

Build eCos on BeMicro

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Download demo package

- svn checkout
<http://www.ecosforge.net/ecosforge/nios2ecos>
- <http://www.zylin.com/ecosbemicro.tar.bz2>
- Install eCos 3.0 (any GCC toolchains, none is fine)
- <http://ecos.sourceware.org/getstart.html>



Setup eCos and Nios tools

- Start Nios 2 EDS SDK Shell
- `export PATH=$PATH:.../ecos-3.0/tools/bin`
- `export ECOS_REPOSITORY=$PATH:.../ecos-3.0/packages`
- `cd nios2ecos`
- `. nios_env.sh`
- `cd bemicro`
- `sh build.sh`



A few hacks...

- Install a fresh Cygwin side-by-side to Quartus. The Cygwin that ships w/Quartus is ... not current
- Flaky error messages about tclsh? Upgrade to latest Cygwin
- `sh fixquartus90cygwin.sh => dos2unix` fixes. You'll need to run `dos2unix` occasionally on older script files in Quartus.



Run example

- `nios2-configure-sof fpga.sof`
- `nios2-terminal`
- `nios2-gdb-server --tcpport=1234 --tcppersist -r`
- `nios2-elf-gdb`
 `install/tests/kernel/v3_0/tests/tm_basic`
- `target remote localhost:1234`
- `load`
- `continue`
- `=> voila! Check output in nios2-terminal`



uClinux

- Start with nioswiki pages
- Are you familiar with git? Figure out how to organize: updates, your own modifications, your application, etc.
- git submodules are used heavily
- Demo
- You have to develop under Linux
- Quartus tools work **great** under Ubuntu 9.10.



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Embedded services

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