

MC-ISAR_AS422_TC3xx_1.30.0_Patch_5

Release Notes

Product name: MC-ISAR_AS422_TC3xx¹

Release number: 1.30.0_Patch_5

Type of release: PATCH*

Release method: via Release Area

AUTOSAR specification: 4.2.2

Compiler support: Tasking 6.2r2p2

Processor platform: TC38xAA, TC38xAB, TC38xAC, TC38xAD

Date: 2020-06-05

Patch Applicability: 1.30.0

* This patch has passed delta testing, but has not been subject to the full validation process for a production release. Customers must perform their own integration testing.

¹ Earlier known as MC_AURIX2G_SW_MCAL
Release Note

1. Scope and purpose

This patch is to provide the fix for following issues:

Issue Id	0000053912-11145
Title	Restriction in Tresos configuration regarding phase shifting PWM

The patch is applicable to following package

Date of Release	Package
2019-10-24	MC-ISAR_AS42x_TC3xx_BASIC_1.30.0

2. Details of Issues Fixed

Issue Id	0000053912-11145
Title	Restriction in Tresos configuration regarding phase shifting PWM
Description	Unnecessary channel ordering and restriction of PWM shifted channels to be in the same TOM or ATOM module when PwmHandleShiftByOffset is TRUE
Impact	User is unnecessarily forced to order the PWM TOM or ATOM channels only within a TOM or ATOM module when PwmHandleShiftByOffset is TRUE
Solution	<p>Relax the error check for channel ordering and also the channels to be in the same TOM or ATOM module when PwmHandleShiftByOffset is TRUE.</p> <p>User shall consider the following points when PwmHandleShiftByOffset is TRUE:</p> <ul style="list-style-type: none"> ➤ To ensure synchronous start of all the shifted channels at the same time, configure all the shifted channels including the fixed period channel in the same TGC or AGC module (Recommended). ➤ If shifted channels and fixed period channel are across the TGC or AGC modules, there could be a delay on the shifted channels based on the execution time of the PWM initialization sequence. <ul style="list-style-type: none"> • User can measure the actual offset during the PWM initialization and compensate the delay of the shifted channels accordingly in the configuration. • Execution time depends on the initialization sequence and number of Host-Triggers. <p>PWM Initialization Sequence:</p> <ul style="list-style-type: none"> ➤ Driver initializes all the relevant registers of the configured hardware with the values passed in the configuration pointer structure before generating the PWM signal. ➤ Driver performs the Host-Trigger when PwmHandleShiftByOffset is TRUE to generate the PWM signal. i.e. <ul style="list-style-type: none"> • Loop from lowest configured TOM module to the highest configured TOM module <ul style="list-style-type: none"> ▪ Host-trigger of TGC0 for current TOM ▪ Host-trigger of TGC1 for current TOM • Loop from lowest configured ATOM module to the highest configured ATOM module <ul style="list-style-type: none"> ▪ Host-trigger of AGC for current ATOM

3. Contents of 1.30.0_Patch_5

Package for Patch 1.30.0_Patch_5 (MC-ISAR_AS422_TC3xx_1.30.0_Patch_5.zip) contains:

1. Releasenote_MC-ISAR_AS422_TC3xx_1.30.0_Patch_5.pdf
2. Folder MC-ISAR_AS422_TC3xx_1.30.0_Patch_5\patched_files contains

Module	File	Purpose
Pwm_17_GtmCcu6	Pwm_17_GtmCcu6.c	SW patch version is updated to 10.30.41
	Pwm_17_GtmCcu6_PBcfg.c	Issue fixed
	plugin.xml	SW patch version is updated to 10.30.41
	Pwm_17_GtmCcu6_Bswmd.arxml	SW patch version is updated to 10.30.41
	Pwm_17_GtmCcu6.xdm	SW patch version is updated to 10.30.41
	Pwm_17_GtmCcu6.bmd (for all supported processor platform)	SW patch version is updated to 10.30.41
	CRYPTOMANIFEST.MF	Crypto Signature files for plugins
	CRYPTOMANIFESTSIG.MF	

4. Steps to use 1.30.0_Patch_5

1. Ensure that MC-ISAR_AS42x_TC3xx_BASIC_1.30.0 BASE package is installed.
2. Extract MC-ISAR_AS422_TC3xx_1.30.0_Patch_5.zip
3. Replace files present in BASE packages from the files present under MC-ISAR_AS422_TC3xx_1.30.0_Patch_5\patched_files.
Please see following example for replacing files:

```
xcopy /F /E /Y <PATCH_EXTRACTED_PATH>\patched_files <BASE_PACKAGE_INSTALLED_PATH>\MC-ISAR_AS42x_TC3xx_BASIC_1.30.0\
```

4. Clean and build the release package. (Refer TC3xx_SW_MCAL_UM_Basic.pdf for details)

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Published by

Infineon Technologies AG

81726 München, Germany

Edition 2020-06-05

© 2020 Infineon Technologies AG.

All Rights Reserved.

Do you have a question about this document?

Email: erratum@infineon.com

Document reference

IFX-sbp1571723956889

IMPORTANT NOTICE

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

For further information on the product, technology delivery terms and conditions and prices please contact your nearest Infineon Technologies office (www.infineon.com).

WARNINGS

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.