INTEGRATED CIRCUITS

ERRATA SHEET

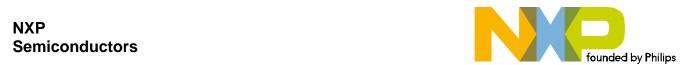
Date: 2009 January 15

Document Release: Version 1.0 Device Affected: LPC2929

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 January 15



Document revision history

Rev	Date	Description
1.0	2009 January 15	First version

Identification

The typical LPC2929 devices have the following top-side marking:

LPC2929xxx

XXXXXX

xxxYYWWR

The last letter in the third line (field 'R') will identify the device revision. This Errata Sheet covers the following revisions of the LPC2929:

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 LPC2929 does not meet the NXP QRS ESD requirements on the $V_{\rm ddosc}$ pin. The $V_{\rm ddosc}$ 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 LPC2929

ADC0.1 **Missing Codes**

The LPC2929 has a 10-bit ADC with a $5.0\,\mathrm{v}$ measurement range providing a total of up to 24 analog inputs with conversion times as low as $2.44\,\mathrm{us}$ per channel ($F_{ADC} = 4.5\,\mathrm{MHz}$). Each channel Introduction:

provides a compare function to minimize interrupts.

For $F_{ADC} > 2.5$ MHz, the 5 v ADC shows missing codes Problem:

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

AC/DC Deviations

ESD.1 The LPC2929 does not meet the NXP QRS ESD requirements on the V_{ddosc} pin.

Introduction: The LPC2929 is rated for 2kV ESD HBM. The V_{ddosc} pin is the power supply pin for the oscillator

circuit.

Problem: The LPC2929 does not meet the required 2kV ESD HBM specification.

Work around: Observe proper ESD handling precautions for the LPC2929.