2 Applicable Devices

RA Family : RA2A1 group

1.3 Details

When ADC16 input channel AN022, AN023, or SBIAS/VREFI is selected in the [AFE Connection] tab, the A/D conversion value cannot be displayed in the [AD Monitor] tab.

1.4 Conditions

The problem arises when settings (1), (2) and (3) are used.

(1) Select ADC16 input channels AN022, AN023, and SBIAS/VREFI in the [AFE Connection] tab.

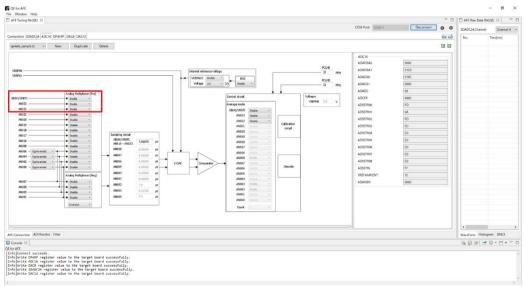


Figure 1 Input channel settings

(2) In the [AD Monitor] tab, switch the monitor target to ADC16 and click the [Start AFE Tuning] button.

File Window Help			
AFE Tuning RA(QE)			- 0
		COM Port: COM11	V Disconnect 🔘 🎯
Monitor target ADC16 ~			5 <mark>5 2 1</mark> 2 3 9
Channel 12 Channel 13 Channel 14 Channel 15 Channel 16	Channel 17 (506, 2007) 020072020000	Channel selection Channel 15 ∨ ⊘Auto Scaling	
<	> r		

QE for AFI



(3) Figure 2 Monitoring target setting Select channel 15 (AN022), channel 16 (AN023), or channel 17 (SBIAS/VREFI) in the channel settings.

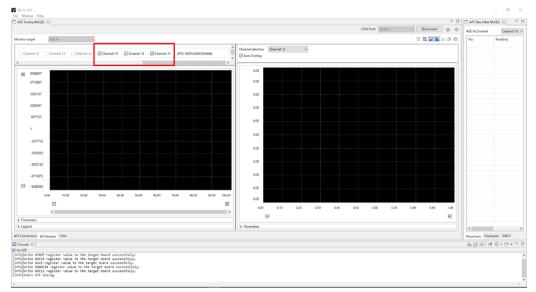


Figure 3 Monitoring channel setting

1.5 Workaround

There is no workaround.

1.6 Schedule for Fixing the Problem

This problem will be fixed in the next version. (Scheduled to be released in end of July 2021.)



2. Restrictions on obtaining A/D conversion values for high output data rates on ADC16

2.1 Applicable Products

RA2A1 Group Board Control Program for QE for AFE (R01AN5795eJ0100)

2.2 Applicable Devices

RA Family : RA2A1 group

2.3 Details

Unable to obtain A/D conversion value for analog input channel with high output data rate.

2.4 Conditions

It occurs when the following are set at the same time.

(1) When deselecting the average target in A/D-converted value average channel select register (ADADSn).(2) When selecting "1-time conversion" in A/D-converted value average count select register (ADADC).

2.5 Workaround

There is no workaround.

2.6 Schedule for Fixing the Problem

This problem will be fixed in the next version. (Scheduled to be released in end of May 2021.)



Revision History

		Description	
Rev.	Date	Page	Summary
1.00	May.16.21	-	First edition issued

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