

### Product Change Notification / SYST-13HJDL344

### Date:

14-Oct-2021

### **Product Category:**

Microprocessors

### **PCN Type:**

**Document Change** 

### **Notification Subject:**

ERRATA - SAM9X60 SIP Device Silicon Errata and Datasheet Clarification Document Revision

### Affected CPNs:

SYST-13HJDL344\_Affected\_CPN\_10142021.pdf SYST-13HJDL344\_Affected\_CPN\_10142021.csv

### Notification Text:

SYST-13HJDL344

Microchip has released a new Product Documents for the SAM9X60 SIP Device Silicon Errata and Datasheet Clarification of devices. If you are using one of these devices please read the document located at SAM9X60 SIP Device Silicon Errata and Datasheet Clarification.

Notification Status: Final

Description of Change: Added silicon revision information throughout

Impacts to Data Sheet: None

Reason for Change: To Improve Productivity

Change Implementation Status: Complete

Date Document Changes Effective: 14 Oct 2021

**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:

SAM9X60 SIP Device Silicon Errata and Datasheet Clarification

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

### **Terms and Conditions:**

If you wish to <u>receive Microchip PCNs via email</u> please register for our PCN email service at our PCN home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the PCN FAQ section.

If you wish to <u>change your PCN profile</u>, <u>including opt out</u>, please go to the <u>PCN home page</u> select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections. Affected Catalog Part Numbers (CPN)

SAM9X60D1G-I/4FB SAM9X60D1GT-I/4FB SAM9X60D5M-I/4FB SAM9X60D5MT-I/4FB SAM9X60D6K-I/4GB SAM9X60D6KT-I/4GB



# SAM9X60 SIP Device

# SAM9X60 SIP Device Silicon Errata and Data Sheet Clarifications

### SAM9X60 SIP Device

The SAM9X60 SIP device that you have received conforms functionally to the current Device Data Sheet (DS60001580), except for the anomalies described in this document.

The silicon issues discussed in the following pages are for silicon revisions with the Device and Revision IDs listed in the following table. The silicon issues are summarized in 1. Silicon Issue Summary.

Note: This document summarizes all silicon errata issues from all revisions of silicon, previous as well as current.

Data Sheet clarifications and corrections (if applicable) are located in 3. Data Sheet Clarifications, following the discussion of silicon issues.

The Device and Revision ID values for the SAM9X60 SIP silicon device are shown in the following table.

Part Number	Silicon Revision	Device Identification			
		CHIPID_CIDR[31:0]	CHIPID_EXID[31:0]		
SAM9X60D5M	A0	0x819B35A2	0x0000001		
SAMISAOODSIM	A1	0x819B35A1	0x0000001		
SAM9X60D1G	A0	0x819B35A2	0x0000010		
	A1	0x819B35A1	0x0000010		
SAM9X60D6K	A0	0x819B35A2	0x0000011		
	A1	0x819B35A1	0x0000011		

#### Table 1. SAM9X60 SIP Silicon Device Identification

**Note:** Refer to the "Chip Identifier" and "Product Identification System" sections in the current device data sheet (DS60001580) for detailed information on chip identification and version for your specific device.

## 1. Silicon Issue Summary



**Important:** The following issues come in addition to the issues listed in the SAM9X60 device errata (DS80000846).

#### Table 1-1. Silicon Issue Summary

Module	Item/Feature	Summary	Affected Silicon Revisions		
			A0	A1	
Package Marking	2.1 Wrong Package Marking for Selected 512 Mb DDR2-SDRAM SIP Parts	Some parts marked "SAM9X60D5M-V" instead of "SAM9X60D5M-I"	х	x x	
r ackage Marking	2.2 Wrong Package Marking for Selected 1 Gb DDR2-SDRAM SIP Parts	Some parts marked "SAM9X60D1G-V" instead of "SAM9X60D1G-I"	х	Х	

### 2. Package Marking

#### 2.1 Wrong Package Marking for Selected 512 Mb DDR2-SDRAM SIP Parts

Parts with the following date codes were wrongly marked SAM9X60D5M-**V** instead of SAM9X60D5M-**I**: 1932U2W, 1932U3R, 1932U43,1937AEY

Work Around None

#### Affected Silicon Revisions

A0	A1			
Х	Х			

#### 2.2 Wrong Package Marking for Selected 1 Gb DDR2-SDRAM SIP Parts

Parts with the following date codes were wrongly marked SAM9X60D1G-**V** instead of SAM9X60D1G-**I**: 1932TT3, 1932VY9, 1932VYA, 1937AEJ

#### Work Around

None

#### Affected Silicon Revisions

A0	A1			
Х	Х			

### 3. Data Sheet Clarifications

No clarifications to report at this time.

