

SIMTEC ELECTRONICS

ABLE batty user guide

Simtec Electronics

**BJD
VRS**

ABLE batty user guide

Simtec Electronics

by B J D and V R S

Copyright © 2005 Simtec Electronics

- LINUX® is a registered trademark of Linus Torvalds.
- UNIX® is a registered trademark of The Open Group.
- All other trademarks are acknowledged.

While every precaution has been taken in the preparation of this book, the publisher assumes no responsibility for errors or omissions, or for damages resulting from the use of the information contained herein.

Revision History

Revision 0.18

15th April 2005

VRS

Initial Release.



Table of Contents

- 1. Overview 1
- 2. Using batty 3



List of Examples

2.1. Starting batty from the command line	3
---	---



Chapter 1. Overview

The Simtec Electronics Advanced Boot Load Environment (ABLE) is a portable modular boot loader for use in applications where an OS must be retrieved and started. ABLE provides extended functionality providing modules for a command line, video consoles, serial consoles, network booting and numerous other facilities.

Batty is an ABLE tool which performs hardware unit tests. It runs on all platforms. The number and nature of its tests vary between platforms depending on factors such as availability of hardware and features preset. To be used effectively batty must be run on ABLE versions later than 2.05.



Chapter 2. Using batty

The latest version is usually available either from the ABLE support page or the specific board support page on the Simtec Electronics website.

The batty tool is executed from the ABLE command line and commences execution immediately.

Example 2.1. Starting batty from the command line

```
>(tftpboot)batty
.....loaded (tftpboot)batty, 0x8040 bytes at 0x00008000
boot: booting 'able appl'
Simtec Board Test Tool, Version 0.18
(c) 2005 Simtec Electronics

EB2410ITX (BAST) Test Suite

Testing S3C24XX CPU Core
CPU ID 32410002, OK [S3C2410A]
Testing internal SRAM block
  Pattern: all ones
  Pattern: all zeros
  Pattern: alternate zero/ones (LSB set)
  Pattern: alternate zero/ones (LSB unset)
  Writing address to each location

Testing system RAM [0x00400000..0x07d00000]
  Pattern: all ones
  Pattern: all zeros
  Pattern: alternate zero/ones (LSB set)
  Pattern: alternate zero/ones (LSB unset)
  Writing address to each location

Checking ABLE CRC
CRC OK

Searching for ABLE info
Version 208
Release 2005041001
Supported machine number 3
Supported machine number 6

Testing CPLD registers
CPLD ID register (value 00) OK

DONE: 13 tests, 13 ok, 0 failed, 0 warnings
PASSED: all tests OK
>
```

Example 2.1, “Starting batty from the command line” shows a typical execution of batty on an EB2410ITX. On this particular platform a fairly small number of tests are performed, specifically a series of memory tests and a verification that the ABLE stored in flash is viable. The DONE line shows the number of tests attempted and the number passed along with any warnings.

