

Readme

Lattice recommends starting with the precompiled demonstration for the **ECP2 Mico32 board**. The demo has proven operation with the following DDR1 modules:

- Corsair VS512SDS266 200-pin SODIMM 512-megabyte PC2100
- Infineon HYS64D64020GBDL-6-B, a 64Mx64 SDRAM, S200-DDR1-2700-CL25-512M-328

Other DDR modules are not guaranteed to work, so use one of the above DDR modules.

The Mico System Builder is delivered with a stripped-down Cygwin as part of MicoSystemBuilder SDK shell and is sufficient for the prebuilt demo. You will need a full Cygwin installation if you intend to rebuild the demo or view the source tarballs. Cygwin can be obtained from www.cygwin.com; please refer to the "LatticeMico32 Port to Linux Building Guide" for information on Cygwin requisites.

Known Issues

Item	Release	Issue
ttyS0 Overflows	2008-02-19	The LatticeMico32 UART does not contain receive buffers and so actions that can result in rapid back-to-back data arriving at the LatticeMico32 UART such as typing fast on the serial console or using the up-arrow command-recall shortcut can result in data overflow, detected by Linux as ttyS0 overflows.
shutdown command does not work	2008-02-19	In the provided demo platform, there is no means for resetting the processor and so the shutdown command is not implemented.
Push of Program button	2008-02-19	When configuring the FPGA using the SPI flash (after programming the SPI flash with the demo bitstream) such as cycling the power on the LatticeMico32 board or pushing the "program" button, you must wait till the FPGA is configured and then press the "reset" button on the board due to limitations in the LM32 DDR controller.
Board stops working after some time	2008-02-19	The provided demo FPGA bitstream contains time-limited eval IP's for the TSMAC and DDR. This will cause the board to stop functioning after some time requiring you to reprogram the FPGA.
ping to LatticeMico32 board when running u-boot does not work	2008-02-19	U-Boot does not support ping replies and hence silently drops incoming ping requests. However, U-boot supports pinging other network partners.

Release Notes

Item	Release	Issue
Full Demo and port referenced at Theobroma site.	2008-02-19	Initial release. Date stamped 20080206. Released to web 2008-02-19.