## 4. Revision History

#### 4.1 DS80000859B - 10/2021

Added silicon revision information throughout

### 4.2 DS80000859A - 10/2019

First issue.

### The Microchip Website

Microchip provides online support via our website at www.microchip.com/. This website is used to make files and information easily available to customers. Some of the content available includes:

- **Product Support** Data sheets and errata, application notes and sample programs, design resources, user's guides and hardware support documents, latest software releases and archived software
- General Technical Support Frequently Asked Questions (FAQs), technical support requests, online discussion groups, Microchip design partner program member listing
- **Business of Microchip** Product selector and ordering guides, latest Microchip press releases, listing of seminars and events, listings of Microchip sales offices, distributors and factory representatives

## **Product Change Notification Service**

Microchip's product change notification service helps keep customers current on Microchip products. Subscribers will receive email notification whenever there are changes, updates, revisions or errata related to a specified product family or development tool of interest.

To register, go to www.microchip.com/pcn and follow the registration instructions.

# **Customer Support**

Users of Microchip products can receive assistance through several channels:

- Distributor or Representative
- Local Sales Office
- Embedded Solutions Engineer (ESE)
- Technical Support

Customers should contact their distributor, representative or ESE for support. Local sales offices are also available to help customers. A listing of sales offices and locations is included in this document.

Technical support is available through the website at: www.microchip.com/support

### **Microchip Devices Code Protection Feature**

Note the following details of the code protection feature on Microchip products:

- · Microchip products meet the specifications contained in their particular Microchip Data Sheet.
- Microchip believes that its family of products is secure when used in the intended manner, within operating specifications, and under normal conditions.
- Microchip values and aggressively protects its intellectual property rights. Attempts to breach the code protection features of Microchip product is strictly prohibited and may violate the Digital Millennium Copyright Act.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of its code. Code protection does not mean that we are guaranteeing the product is "unbreakable". Code protection is constantly evolving. Microchip is committed to continuously improving the code protection features of our products.

### Legal Notice

This publication and the information herein may be used only with Microchip products, including to design, test, and integrate Microchip products with your application. Use of this information in any other manner violates these terms. Information regarding device applications is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. Contact your local Microchip sales office for additional support or, obtain additional support at www.microchip.com/en-us/support/design-help/client-support-services.

THIS INFORMATION IS PROVIDED BY MICROCHIP "AS IS". MICROCHIP MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTIES RELATED TO ITS CONDITION, QUALITY, OR PERFORMANCE.

IN NO EVENT WILL MICROCHIP BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL LOSS, DAMAGE, COST, OR EXPENSE OF ANY KIND WHATSOEVER RELATED TO THE INFORMATION OR ITS USE, HOWEVER CAUSED, EVEN IF MICROCHIP HAS BEEN ADVISED OF THE POSSIBILITY OR THE DAMAGES ARE FORESEEABLE. TO THE FULLEST EXTENT ALLOWED BY LAW, MICROCHIP'S TOTAL LIABILITY ON ALL CLAIMS IN ANY WAY RELATED TO THE INFORMATION OR ITS USE WILL NOT EXCEED THE AMOUNT OF FEES, IF ANY, THAT YOU HAVE PAID DIRECTLY TO MICROCHIP FOR THE INFORMATION.

Use of Microchip devices in life support and/or safety applications is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless Microchip from any and all damages, claims, suits, or expenses resulting from such use. No licenses are conveyed, implicitly or otherwise, under any Microchip intellectual property rights unless otherwise stated.

