KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit release notes

About this document

Scope and purpose

Thank you for your interest in the PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit. This document lists the kit contents, installation requirements, kit documentation, limitations and known issues.

Intended audience

This document is intended for KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit users. This board is intended to be used under laboratory conditions.

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1 Release contents

1.1 Kit contents

The KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation kit box includes the following components:

1. KIT_PSC3M5_CC2 Motor Control card
2. Drive adapter card
3. KITMOTORDC250W24VTOBO1 power board
4. USB Type-A to USB Type-C cable
5. Nanotec DB42S03 or DB42M03 24V BLDC motor
6. 24 V/1 A AC-DC adapter
7. Quick start guide

2 Kit information

For information related to the kit, see the KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit webpage.

2.1 Software and tools

To utilize the code examples in this kit, ModusToolbox™ version 3.2 or later is required. This is available on the ModusToolbox™ software webpage. For more details, see the kit user guide.

Install J-Link software version v7.96d or later, along with the USB driver for the selected J-Link device.

2.2 Code examples and collaterals

The kit webpage contains both the documents and hardware files. Additionally, the code examples are available in the Infineon GitHub repository.

2.3 Installation

The kit guide, available on the webpage, provides all the necessary software installation instructions. For more information, see the KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit webpage.

2.4 Kit revision

This is the initial revision (Rev. **) of the KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit.

2.5 Limitations and known issues

The limitations and known issues in this revision (Rev **) of the KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit are as follows:

1. After programming/flashing the control card MCU using the ModusToolbox™ Motor Suite GUI, the MCU needs to be reset by pressing the reset button (SW1)
2. The control card is configured to operate with 5 V analog reference and digital logic power boards. However, to ensure compatibility with 3.3 V analog reference and digital logic power boards, the following components must be removed:
   - **For motor 1**: R105, R117, R118, R119 R37 and R39
   - **For motor 2**: R123, R124, R125, R136, R34 and R36
   - **For PFC/motor 3**: R137, R138, R139 and R147
3. Note that the control card's SPI and I2C interfaces are only compatible with 3.3 V logic smart gate drive power boards

2.6 Documentation

The following documents are available on the kit webpage:

- KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit user guide
- KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit quick start guide
- KIT_PSC3M5_MC1 PSOC™ Control C3M5 Complete System Motor Control Evaluation Kit release notes

2.7 Technical support

For assistance or product-related queries, contact Infineon Support or post your queries on the Infineon Developer Community platform.

2.8 Additional information

- For more information on the PSOC™ Control C3 MCU, including associated documentation, and software, see PSOC™ Control C3 webpage
- To know more about the functionality and releases of ModusToolbox™, see the ModusToolbox™ software webpage
- For a list of trainings on ModusToolbox™, see ModusToolbox™ software training

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Do you have a question about any aspect of this document?

Email: erratum@infineon.com

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