S334A Board Errata

Notes

Supplemental Information

This Board Errata reflects revisions to the IDT79S334A Evaluation Board.

Revision History

September 5, 2000: First version of errata.

November 10, 2000: Added items #2 and #3 which refer to Embedix Linux Installation.

Descriptions and Workarounds

Item #1 - Electrical short

Issue: On the S334A revision 1 and revision 2 boards, VIO Pin A16 and Pin B19 on the two 3.3V PCI connectors (J16 and J17) are connected to the 5V supply instead of the 3.3V supply. When a 3.3V PCI card is plugged into either of the 3.3V PCI connectors, the 3.3V and the 5V supply will be shorted together.

Workaround: Desolder the A16 and B19 pins on both connectors and cut, so they don't make a connection with the pad on the board.

Fix: This item will be fixed in board revision 3 and subsequent revisions.

Item #2 - Board Frequency (Embedix Linux Installation)

Issue: The current distribution of Lineo Embedix CD-ROM assumes that the IDT evaluation board runs at 50 MHz system clock. In reality, IDT evaluation board may be running at a different frequency. For example, the IDT 79S334A evaluation boards typically ship at 75 MHz, and the IDT 79S332 evaluation boards typically ship at 66.5 MHz.

Work-around:

Open the file "linux/include/asm-mips/serial.h".

Change the definition of "IDT_BASE_BAUD" to reflect the actual frequency value.

For example, to use a 75MHz system:

define IDT_BASE_BAUD (75 * 1000 * 1000 /16).

Fix: This will be fixed in the next Lineo version.

Item #3 - Load Address (Embedix Linux Installation)

Issue: The current distribution of Lineo Embedix CD-ROM assumes that the IDT evaluation board ships with EPROM labeled IDT/sim version 9.0. In reality, boards shipped after November 8, 2000, ship with IDT/sim version 9.1. Version 9.1 is larger in size. The default address at which Embedix loads is, therefore, not valid for IDT/sim version 9.1

Work-around:

Change the load address to a higher address. In order to change the load address of the Embedix image, make the following modification:

Open the file "linux/arch/mips/Makefile".

Change the value of "LOADADDR".

For example, here is a safe value:

LOADADDR += 0x80200000.

Fix: This will be fixed in the next Lineo version.