bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program   ☐ V1.00
Firmware for BDI2000   ☑ V1.01
Logic for BDI2000   ☐ V1.02

Date: Sept 26, 2000
Page: 1/1

Enhancements

• User selectable Telnet prompt added. The Telnet prompt can be defined in the configuration file and also interactively changed during a Telnet session.

• Flash programming support for Atmel AT49 added.

• New flash erase modes support now chip and block erase.

• The flash programming function (PROG) now supports different file formats.

• Load offset added to Telnet LOAD, VERIVY and PROG command.

• GDB binary download support added (X<memaddr>,<len>:bbbbbbbbb).

Error Correction

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program	☐ V1.00
Firmware for BDI2000	■ V1.02
Logic for BDI2000	☐ V1.02

Date: Dec 1, 2000
Page: 1/1

Enhancements

• Support for multiple devices on the JTAG scan chain added (see new configuration parameters).

• New Telnet command (CONFIG) added to show current BDI configuration.

• Support for TMS470 added.

• A HALT entered via Telnet sends a signal to GDB to inform it about the new target state. Stopping the target via Telnet may be necessary if GDB does not forward ctrlC to the BDI. This is sometimes the case when working with a GUI on top of GDB.

• An additional option for the BREAKMODE configuration parameter allows to define the opcode pattern GDB uses when setting a breakpoint. By default a pattern of 0xE7FFDEFE is assumed.
The BDI needs to know the correct pattern in order to setup the correct trigger conditions in the ARM ICEBreaker module.

Error Correction

bdiGDB for BDI2000 **ARM7 / ARM9 version**	**Release Note**

Config. program	■ V1.01	
Firmware for BDI2000	■ V1.03	
Logic for BDI2000	☐ V1.02	

Date: March 1, 2001
Page: 1/1

Enhancements

• New Telnet command (DUMP) added to upload a binary memory image.

• New Telnet commands added to access CP15 registers (see manual).

• New Telnet command (RDALL) added to display all ARM registers banks.

• The GDB protocol Z-packet is supported. This allows debugging of mixed ARM/Thumb applications.

Error Correction

• Error in Thumb mode for ARM9TDMI based targets corrected.

• Correct BYPASS instruction scanned for additional devices on the JTAG scan chain.

• Debugging of ARM940T works now correct also with data cache in write-back mode.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program   ☐ V1.01
Firmware for BDI2000   ■ V1.04
Logic for BDI2000   ■ V1.03

Date: Juli 13, 2001
Page: 1/1

Enhancements

• Additional JTAG clock frequencies (down to 10kHz) added.

• Configuration parameter CLOCK enhanced to support different JTAG clocks during startup. For more information see user's manual.

Error Correction

• Error when host uses 64k TCP window corrected.

bdiGDB for BDI2000 ARM7 / ARM9 version

Release Note

Config. program ☐ V1.01
Firmware for BDI2000 ■ V1.05
Logic for BDI2000 ☐ V1.03

Date: Nov. 15, 2001
Page: 1/1

Enhancements

- New configuration parameter (STARTUP) added, see user's manual for more information.

- New configuration parameter (RESET) added to define the target reset type (NONE, HARD).

- New configuration parameter (WAKEUP) added to support targets that needs some wake-up time after a reset.

- The RS232 port of the target can be routed via the BDI to a TCP/IP channel, see user's manual.

- For ARM9 targets, the hardware vector catch register is used to implement the vector catch feature.

- The GDB „monitor"command can be used to access BDI Telnet commands.

Error Correction

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program ☐ V1.01
Firmware for BDI2000 ■ V1.06
Logic for BDI2000 ☐ V1.03

Date: Febr. 11, 2001
Page: 1/1

Enhancements

• Access to IceBreaker registers via Telnet implemented.

• IceBreaker watchpoint hardware can be programmed via Telnet (see user's manual).

• New init list entries allow to execute memory read accesses.

• The new Telnet command RDUMP writes the value of all user defined registers to a file on the host.

• The IceBreaker debug communication channel (DCC) can be routed to a TCP/IP channel.

• Support for ARM9E, ARM946E and ARM966E has been added.

• Faster programming for Intel StrataFlash.

Error Correction

• Error when invalidating 920T instruction cache corrected.

• Error when debugging ARM9 in Thumb mode corrected.

• Error when reading 920T CP15 registers corrected.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program ■ V1.02
Firmware for BDI2000 ■ V1.07
Logic for BDI2000 ☐ V1.03

Date: April 29, 2002
Page: 1/1

Enhancements

• Support for Multi-Core debugging added. Concurrent debugging of up to 4 daisy chained ARM cores with different GDB sessions is now possible.

• The Windows setup tool is now a WIN32 application.

• BDI Firmware programming time improved for the Linux setup tool (bdisetup).

Error Correction

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program ☐ V1.02
Firmware for BDI2000 ■ V1.08
Logic for BDI2000 ■ V1.04

Date: July 10, 2002
Page: 1/1

Enhancements

- Driver type of the TRST output can be configured as open-drain or push-pull

- The time how long the BDI asserts the reset signal can be configured.