### Trademarks

The Microchip name and logo, the Microchip logo, Adaptec, AnyRate, AVR, AVR logo, AVR Freaks, BesTime, BitCloud, CryptoMemory, CryptoRF, dsPIC, flexPWR, HELDO, IGLOO, JukeBlox, KeeLoq, Kleer, LANCheck, LinkMD, maXStylus, maXTouch, MediaLB, megaAVR, Microsemi, Microsemi logo, MOST, MOST logo, MPLAB, OptoLyzer, PIC, picoPower, PICSTART, PIC32 logo, PolarFire, Prochip Designer, QTouch, SAM-BA, SenGenuity, SpyNIC, SST, SST Logo, SuperFlash, Symmetricom, SyncServer, Tachyon, TimeSource, tinyAVR, UNI/O, Vectron, and XMEGA are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

AgileSwitch, APT, ClockWorks, The Embedded Control Solutions Company, EtherSynch, Flashtec, Hyper Speed Control, HyperLight Load, IntelliMOS, Libero, motorBench, mTouch, Powermite 3, Precision Edge, ProASIC, ProASIC Plus, ProASIC Plus logo, Quiet- Wire, SmartFusion, SyncWorld, Temux, TimeCesium, TimeHub, TimePictra, TimeProvider, TrueTime, WinPath, and ZL are registered trademarks of Microchip Technology Incorporated in the U.S.A.

Adjacent Key Suppression, AKS, Analog-for-the-Digital Age, Any Capacitor, AnyIn, AnyOut, Augmented Switching, BlueSky, BodyCom, CodeGuard, CryptoAuthentication, CryptoAutomotive, CryptoCompanion, CryptoController, dsPICDEM, dsPICDEM.net, Dynamic Average Matching, DAM, ECAN, Espresso T1S, EtherGREEN, GridTime, IdealBridge, In-Circuit Serial Programming, ICSP, INICnet, Intelligent Paralleling, Inter-Chip Connectivity, JitterBlocker, Knob-on-Display, maxCrypto, maxView, memBrain, Mindi, MiWi, MPASM, MPF, MPLAB Certified logo, MPLIB, MPLINK, MultiTRAK, NetDetach, NVM Express, NVMe, Omniscient Code Generation, PICDEM, PICDEM.net, PICkit, PICtail, PowerSmart, PureSilicon, QMatrix, REAL ICE, Ripple Blocker, RTAX, RTG4, SAM-ICE, Serial Quad I/O, simpleMAP, SimpliPHY, SmartBuffer, SmartHLS, SMART-I.S., storClad, SQI, SuperSwitcher, SuperSwitcher II, Switchtec, SynchroPHY, Total Endurance, TSHARC, USBCheck, VariSense, VectorBlox, VeriPHY, ViewSpan, WiperLock, XpressConnect, and ZENA are trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

SQTP is a service mark of Microchip Technology Incorporated in the U.S.A.

The Adaptec logo, Frequency on Demand, Silicon Storage Technology, Symmcom, and Trusted Time are registered trademarks of Microchip Technology Inc. in other countries.

GestIC is a registered trademark of Microchip Technology Germany II GmbH & Co. KG, a subsidiary of Microchip Technology Inc., in other countries.

All other trademarks mentioned herein are property of their respective companies.

© 2021, Microchip Technology Incorporated and its subsidiaries. All Rights Reserved.

ISBN: 978-1-5224-9035-7

# Quality Management System

For information regarding Microchip's Quality Management Systems, please visit www.microchip.com/quality.



