LPC802

Errata sheet LPC802

Rev. 1.5 — 25 September 2019 Errata sheet

Document information

Info	Content
Keywords	LPC802M001JDH16;LPC802M001JDH20;LPC802M011JDH20;LPC802M001JHI33; LPC802UK; LPC802 errata
Abstract	This errata sheet describes both the known functional problems and any deviations from the electrical specifications known at the release date of this document. Each deviation is assigned a number and its history is tracked in a table.

Revision history

Rev	Date	Description
1.5	20190925	• Added device revision (1D) and updated VDD.1 errata.
1.4	20190910	• Updated device revision and VDD.1 errata.
1.3	20190604	• Added VDD.1 errata
1.2	20180427	• Added LPC802UK part.
1.1	20180313	• Updated Table 1 “Device revision table”. • Updated work-around of Section 3.1 “DPD.1: Port pin PIO0_4 cannot be used to wake up the device from deep power-down mode.”.
1.0	20171129	Initial version.

Contact information

For more information, please visit: **http://www.nxp.com**

For sales office addresses, please send an email to: **salesaddresses@nxp.com**

1. Product identification

The LPC802 HVQFN33 packages have the following top-side marking:

- First line: LPC802M0
- Second line: xxxx
- Third line: yywwx[R]
  - yyww: Date code with yy = year and ww = week.
  - xR = Boot code version and device revision.

The LPC802 TSSOP20 packages typically have the following top-side marking:

- First line: LPC802
- Second line: M0y1
  - y: 0 or 1
- Third line: xxxx
- Fourth line: xxywwx[R]
  - yww: Date code with y = year and ww = week.
  - xR = Boot code version and device revision.

The LPC802 TSSOP16 packages have the following top-side marking:

- First line: LPC802
- Second line: M001J
- Third line: xxxx
- Fourth line: ywwx[R]
  - yww: Date code with y = year and ww = week.
  - xR = Boot code version and device revision.

The LPC802 WLCSP16 packages have the following top-side marking:

- First line: LPC802
- Second line: xxxxx
- Third line: xyywwx[R]
  - yyww: Date code with ww = week and yy = year.
  - xR = Boot code version and device revision.
- Fourth line: xxx - yyy

Table 1. Device revision table

Revision identifier (R)	Revision description
0A	Initial device revision with Boot ROM version 13.0
1A	Second device revision with Boot ROM version 13.1
1B	Third device revision with Boot ROM version 13.1
1C	Fourth device revision with Boot ROM version 13.1
1D	Fifth device revision with Boot ROM version 13.1

2. Errata overview

Table 2. Functional problems table

Functional problems	Short description	Revision identifier	Detailed description
DPD.1	Port pin PIO0_4 cannot be used to wake up the device from deep power-down mode.	0A, 1A	Section 3.1

Table 3. AC/DC deviations table

AC/DC deviations	Short description	Revision identifier	Detailed description
VDD.1	The minimum rise time of the power supply ramp must be 1 ms or less.	0A, 1A, 1B, 1C	Section 4.1

Table 4. Errata notes

Note	Short description	Detailed description
n/a	n/a	n/a

3. Functional problems detail

3.1 DPD.1: Port pin PIO0_4 cannot be used to wake up the device from deep power-down mode.

Introduction:

On the LPC802, the following pins can be used as WAKEUP pins to wake up from deep power-down mode: PIO0_4, PIO0_8, PIO0_9, PIO0_10, PIO0_11, PIO0_13, PIO0_15, and PIO0_17.

Problem:

The PIO0_4 pin does not function properly and cannot be used to wake up the device from deep power-down mode. Other pins listed above are functional.

Work-around:

No work-around on device revisions 0A and 1A. This issue is fixed in device revision 1B.

4. AC/DC Deviation

4.1 VDD.1: The rise time of the power supply ramp must be 1 ms or below.

Problem:

The LPC802 device might not always start-up if the rise time of the power supply ramp on the VDD pin is 1 ms or above.

Work-around:

For device revisions 0A, 1A, 1B, and 1C, the rise time of power supply ramp must be 1 ms or below. This issue is fixed in device revision 1D.

5. Legal information

5.1 Definitions

Draft — The document is a draft version only. The content is still under internal review and subject to formal approval, which may result in modifications or additions. NXP Semiconductors does not give any representations or warranties as to the accuracy or completeness of information included herein and shall have no liability for the consequences of use of such information.

5.2 Disclaimers

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors.

In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the *Terms and conditions of commercial sale* of NXP Semiconductors.

Right to make changes — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

Suitability for use — NXP Semiconductors products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of an NXP Semiconductors product can reasonably be expected to result in personal injury, death or severe property or environmental damage. NXP Semiconductors and its suppliers accept no liability for inclusion and/or use of NXP Semiconductors products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Applications — Applications that are described herein for any of these products are for illustrative purposes only. NXP Semiconductors makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

Customers are responsible for the design and operation of their applications and products using NXP Semiconductors products, and NXP Semiconductors accepts no liability for any assistance with applications or customer product design. It is customer's sole responsibility to determine whether the NXP Semiconductors product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products.

NXP Semiconductors does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using NXP Semiconductors products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). NXP does not accept any liability in this respect.

Export control — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

5.3 Trademarks

Notice: All referenced brands, product names, service names and trademarks are the property of their respective owners.

6. Contents

For more information, please visit: http://www.nxp.com
For sales office addresses, please send an email to: salesaddresses@nxp.com

Date of release: 25 September 2019
Document identifier: LPC802