



## Product Change Notification: SYST-29EGKB294

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### Date:

03-Jul-2026

### Product Category:

8-Bit Microcontrollers

### Notification Subject:

Data Sheet - AVR32/16DU14/20/28/32 Complete Data Sheet

### Affected CPNs:

[SYST-29EGKB294\\_Affected\\_CPN\\_07032026.pdf](#)

[SYST-29EGKB294\\_Affected\\_CPN\\_07032026.csv](#)

### Notification Text:

SYST-29EGKB294

Microchip has released a new Datasheet for the AVR32/16DU14/20/28/32 Complete Data Sheet of devices. If you are using one of these devices please read the document located at [AVR32/16DU14/20/28/32 Complete Data Sheet](#).

**Notification Status:** Final

#### Description of Change:

#### Document:

- General improvement of the documentation and its structure
- Status: *Complete Data Sheet*
- Updated AVR® DU Device Designations figure
- The USART0 offset has been corrected
- Removed the EXTBREAK

#### CPU:

- Updated the CPU's *Stack Pointer Register* description

**Memories:**

- Added the *USERROW Register*

**NVMCTRL:**

- Updated the description of *Section Sizes* in the *Logical Sections* section
- Note has been added to the *Command Modes* section in the *Function Description* section
- Updated the *Available Interrupt Vectors and Sources* table
- Notes have been added to the flags of the *INTLAGS* register

**CLKCTRL:**

- The *Signal Description* has been updated
- Improved the description of the *Sleep mode operation*

**EVSYS:**

- Removed the *Event Users* table

**PORT-I/O:**

- Improved the description of the following sections:
  - Initialization
  - The Pin descriptions
  - The Interrupts
  - Available Interrupt Vectors and Sources
- Updated the *Available Interrupt Vectors and Sources* table
- Updated the *Event's name in the Event Generators in PORTx* table
- Removed all INLVL bits in PORTx registers

**BOD:**

- Improved the bit description and removed the sentence
- Improved the *Initialization* description
- Updated the *CTRLA* register reset value to 0xXX

**VREF:**

- Improved the *Initialization* description

**TCA:**

- Updated the Interrupt tables:
  - *Available Interrupts Vectors and Sources in Single and Split Modes*
- Improved the description for setting or changing interrupt settings

- Updated the bit field values for the Waveform Generation Mode WGMODE bit field in the CTRLB register

#### **TCB:**

- Improved the description of the *Output Configuration*

#### **USART:**

- The *Host SPI* is updated to *SPI Host*
- The *LIN Client* is updated to *LIN Responder*
- Added the description of the *Transmit Pipeline* section
- Note is removed from the *Receiver Error Flags* section
- Improved the description of *Flushing the Receive Buffer*
- Updated the following figures in the *Functional Description* section:
  - Frame Formats
  - Auto-Baud Timing
  - XDIR Drive Timing
  - Protected Identifier Field and Mapping of Identifier and Parity Bits
- Updated the *Available Interrupt Vectors and Sources* table
- Updated Registers:
  - BAUD: The *Reset value* is 0x0000
  - DBGCTRL: added the description of the DBGRUN bit

#### **USB:**

- Updated the *Event Generators in USB* table
- Improved the description of the *Interrupts* section
- Updated the *Available Interrupt Vectors and Sources* table
- Updated the following tables in the *Interrupts* section:
  - Transaction Complete Interrupt Sources
  - Bus Event Interrupt Sources

#### **AC:**

- Updated the Block Diagram
- Updated the Signal Description table
- Updated the Functional Description:
  - Improved the description of the initialization during the start-up time. The INITVAL bit in *ACn.MUXCTRL* register is used
  - Input and Reference Selection: Added a second formula to calculate  $V_{DACREF}$
  - Updated the Analog Comparators in Window Mode figure
- Updated the Interrupts:
  - Available Interrupt Vectors and Sources tables

- Configurations for Available Interrupt Vectors and Sources table
- Updated registers:
  - Updated the description of the bits and bit fields in the registers
  - Added the DACREFL register

**ADC:**

- The Main Clock Time base control register is CLKCTRL.MCLKTIMEBASE
- Improved the *Accumulator Test* description
- Improved the *Temperature sensor usage* description
- Improved *The Interrupt* section
- The register offsets corrected to agree with header files
- MUXPOS register corrections

**UPDI:**

- Corrected the start address in figure *Memory Map, As Seen From The UPDI*

**Electrical Characteristics:**

- Final limits updated
- Updated  $I_{DD\_ADC}$  in *Peripherals Power Consumption*
- Updated the *Supply Voltage* table
  - Added *Input Leakage on the Regulator Output ( $V_{USB}$  Pin)*
  - Added *Sink Function Trigger Point*
- Characteristic graphs added

**Impacts to Data Sheet:** None

**Reason for Change:** To Improve Productivity

**Change Implementation Status:** Complete

**Date Document Changes Effective:** 03 Jul 2026

**NOTE:** Please be advised that this is a change to the document only the product has not been changed.

**Markings to Distinguish Revised from Unrevised Devices:** N/A

**Attachments:**

**AVR32/16DU14/20/28/32 Complete Data Sheet**

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