



Product Change Notification: SYST-07SVSW972

Date:

11-Jun-2026

Product Category:

Hybrid Controllers

Notification Subject:

MCP19214/15 Silicon Errata and Data Sheet Clarification

Affected CPNs:

[SYST-07SVSW972_Affected_CPN_06112026.pdf](#)

[SYST-07SVSW972_Affected_CPN_06112026.csv](#)

Notification Text:

SYST-07SVSW972
Microchip has released a new Document for the MCP19214/15 Silicon Errata and Data Sheet Clarification of devices. If you are using one of these devices please read the document located at MCP19214/15 Silicon Errata and Data Sheet Clarification. Notification Status: Final Description of Change: Initial release of this document Impacts to Data Sheet: None Reason for Change: To Improve Productivity Change Implementation Status: Complete Date Document Changes Effective: 11 Jun 2026

Description of Change:

Initial release of this document

Impacts to Data Sheet: None

Reason for Change: To Improve Productivity

Change Implementation Status: Complete

Date Document Changes Effective: 11 Jun 2026

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:

MCP19214/15 Silicon Errata and Data Sheet Clarification

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

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Affected Catalog Part Numbers (CPN)

MCP19214-E/MQ

MCP19214T-E/MQ

MCP19215-E/S8

MCP19215T-E/S8

Introduction

The MCP19214/5 devices you have received conform functionally to the current device [Data Sheet](#) , except for the anomalies described in this document. The errata described in this document will likely be addressed in future revisions of the MCP19214/5 devices.

Notes:

- This document summarizes all the silicon errata issues from all the silicon revisions, previous and current.
- Refer to the Device/Revision ID section in the current device [Data Sheet](#) for more detailed information on Device Identification and Revision IDs for your specific device or contact your local Microchip sales office for assistance.

1. Silicon Issue Summary

Legend:Erratum is **not** applicable: —

Erratum is applicable: X

Peripheral	Short Description	Valid for Silicon Revision B2
Gate Driver	MOSFET Driver Output Turns High if Power ON Sequence is not Appropriate	X
Gate Driver	MOSFET Driver Output Gets Stuck High if Power OFF Sequence is not Appropriate	X

Note: This revision is the initial release of the silicon.

2. Silicon Errata Issues

2.1. MOSFET Driver Output Turns High if Power ON Sequence is not Appropriate

If power is applied to VDR before VDD has reached the minimum operating voltage a pulse of VDR voltage will appear on PDRV1 and PDRV2.

The pulse width can be sufficiently long to cause power switch turn ON and power train damage.

Workaround

Power up sequencing enabled by VDD is recommended to be used for VDR supply.

VDR must not be powered if VDD has not reached minimum operating voltage.

A recommended implementation for correct power up sequencing can be found in [Schematic 1](#).

Resistor R is recommended to be below 3.3 Ω to make sure the voltage drop during switching does not cause driver undervoltage events. Further optimizations can be done based on the value of the selected decoupling capacitor.

If VDR needs to be supplied with a voltage higher than VDD, [Schematic 2](#) is recommended to be used.

The [Power ON Timing Diagram](#) can be used as an example for correct power ON sequence. Timing recommendations can be found in [Table 2-1](#).

2.2. MOSFET Driver Output Gets Stuck High if Power OFF Sequence is not Appropriate

If VIN is powered down or VDD goes low, and VDR is present, while PDRV1/PDRV2 is High or while being High during a switching cycle, then PDRV1/PDRV2 might remain stuck High.

This can cause power switch to be stuck ON and the power train to be damaged.

Workaround

Power OFF must be ensured, so that VDR does not remain High while VDD goes low.

A recommended implementation for correct power DOWN sequencing can be found in [Schematic 1](#).

If VDR needs to be supplied with a voltage higher than VDD, [Schematic 2](#) is recommended to be used.

If VIN gets LOW, diode D must be selected to have enough current capability to discharge the VDR filter capacitors before VDD capacitors are discharged

The [Power OFF Timing Diagram](#) can be used as an example for correct power down sequence. Timing recommendations can be found in [Table 2-2](#).

Time t2 must not be longer than t1.

