

ERRATA SHEET

Date: 2009 February 27
Document Release: Version 1.0
Device Affected: LPC2930

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 at the end of the document.

2009 February 27

Document revision history

Rev	Date	Description
1.0	2009 February 27	First version

Identification

The typical LPC2930 devices have the following top-side marking:

LPC2930xxx

xxxxxxx

xxYYWWR

The last letter in the third line (field 'R') will identify the device revision. This Errata Sheet covers the following revisions of the LPC2930:

Revision Identifier (R)	Comment
'(blank)'	Initial device revision

Field 'YY' states the year the device was manufactured. Field 'WW' states the week the device was manufactured during that year.

Errata Overview - Functional Problems

Functional Problem	Short Description	Device Revision the problem occurs in
ADC0.1	Missing Codes	(blank)

Errata Overview - AC/DC Deviations

AC/DC Deviation	Short Description	Device Revision the deviation occurs in
ESD.1	The LPC2930 does not meet the NXP QRS ESD requirements on the V_{ddosc} pin. The V_{ddosc} pin fails ESD HBM at 500 V.	(blank)

Errata Notes

Notes	Short Description	Device Revision the note applies to
N/A	N/A	N/A

Functional Problems of LPC2930

ADC0.1 **Missing Codes**

Introduction: The LPC2930 has a 10-bit ADC with a 5.0 V measurement range providing a total of up to 24 analog inputs with conversion times as low as 2.44 μ s per channel ($F_{ADC} = 4.5$ MHz). Each channel provides a compare function to minimize interrupts.

Problem: On devices with date codes before 0905 and for $F_{ADC} > 2.5$ MHz, the 5 V ADC shows missing codes.

Work around: Limit the F_{ADCmax} for ADC0 to 2.0 MHz.

AC/DC Deviations

ESD.1 The LPC2930 does not meet the NXP QRS ESD requirements on the V_{ddosc} pin.

Introduction: The LPC2930 is rated for 2 kV ESD HBM. The V_{ddosc} pin is the power supply pin for the oscillator circuit.

Problem: On devices with date codes before 0905, the LPC2930 does not meet the required 2 kV ESD HBM specification.

Work around: Observe proper ESD handling precautions for the LPC2930.