

ERRATA SHEET

Date: August 20, 2002
Document Release: Version 1.0
Devices Affected: PXAS37

This errata sheet describes both the functional deviations 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.

2002 Aug 20

**XA 16-bit microcontroller
Errata Sheet**

PXAS37

IDENTIFICATION:

The typical PXAS37 devices have the following top-side marking:

PXAS37xxx
 XXXXXX
 xxxYYWW R

The last letter in the third line (field 'R') will identify the device revision. This Errata Sheet covers the following revisions of the PXAS37:

Revision Identifier (R)	Comment
-, A	

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

FUNCTIONAL DEVIATIONS OF XA-S37

CORE.1: End of Segment Return Error

Introduction: Memory segments are divided into 64K blocks. The processor normally pre-fetches up to 16 bytes of code.

Problem: With an XA-S37 running in 16 bit mode out of external code space, the code fails if a RET instruction is located within 16 bytes of the end of a 64K segment. (xxxx0H - xxxfffH) This absolute location may be affected by whatever code precedes the RET instruction, but the problem can occur anywhere in the last 16 bytes of a 64 kB segment.

No such failures have been observed when executing external code in 8-bit mode.

Workaround: Ensure that RET statements are not located within the last 16 bytes of a 64K segment. (e.g. by declaring these memory locations as reserved.)

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ERRATA HISTORY - FUNCTIONAL PROBLEMS

Functional Problem	Short Description	errata occurs in device revision
EOS.1	End of Segment Error	-, A