WLC1115 MP-A11 15-W wireless power transmitter (REF_WLC_TX15W_C1) release notes

About this document

Scope and purpose

Thank you for your interest in the WLC1115 MP-A11 15-W wireless power transmitter (REF_WLC_TX15W_C1) reference solution. This design is Qi 1.3.2 certified (Qi ID: 12383) and supports charging up to 15 W. The reference board demonstrates the capabilities and features of the Infineon WLC1115 wireless charging transmitter controller. WLC1115 is a highly integrated wireless power transmitter with an integrated USB Type-C Power Delivery (PD) controller, certified for USB PD 3.1 specification (USB-IF TID: 7531).

This document lists the reference board package contents, installation requirements, documentation, limitations, and known issues.

Intended audience

This document is intended for users of the REF_WLC_TX15W_C1 reference solution.

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1 Release information

1.1 Reference solution contents

The WLC1115 15-W wireless power transmitter reference board package contains the following:

- WLC1115 15-W wireless power transmitter reference board (REF_WLC_TX15W_C1)
- USB-C power adapter
- USB Type-C cable
- Qi-compatible receiver
- Host Programming Interface (HPI) dongle for programming/debugging
- USB micro-B cable
- Quick start guide
- Four jumper wires

Note: *The following items may be required for evaluating the wireless power transmitter capabilities of the reference board. Note that these are not included in the reference board package.*

- Qi- compatible mobile phone
- PC running Windows 10 or higher to run Infineon Wireless Charging Configuration Utility

1.2 Documentation

Download the documents and hardware design files from the reference board webpage.

The documents include:

- Quick start guide
- Test report
- User guide
- Release notes *(this document)*

The hardware design files package includes:

- Schematics
- Bill of materials (BOM)
- Layout files

For more details on installation of software tools, see the “WLC1115 MP-A11 15-W wireless power transmitter (REF_WLC_TX15W_C1)” user guide.

1.3 Reference solution revision

This release is the second revision (Rev *A) of the REF_WLC_TX15W_C1 reference solution. This revision of the solution uses REV04 of the REF_WLC_TX15W_C1 layout and REV05 of the schematic and BoM. The board part number (600-60628-01) and layout revision (REV04) are marked on the top silkscreen of the board as shown in Figure 1.

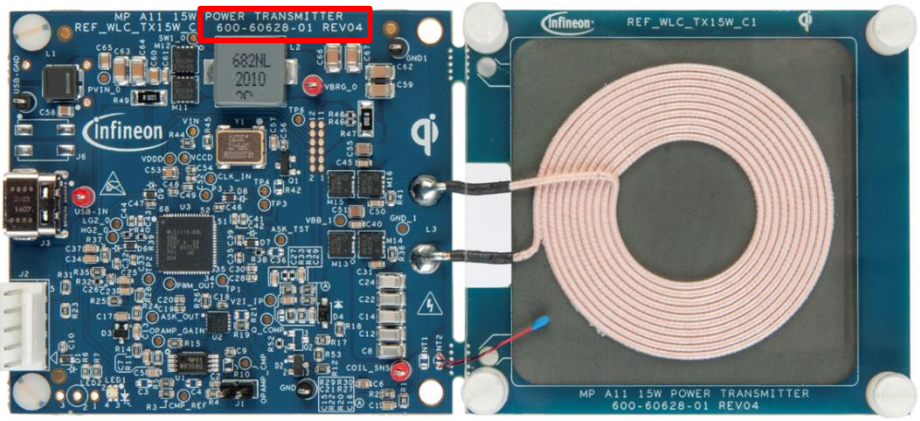


Figure 1 Identifying the reference board part number and revision

1.4 Changes in Rev *A of the solution

1.4.1 Update to ASK demodulation circuit

Value of the 3 components (R30, R29 and C21) in ASK demodulation circuit have been changed to ensure more consistent operation of the ASK amplifier. For more details, refer to the REF_WLC_TX15W_C1 REV05 schematic file, which can be downloaded from the reference board webpage. Contact Infineon technical support for further queries.

Note: The component changes mentioned above shall be incorporated in the REF_WLC_TX15W_C1 reference boards which are built after work week 2307 (YYWW). The manufacturing work week is printed on the label located at the bottom of the REF_WLC_TX15W_C1 board as shown in Figure 2.

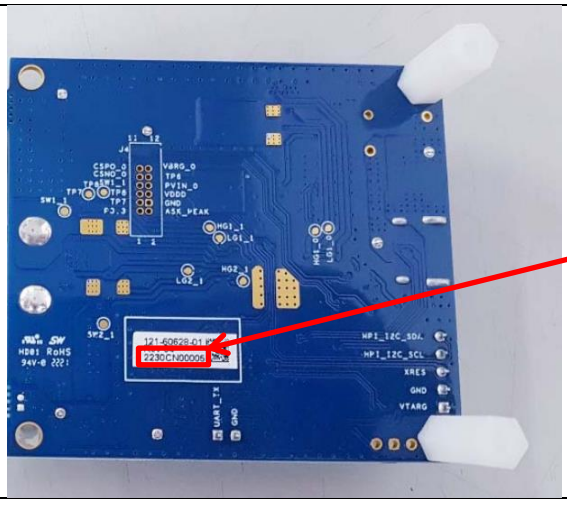


Figure 2 Identifying the manufacturing timeline

1.5 Known limitations and issues

None

1.6 Silicon datasheet

Download the latest version of the WLC115 datasheet from the reference board webpage.

1.7 Technical support

For technical support, go to www.infineon.com/support page.

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