



CoreLV™ Errata / Functional Change Sheet

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Preface

This document communicates errata and functional changes for the different revisions of CoreLV™.

The document consists of the following sections:

- **Revisions.** Provides information on CoreLV revisions. A matrix shows the relation between the RTL revisions and the Errata numbers.
- **Errata.** A detailed description of the errata, the implications, suggested workarounds, and status.
- **Functional Changes.** A description of functional changes made to the CoreLV. This section reflects new or modified functionality added to a particular version of the CoreLV, not errata.

The descriptions of the errata and the functional changes include information about the status of the errata/change. The codes listed in the following table are used to describe the status.

Table 1 Status Codes used in the Descriptions of Errata and Changes

Code	Description
Open	This issue is under investigation.
Fix	This issue is intended to be fixed in a future version of the component.
Fixed	This issue has been fixed in a previous version.
NoFix	There are no plans to fix this issue.
Doc	The appropriate documents will be updated in the future.

Modifications

Additions and changes of the contents since the previous revision of this document is highlighted by a vertical bar in the margin and the last page of this documents holds a revision record.

1 Overview

1.1 Revision Overview

The table lists the revisions of the various configurations of the board.

Table 2 Summary revisions

Revision	Description	Date
01	Prototypes.	Oct 30, 1999
02	First release.	Jan 13, 2000
03	Minor fixes.	April 26, 2000
04	Strap added.	June 8, 2000
10	New PCB layout, 100MHz-capable System Controller.	Aug. 18, 2000
11	Production-related changes	June 15, 2001
12	Production-related changes	July 20, 2001
13	Minor production test procedure change	August 8, 2001

Note that not all revision 01 prototypes are marked with the revision number.

1.2 Overview of Errata and Functional Changes

The tables below give a one-line overview of the Errata and the Functional Changes (FCs). Each of these are assigned a unique name/number.

Table 3 Summary of Errata

Erratum No	Description
E1	COREHI interrupt line spuriously active.
E2	System Controller latch-up with EJTAG activity under reset. LV gets hot.

Table 4 Summary of Functional Changes

Functional Change No	Description
F1	100 MHz system controller.

1.3 Revisions of CoreLV and Errata/Changes

The table below correlates each erratum or FC to specific revisions of the CoreLV:

Table 5 Errata / FCs for CoreLV

	Revision										
	0 1	0 2	0 3	0 4	1 0	1 1	1 2	1 3			
Errata											ECOs
E1	X	X									02
E2	X	X	X	X							03
Functional Changes No.											
F1					X	X	X	X			

2 Errata Description

E1. COREHI interrupt line spuriously active

Problem: The interrupt signal *PCI_INT* from the System Controller lacks a pullup resistor to make it inactive, and this interrupt is used to generate the *COREHI* interrupt signal.

Implication: The *COREHI* interrupt signal may be spuriously active, and cannot be used.

Workaround: None.

Status: Fixed.

E2. System Controller latch-up with EJTAG activity under reset

Problem: The System Controller locks up when there is EJTAG activity and its RESET input is active.

Implication: The boards appears to fail, and the LV gets hot, if an EJTAG “reset and run” sequence is issued, or if manual reset is used simultaneously with debug activity. This prevents use of EJTAG polling to detect the end of reset.

Workaround: EJTAG tool must implement a delay after asserting reset, before continuing with probe activity.

Status: Fixed.

3 Functional Changes

F1. 100MHz System Controller

Description: The Galileo GT64120A System Controller is used, giving possible bus speeds up to 100MHz. In addition, some CBUS buffering is reorganised to support the higher speed.

Status: Implemented in revision 10.

Appendices

A Revision History

Revision	Date	Description
01.00	2000/01/13	Initial Release.
01.01	2000/03/22	Updated copyright notice.
01.02	2000/04/26	Added E1, F1, and CSM version templates.
		Updated copyright notice.
01.03	2000/06/02	Added E2.
		Removed CSM J25C1 versions and F1 from revision table.
10.00	2000/08/18	Functional change F1 changed to revision 10.
10.01	2001/01/23	Document Layout updated.
10.02	2001/08/27	Added revs 11,12 and 13.