[Upgrade to revision] Solution Toolkit QE for AFE[RA] V1.1.0: Development Assistance Tool for Analog Front End

R20TS0740EJ0100
Rev.1.00
Sep. 01, 2021

Outline

We have updated QE for AFE[RA] (development assistance tool for analog front end for the RA family) from V1.0.0 to V1.1.0.

Major functional improvements and changes are as follows.

- Addition of the function for checking analog IP connections and pins on the AFE connection tab
- Addition of supported analog IPs
- Support of voltage settings of the analog power supply pin AVCC0

Refer to the URL below for the overview of the product.

https://www.renesas.com/qe-afe

1. Product and Version to Be Updated

- QE for AFE[RA] V1.0.0

2. Descriptions of the Update

The major revision points are as follows. For details and installation instructions, see the following release note.

- QE for AFE[RA] V1.1.0 Release Note

https://www.renesas.com/search?keywords=r20ut5037

2.1 Issue Fixed

The problem regarding the point below has been fixed.

(1) RENESAS TOOL NEWS, Document No. R20TS0709EJ0100

1. Notes on displaying the A/D conversion value of a specific channel on ADC16

   Applicable devices: RA2A1 group

   For details about the problem, refer to the following URL:

   https://www.renesas.com/search?keywords=r20ts0709

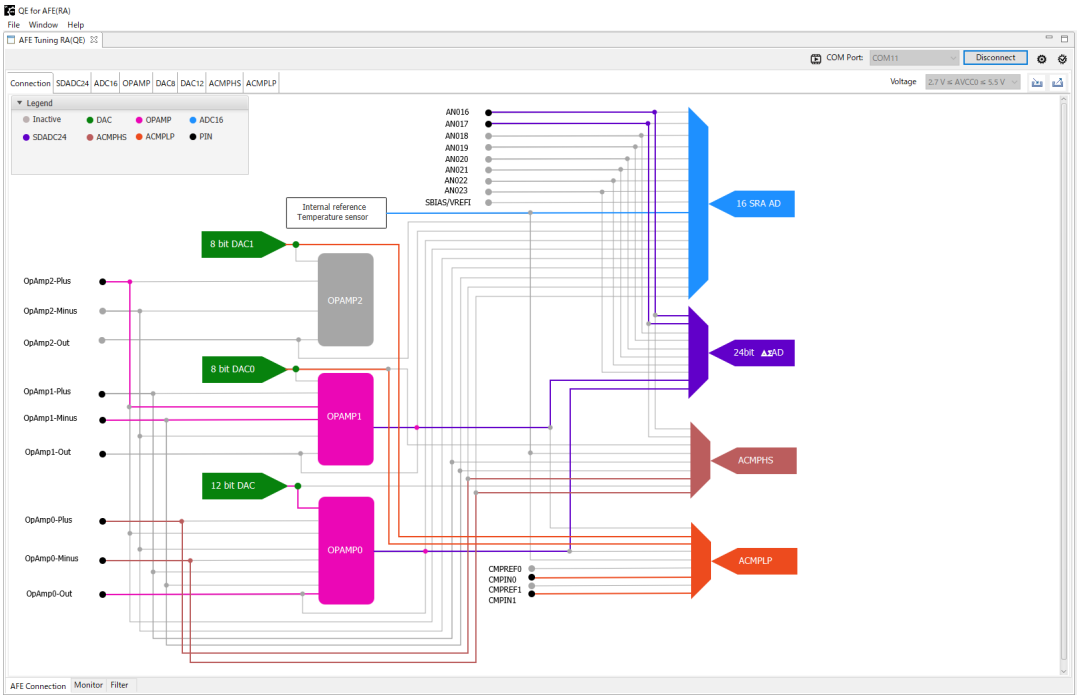
Remark: The problem described in "2. Restrictions on obtaining A/D conversion values for high output data rates on ADC16" was fixed by the following software:

RA2A1 Groupe Board Control Program for 'QE for AFE' - Sample Code

2.2 Improved Functionality

➢ Addition of the function for checking analog IP connections and pins on the AFE connection tab

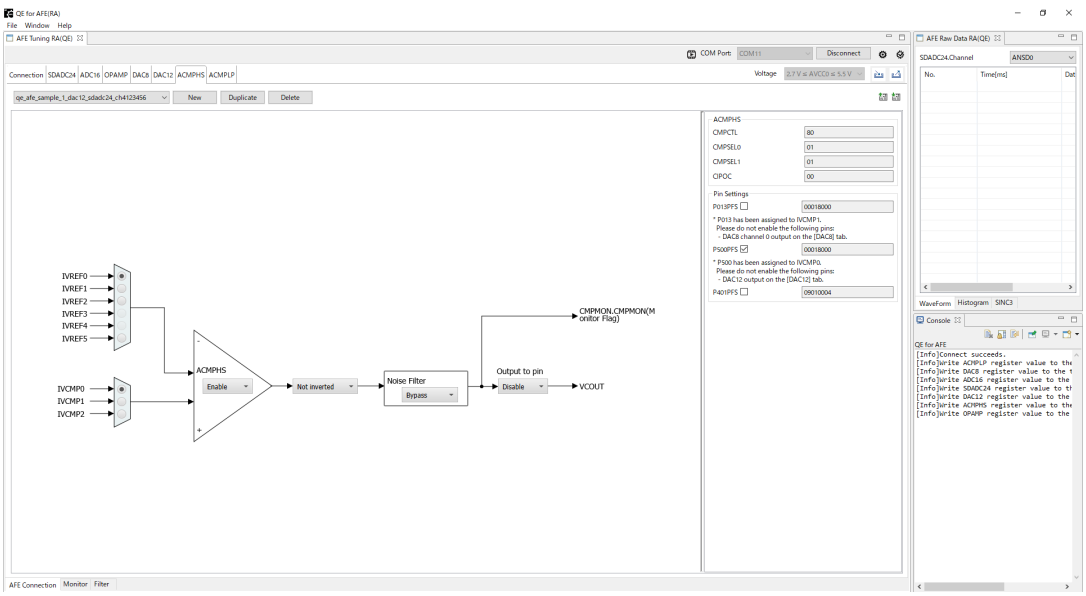
The connection settings in the block diagram of each analog IP on the AFE connection tab can now be checked by using the GUI.



➢ Addition of supported analog IPs

Support of high speed analog comparator (ACMPHS) and lower power consumption comparator (ACMPLP) has been added.

It is now possible to configure the 12-bit D/A converter (DAC12), 8-bit D/A converter (DAC8), and operation amplifier (OPAMP) by using the GUI. In addition, the temperature sensor output and internal reference voltage have been supported as extension input of the 16-bit A/D converter (ADC16).



- Support of voltage settings of the analog power supply pin AVCC0

Power supply settings of the analog power supply pin AVCC0 have been supported so that more detailed settings can be specified.

3. Obtaining the Product

Download the installer for QE for AFE[RA] V1.1.0 from the following URL:

https://www.renesas.com/qe-afe

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Sep.01.21	-	First edition issued

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:
www.renesas.com/contact/.

TS Colophon 4.2