Product Change Notification - SYST-27YEGS241

Date:

29 Mar 2019

Product Category:

8-bit Microcontrollers

Affected CPNs:

Notification subject:

Data Sheet - megaAVR 0-series Family Data Sheet

Notification text:

SYST-27YEGS241

Microchip has released a new DeviceDoc for the megaAVR 0-series Family Data Sheet of devices. If you are using one of these devices please read the document located at megaAVR 0-series Family Data Sheet.

Notification Status: Final

Description of Change:

1) Entire document: Added support for ATmega808/809/1608/1609, Added support for 40-pin PDIP, Editorial updates and Renamed document type from manual to family data sheet on the

2) Features: Updated data retention information and Extended speed grade information on the Features section

3) Memories: Added oscillator calibration (OSCCALnnxn) registers; SIGROW- Updated description to clarify that information is stored in fuse bytes, not in volatile registers; FUSE - Clarifying that reserved bits within a fuse byte must be written to 'lsquo;0', Removed non-recommended BOD levels in BODCFG, Updating access for LOCKBIT from R/W to R, Removed misleading reset values; Updated Memory Section Access from CPU and UPDI on Locked Device section

4) AVR CPU: Removed redundant information

5) Clock Controller (CLKCTRL): Added OSC20MCALIBA register

6) Event System (EVSYS): STROBE/STROBEA renamed to STROBEx; Event Generators - Added Window Compare Match for ADC, Updated TCB event generator description; Event Users- Updated table; STROBEn - Updated access from R/W to W; Updated generator names in CHANNEL ; Updated table in USER

7) PORTMUX - Port Multiplexer - Added explicit information for EVSYSROUTEA register

8) BOD - Brown-out Detector - Removed non-recommended BOD levels from CTRLB

9) TCA - 16-bit Timer/Counter Type A: Single Slope PWM Generation - Revised figure and description; Dual Slope PWM - Revised figure and description; Events - Revised description and added table

10) TCB - 16-bit Timer/Counter Type B : Updated block diagram for clock sources; Mode figures legend use improved; Input Capture Pulse-Width Measurement mode figure corrected; 8-bit PWM mode pseudo-code replaced by figure; Added output configuration table

11) Real-Time Counter (RTC): Clarified that first PIT interrupt and RTC count tick will be unknown; Added Debug Operation section; Updated reset values for PER and CMP register; Updated access for PITINTFLAGS register

12) USART - Universal Synchronous and Asynchronous Receiver and Transmitter: Structural changes; General content improvements

13) Serial Peripheral Interface (SPI): Added INTCTRL register

14) Two-Wire Interface (TWI): Removed misleading internal information from Overview section; Cleaned up Dual Control information; Clarified APIEN description in SCTRLA

15) CCL - Configurable Custom Logic: Register summary updated- Number n of LUTs and according registers (LUTnCTRLA, LUTnCTRLB, LUTnCTRLC, TRUTHn); Update of terms and descriptions: - Block Diagram section - CCL Input Selection MUX section - Sequencer Logic - Events - Filter - Association LUT-Sequencer

16) Analog-to-Digital Converter (ADC): Updated ADC Timing Diagrams - Single Conversion - Free-Running Conversion; Added information in the Events section

17) Unified Program and Debug Interface (UPDI): General content improvements; Updated Access for UROWWRITE in ASI_KEY_STATUS register

Impacts to Data Sheet: None

Reason for Change: To Improve Manufacturability

Change Implementation Status: Complete

Date Document Changes Effective: 29 Mar 2019

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
Attachment(s):
megaAVR 0-series Family Data Sheet

Please contact your local Microchip sales office with questions or concerns regarding this notification.

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Affected Catalog Part Numbers (CPN)

ATMEGA1608-AFR
ATMEGA1608-MFR
ATMEGA3208-AFR
ATMEGA3208-MFR
ATMEGA3208-XFR
ATMEGA3209-AFR
ATMEGA3209-MFR
ATMEGA4808-AFR
ATMEGA4808-MFR
ATMEGA4808-XFR
ATMEGA4809-AFR
ATMEGA4809-MFR
ATMEGA4809-XPRO