2.3. Affected Silicon Revisions

Revision B2

Figure 2-1. Schematic 1

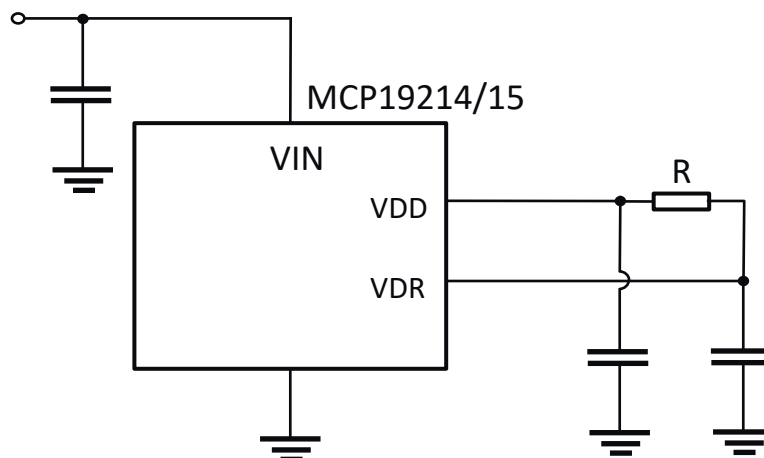


Figure 2-2. Schematic 2

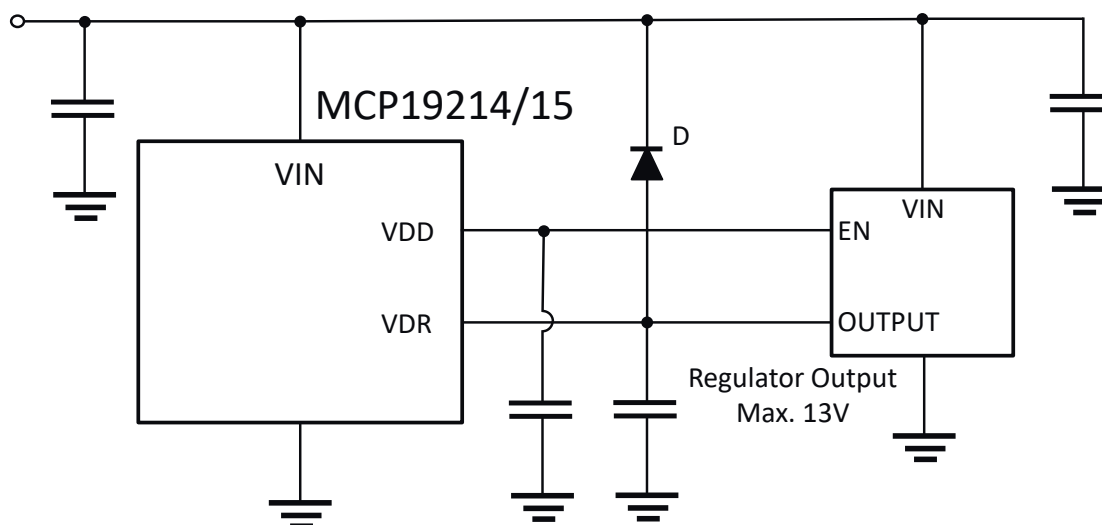
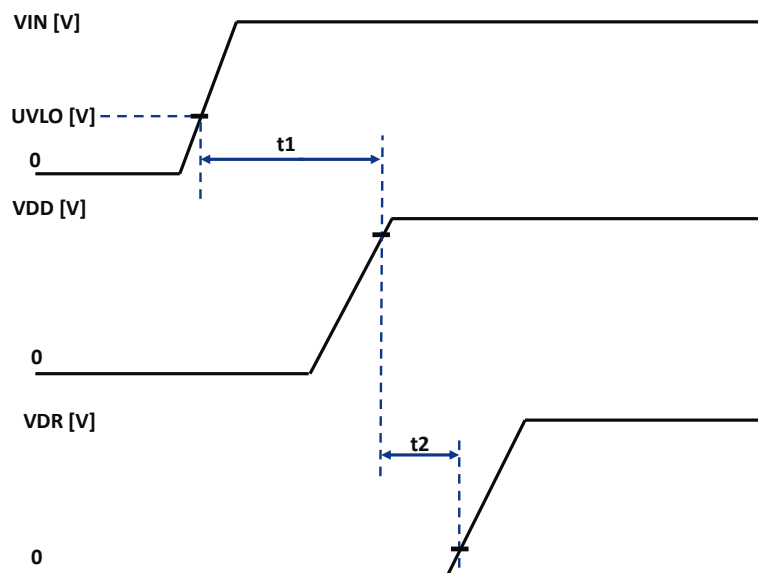
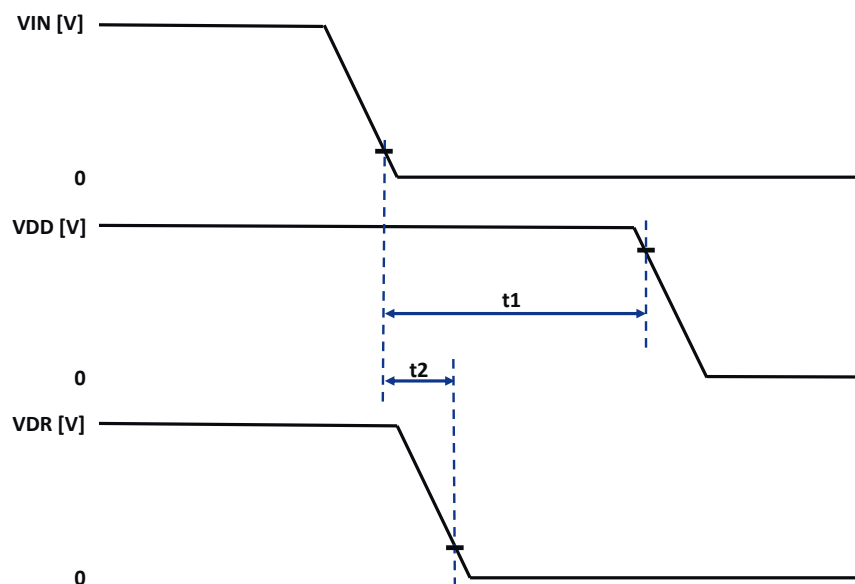


Figure 2-3. Recommended Power ON Timing Diagram**Table 2-1.**

Parameter	Minimum (μ s)	Typical (μ s)	Maximum (μ s)
t1	—	65	—
t2	10	—	—

Figure 2-4. Recommended Power OFF Timing Diagram**Table 2-2.**

Parameter	Minimum (μ s)	Typical (μ s)	Maximum (μ s)
t1	—	10	—
t2	—	—	t1

3. Revision History

Doc. Rev.	Date	Comments
A	05/2026	Initial release of this document.

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ISBN: 979-8-3371-3221-1

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