Errata

Errata for K32W041A and K32W041AM

This report applies to the product list of K32W041A and K32W041AM which have the following marking information of Line C: sSD *** 2

• s: diffusion center global foundry

• S: assembly plant, NXP manufacturing Kaohsiung, Taiwan

· D: RoHs Dark Green chemical content of molding

• ***: YWW, assembly data code in year and week

• 1: die version

Errata ID	Errata Title
SE300	JTAG: IDE loses communication with device
SE301	UART: Cannot detect error on second stop when 2 stop configuration is used
SE302	AES crypto possible corruption using USART/SPI DMA mode consecutively

SE300: JTAG: IDE loses communication with device

Errata type: Errata

Description: MCUXpresso debug cannot be used for applications with the watchdog enabled.

During the debug session, the watchdog fires cause the IDE to lose connection, which

prevents further debug in the session.

Workaround: Disable the watchdog during debug sessions.

SE301: UART: Cannot detect error on second stop when 2 stop configuration is used

Errata type: Errata

Description: When UART is configured to use 2 Stop bit protocol, the device does not detect error on

second stop bit.

Workaround: No workaround is available. It is recommended not to use 2 stop bit protocol.



SE302: AES crypto possible corruption using USART/SPI DMA mode consecutively

Errata type: Errata

Description: The hardware AES crypto engine may not be safely executed while DMA write operations are

performed by USART0/1 and SPI0/1. This is because the AES corruption happens under special data sequence on AHB port 7 when AES access is followed consecutively with a DMA

write access to USART and SPI.

Workaround: The application software should avoid using hardware AES when write operation is required

for USART/SPI DMA mode. The customer can use software AES encryption/decryption when USART/SPI DMA write operation is needed. NXP provides suggestions (from SDK 2.6.6 or later) on how to switch between hardware and software AES dynamically depending on the

USART/SPI DMA usage.

How To Reach Us

Home Page:

nxp.com

Web Support:

nxp.com/support

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors. In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms and conditions of commercial sale of NXP Semiconductors.

Right to make changes - NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

Security — Customer understands that all NXP products may be subject to unidentified or documented vulnerabilities. Customer is responsible for the design and operation of its applications and products throughout their lifecycles to reduce the effect of these vulnerabilities on customer's applications and products. Customer's responsibility also extends to other open and/or proprietary technologies supported by NXP products for use in customer's applications. NXP accepts no liability for any vulnerability. Customer should regularly check security updates from NXP and follow up appropriately.

Customer shall select products with security features that best meet rules, regulations, and standards of the intended application and make the ultimate design decisions regarding its products and is solely responsible for compliance with all legal, regulatory, and security related requirements concerning its products, regardless of any information or support that may be provided by NXP. NXP has a Product Security Incident Response Team (PSIRT) (reachable at PSIRT@nxp.com) that manages the investigation, reporting, and solution release to security vulnerabilities of NXP products.

Suitability for use — NXP Semiconductors products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of an NXP Semiconductors product can reasonably be expected to result in personal injury, death or severe property or environmental damage. NXP Semiconductors and its suppliers accept no liability for inclusion and/or use of NXP Semiconductors products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Non-automotive qualified products — Unless this data sheet expressly states that this specific NXP Semiconductors product is automotive qualified, the product is not suitable for automotive use. It is neither qualified nor tested in accordance with automotive testing or application requirements. NXP Semiconductors accepts no liability for inclusion and/or use of non-automotive qualified products in automotive equipment or applications.

In the event that customer uses the product for design-in and use in automotive applications to automotive specifications and standards, customer (a) shall use the product without NXP Semiconductors' warranty of the product for such automotive applications, use and specifications, and (b) whenever customer uses the product for automotive applications beyond NXP Semiconductors' specifications such use shall be solely at customer's own risk, and (c) customer fully indemnifies NXP Semiconductors for any liability, damages or failed product claims resulting from customer design and use of the product for automotive applications beyond NXP Semiconductors' standard warranty and NXP Semiconductors' product specifications.

Applications — Applications that are described herein for any of these products are for illustrative purposes only. NXP Semiconductors makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Customers are responsible for the design and operation of their applications and products using NXP Semiconductors products, and NXP Semiconductors accepts no liability for any assistance with applications or customer product

Table continues on the next page...

design. It is customer's sole responsibility to determine whether the NXP Semiconductors product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products.

NXP Semiconductors does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using NXP Semiconductors products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). NXP does not accept any liability in this respect.

Limiting values — Stress above one or more limiting values (as defined in the Absolute Maximum Ratings System of IEC 60134) will cause permanent damage to the device. Limiting values are stress ratings only and (proper) operation of the device at these or any other conditions above those given in the Recommended operating conditions section (if present) or the Characteristics sections of this document is not warranted. Constant or repeated exposure to limiting values will permanently and irreversibly affect the quality and reliability of the device.

Terms and conditions of commercial sale — NXP Semiconductors products are sold subject to the general terms and conditions of commercial sale, as published at http://www.nxp.com/profile/terms, unless otherwise agreed in a valid written individual agreement. In case an individual agreement is concluded only the terms and conditions of the respective agreement shall apply. NXP Semiconductors hereby expressly objects to applying the customer's general terms and conditions with regard to the purchase of NXP Semiconductors products by customer.

Hazardous voltage — Although basic supply voltages of the product may be much lower, circuit voltages up to 60 V may appear when operating this product, depending on settings and application. Customers incorporating or otherwise using these products in applications where such high voltages may appear during operation, assembly, test etc. of such application, do so at their own risk. Customers agree to fully indemnify NXP Semiconductors for any damages resulting from or in connection with such high voltages. Furthermore, customers are drawn to safety standards (IEC 950, EN 60 950, CENELEC, ISO, etc.) and other (legal) requirements applying to such high voltages.

Export control — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

NXP, the NXP logo, NXP SECURE CONNECTIONS FOR A SMARTER WORLD, EdgeLock, are trademarks of NXP B.V. All other product or service names are the property of their respective owners. AMBA, Arm, Arm7, Arm7TDMI, Arm9, Arm11, Artisan, big.LITTLE, Cordio, CoreLink, CoreSight, Cortex, DesignStart, DynamIQ, Jazelle, Keil, Mali, Mbed, Mbed Enabled, NEON, POP, RealView, SecurCore, Socrates, Thumb, TrustZone, ULINK, ULINK2, ULINK-PLUS, ULINKpro, µVision, Versatile are trademarks or registered trademarks of Arm Limited (or its subsidiaries) in the US and/or elsewhere. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved.

© NXP B.V. 2021-2022.

All rights reserved.

For more information, please visit: http://www.nxp.com
For sales office addresses, please send an email to: salesaddresses@nxp.com

Date of release: 07/2022
Document identifier: K32W041A_K32W041AM

