EVAL_PMG1_S3_DUALDRP Evaluation Kit release notes

About this document

Scope and purpose

Thank you for your interest in the EVAL_PMG1_S3_DUALDRP Kit. This document lists the kit contents, installation instructions, and known limitations.

Intended audience

This document is intended for anyone who uses the Infineon EVAL_PMG1_S3_DUALDRP kit.

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1 Release contents

1.1 Kit contents

The EVAL_PMG1_S3_DUALDRP kit includes the following:

- EVAL_PMG1_S3_DUALDRP board
- Quick start guide

2 Tool information

2.1 Software, tools, and installation

The EVAL_PMG1_S3_DUALDRP kit includes the comprehensive package of documentation and hardware design files. Additionally, the kit is shipped with preprogrammed USBPD DRP firmware at the factory, capable of supporting power consumption up to 140 W (28 V at 5 A) of power consumption on each port in the sink mode and up to 100 W (20 V at 5 A) of power consumption in source mode.

Given this capability, no software tools are required to operate the kit or to conduct a quick demo. However, for the effective execution of all the demos detailed in the user guide, it is recommended to perform the following installation:

- Download and install the latest ModusToolbox™ software package. Support for PMG1-S3 device is added in ModusToolbox™ version 3.0 onwards. Note that this package is large and downloading may take a while depending on the available internet bandwidth.

2.2 Hardware requirements

To perform the demos detailed in the kit user guide, the following hardware are required:

- A USB Type-C power adapter that can supply power over the Type-C port
- USB Type-C cable (if not already provided with the USB Type-C power adapter) for connecting the USB Type-C power adapter to the Type-C receptacle on the EVAL_PMG1_S3_DUALDRP kit board
- A 24 V/10 A DC power supply/adapter for source mode operation on both ports
- USB Type-C load
- A digital multimeter, along with any additional measurement equipment if needed
- A 3 mm flat-head screwdriver

For more details, see the EVAL_PMG1_S3_DUALDRP Evaluation Kit user guide [1].

2.3 Kit version

This is the updated revision (Rev. 4) of this kit.

2.4 Warnings

The usage of the EVAL_PMG1_S3_DUALDRP kit involves managing power consumption of up to 140 W. The kit is intended for use by professionals and experts who are well-versed in the proper handling of batteries and power supplies. It is essential to exercise due care and follow appropriate procedures, including but not limited to connecting the correct terminals to the marked polarities (+/-) on the kit board, and avoiding the application of reverse voltages. When using this kit, it is crucial to adhere to the instructions outlined in the user guide to avoid potential fire hazards and prevent significant damage to other equipment or the surrounding environment.

2.5 Known issues

None

2.6 Technical support

For assistance, go to www.infineon.com/support. Visit community.infineon.com to ask your questions in the Infineon developer community.

References

The following kit documents are available on the EVAL_PMG1_S3_DUALDRP kit webpage.

[1] EVAL_PMG1_S3_DUALDRP Evaluation Kit user guide

[2] EVAL_PMG1_S3_DUALDRP kit quick start guide

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