

Product Change Notification / SYST-07DYKJ478

Date:

08-Feb-2023

Product Category:

Clock and Timing - Clock and Data Distribution

PCN Type:

Document Change

Notification Subject:

ERRATA - ZL40292-3-4-5 Silicon Errata

Affected CPNs:

SYST-07DYKJ478_Affected_CPN_02082023.pdf SYST-07DYKJ478_Affected_CPN_02082023.csv

Notification Text:

SYST-07DYKJ478

Microchip has released a new Errata for the ZL40292-3-4-5 Silicon Errata of devices. If you are using one of these devices please read the document located at ZL40292-3-4-5 Silicon Errata.

Notification Status: Final

Description of Change: Converted errata document from acquired company to Microchip format.

Impacts to Data Sheet: None

Change Implementation Status: Complete

Date Document Changes Effective: 08 Feb 2023

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:
ZL40292-3-4-5 Silicon Errata
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SYST-07DYKJ478 - ERRATA - ZL40292-3-4-5 Silicon Errata

Affected Catalog Part Numbers (CPN)

ZL40292LDG1

ZL40293LDG1

ZL40292LDF1

ZL40293LDF1

ZL40294LDG6

ZL40295LDG6

ZL40294LDF6

ZL40295LDF6

Date: Tuesday, February 07, 2023



ZL40292/293/294/295 Silicon Errata

The ZL4029x family of devices that you have received conform functionally to the current device data sheet, except for the anomaly described in this document.

1.0 SMBUS GLITCH

1.1 Problem Description

During the power on reset, ZL4029x will generate a glitch on the SMBUS SDA line with duration from 300 ns to 490 ns. The glitch occurs 230 ns to 480 ns after the control signal PWRGD_PWRDN# fed to ZL4029x goes high upon the power up. Subsequent toggling of PWRGD_PWRDN# will not cause the glitch unless the power supply is cycled again. This glitch could potentially affect some other devices that share the same SMBUS during the power up.

1.2 Affected Silicon Revisions

Device Revision Code: Byte 5, bits 7:4

TABLE 1: AFFECTED SILICON REVISIONS

Device Revision	Code	Affected or Unaffected
A0	0b0010	Affected
A1	0b0011	Affected
A2	0b0100	Unaffected

1.3 Work Around

If you do not see any problem on the power up in your system, the issue can be ignored. Each ZL4029x device is not sensitive to this glitch, and there will not be any consequences if multiple ZL4029x devices are connected to the same SMBLIS

If another device connected to the same SMBUS experiences this issue during the power up, sequence the PWRGD_PWRDN# control signal such that the device in question gets PWRGD_PWRDN# at least 1 µs after the ZL4029x device.

1.4 Fix

All production devices with the following Device Revision Code (Byte 5, bits 7:4) have eliminated the power on glitch on the SMBUS SDA line.

Device Revision Code: 0b0100.

APPENDIX A: REVISION HISTORY

Revision A (February 2023)

• Converted errata document from acquired company to Microchip format.

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ISBN: 978-1-6683-1946-8

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