



Product Change Notification: SYST-29MYUT419

Date:

03-Jul-2026

Product Category:

8-Bit Microcontrollers

Notification Subject:

Data Sheet - AVR64DU28/32 Complete Data Sheet

Affected CPNs:

[SYST-29MYUT419_Affected_CPN_07032026.pdf](#)

[SYST-29MYUT419_Affected_CPN_07032026.csv](#)

Notification Text:

SYST-29MYUT419

Microchip has released a new Datasheet for the AVR64DU28/32 Complete Data Sheet of devices. If you are using one of these devices please read the document located at [AVR64DU28/32 Complete Data Sheet](#).

Notification Status: Final

Description of Change:

Documents:

- General improvements of the documentation and its structure
- Status: *Complete Data Sheet*
- The USART0 offset has been corrected
- Removed the EXTBREAK

CPU:

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

Memories:

- Added the *USERROW Register*

Peripherals and Architecture:

- The following tables have been updated to show only 28-Pin and 32-Pin:
 - Peripheral Address Map
 - System Memory Address Map

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 descriptions 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 the 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 Interrupt 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
 - The Input and Reference Selection: Added a second formula to calculate V_{DACREF}
 - Updated the Analog Comparators in the 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 the header files
- MUXPOS register corrections

UPDI:

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

Electrical Characteristics:

- Updated the final limits
- 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

Microchip Information:

- Updated

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:

AVR64DU28/32 Complete Data Sheet

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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