# **Worldwide Sales and Service**

AMERICAS	ASIA/PACIFIC	ASIA/PACIFIC	EUROPE		
Corporate Office	Australia - Sydney	India - Bangalore	Austria - Wels		
2355 West Chandler Blvd.	Tel: 61-2-9868-6733	Tel: 91-80-3090-4444	Tel: 43-7242-2244-39		
Chandler, AZ 85224-6199	China - Beijing	India - New Delhi	Fax: 43-7242-2244-393		
Tel: 480-792-7200	Tel: 86-10-8569-7000	Tel: 91-11-4160-8631	Denmark - Copenhagen		
Fax: 480-792-7277	China - Chengdu	India - Pune	Tel: 45-4485-5910		
Technical Support:	Tel: 86-28-8665-5511	Tel: 91-20-4121-0141	Fax: 45-4485-2829		
www.microchip.com/support	China - Chongqing	Japan - Osaka	Finland - Espoo		
Web Address:	Tel: 86-23-8980-9588	Tel: 81-6-6152-7160	Tel: 358-9-4520-820		
www.microchip.com	China - Dongguan	Japan - Tokyo	France - Paris		
Atlanta	Tel: 86-769-8702-9880	Tel: 81-3-6880- 3770	Tel: 33-1-69-53-63-20		
Duluth, GA	China - Guangzhou	Korea - Daegu	Fax: 33-1-69-30-90-79		
Tel: 678-957-9614	Tel: 86-20-8755-8029	Tel: 82-53-744-4301	Germany - Garching		
Fax: 678-957-1455	China - Hangzhou	Korea - Seoul	Tel: 49-8931-9700		
Austin, TX	Tel: 86-571-8792-8115	Tel: 82-2-554-7200	Germany - Haan		
rel: 512-257-3370	China - Hong Kong SAR	Malaysia - Kuala Lumpur	Tel: 49-2129-3766400		
Boston	Tel: 852-2943-5100	Tel: 60-3-7651-7906	Germany - Heilbronn		
Westborough, MA	China - Nanjing	Malaysia - Penang	Tel: 49-7131-72400		
Tel: 774-760-0087	Tel: 86-25-8473-2460	Tel: 60-4-227-8870	Germany - Karlsruhe		
Fax: 774-760-0088	China - Qingdao	Philippines - Manila	Tel: 49-721-625370		
Chicago	Tel: 86-532-8502-7355	Tel: 63-2-634-9065	Germany - Munich		
tasca, IL	China - Shanghai	Singapore	Tel: 49-89-627-144-0		
Tel: 630-285-0071	Tel: 86-21-3326-8000	Tel: 65-6334-8870	Fax: 49-89-627-144-44		
Fax: 630-285-0075	China - Shenyang	Taiwan - Hsin Chu	Germany - Rosenheim		
Dallas	Tel: 86-24-2334-2829	Tel: 886-3-577-8366	Tel: 49-8031-354-560		
Addison, TX	China - Shenzhen	Taiwan - Kaohsiung	Israel - Ra'anana		
Tel: 972-818-7423	Tel: 86-755-8864-2200	Tel: 886-7-213-7830	Tel: 972-9-744-7705		
Fax: 972-818-2924	China - Suzhou				
		Taiwan - Taipei	Italy - Milan		
Detroit	Tel: 86-186-6233-1526	Tel: 886-2-2508-8600	Tel: 39-0331-742611		
Novi, MI	China - Wuhan	Thailand - Bangkok	Fax: 39-0331-466781		
Tel: 248-848-4000	Tel: 86-27-5980-5300	Tel: 66-2-694-1351	Italy - Padova		
Houston, TX	China - Xian	Vietnam - Ho Chi Minh	Tel: 39-049-7625286		
Tel: 281-894-5983	Tel: 86-29-8833-7252	Tel: 84-28-5448-2100	Netherlands - Drunen		
ndianapolis	China - Xiamen		Tel: 31-416-690399		
Noblesville, IN	Tel: 86-592-2388138		Fax: 31-416-690340		
Tel: 317-773-8323	China - Zhuhai		Norway - Trondheim		
Fax: 317-773-5453	Tel: 86-756-3210040		Tel: 47-72884388		
Tel: 317-536-2380			Poland - Warsaw		
_os Angeles			Tel: 48-22-3325737		
/lission Viejo, CA			Romania - Bucharest		
Tel: 949-462-9523			Tel: 40-21-407-87-50		
Fax: 949-462-9608			Spain - Madrid		
Tel: 951-273-7800			Tel: 34-91-708-08-90		
Raleigh, NC			Fax: 34-91-708-08-91		
Tel: 919-844-7510			Sweden - Gothenberg		
New York, NY			Tel: 46-31-704-60-40		
Tel: 631-435-6000			Sweden - Stockholm		
San Jose, CA			Tel: 46-8-5090-4654		
Tel: 408-735-9110			UK - Wokingham		
Tel: 408-436-4270			Tel: 44-118-921-5800		
Canada - Toronto			Fax: 44-118-921-5820		
Tel: 905-695-1980					
Fax: 905-695-2078					