- Via Telnet, multiple cores can be started / halted with one command.

- Processing of GDB monitor command improved.

- No error returned to GDB in case of an invalid 4 byte memory read access. This because GDB refuses to connect to the target if it gets an error during this connection sequence. GDB tries to read the stack frame during the connection sequence and this may lead to invalid memory accesses.

Error Correction

- AMD erase time-out increased

- Error in sector erase sequence for AMD flash on 16bit bus corrected.

- With firmware version 1.07 (first multi-core version), an error during the reset sequence was introduced. This error seems to have no effect for ARM7 cores but for 920T cores it is fatal and is now corrected.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program	☐ V1.02
Firmware for BDI2000	■ V1.09
Logic for BDI2000	☐ V1.04

Date: October 29, 2002
Page: 1/1

Enhancements

• Support for TI925T added.

• New init list entry (WBIN) added. Allows to write up to four binary images during init list processing.

• Memory test function implemented (Telnet MT command).

• A List of valid memory ranges can be defined to avoid invalid memory accesses via the JTAG interface (MMAP entry in the init list).

• Support for AMD MirrorBit flash added.

Error Correction

• Deadlock when continuing from a hardware breakpoint via Telnet removed.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program ■ V1.03
Firmware for BDI2000 ■ V1.10
Logic for BDI2000 ■ V1.05

Date: April 25, 2003
Page: 1/1

Enhancements

- Support for network configuration via BOOTP added.

- Support for 32 bit wide flash chips added.

- New Telnet command added to unlock multiple (same size, continuos) flash sectors with one command.

- Improved Telnet „erase" command to erase multiple (same size, continuos) flash sectors with one command.

- Improved Telnet interface with history buffer and line editing.

- The Telnet command „CONFIG" allows to change the name of the configuration file name. The new name is stored in the BDI's flash and a boot sequence is started.

- Display download progress for ELF and BIN files.

- Reset sequence changed / optimized.

- New Telnet command (FLASH) added to change the flash configuration interactively. This may be useful when running a Telnet script to program different flash memory systems on the target. For example if there is a 8bit boot flash and a 32bit main flash system.

- Maximal JTAG clock rate increased to 16 MHz.

- New faster download mode added (see WORKSPACE parameter in user's manual).

Error Correction

- Error in checksum calculation corrected (Telnet command MC).

Note:

The BDI's ethernet MAC address will change with this release.
The setup tool displays the new MAC address.

bdiGDB for BDI2000 ARM7 / ARM9 version

Release Note

Config. program ☐ V1.03
Firmware for BDI2000 ■ V1.11
Logic for BDI2000 ☐ V1.05

Date: June 5, 2003
Page: 1/1

Enhancements

• Faster flash memory programming.

Error Correction

• With firmware version 1.10, flash programming with workspace was not reliable anymore on some targets. This has been corrected now.

bdiGDB for BDI2000 ARM7 / ARM9 version

Release Note

Config. program	☐ V1.03
Firmware for BDI2000	■ V1.12
Logic for BDI2000	☐ V1.05

Date: Sept. 23, 2003
Page: 1/1

Enhancements

- The Telnet command „CONFIG" allows to change the name and IP address of the configuration file. The new name and IP address is stored in the BDI's flash and a boot sequence is started.

- The file names in the configuration file maybe relative to the configuration file path.

- New Telnet command „bdm" that allows to set a data watchpoint with an address mask added.

- The Telnet command „reset" is now synchronous. This allows the use of it via a GDB monitor command. Also the handling of GDB monitor commands has been improved.

Error Correction

- Flash programming with workspace did not work for some flash memory configurations (chip type, bus width). This has been fixed now.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program	☐ V1.03
Firmware for BDI2000	☑ V1.13
Logic for BDI2000	☐ V1.05

Date: Oct. 28, 2003
Page: 1/1

Enhancements

• Support for ARM926E added.

• Support for MAC71xx including internal flash programming added.

bdiGDB for BDI2000 ARM7 / ARM9 version — Release Note

Config. program ■ V1.04
Firmware for BDI2000 ■ V1.14
Logic for BDI2000 ■ V1.06

Date: January 21, 2004
Page: 1/1

Enhancements

• JTAG signal timing improved.

• Saver handling of GDB monitor commands

• New Telnet DELAY command added. Maybe useful when working with GDB command scripts.

Error Correction

• Correct definition of the predefined register (r0..r15, sp, lr, pc, psr, cpsr).

• AT29 flash programming is working again now.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program ☐ V1.04
Firmware for BDI2000 ☑ V1.15
Logic for BDI2000 ☐ V1.06

Date: July 2, 2004
Page: 1/1

Enhancements

• The Telnet command CONFIG allows to change all BDI network parameters. The new parameters are stored in the BDI's flash and a boot sequence is started.

• Programming support for LPC2100 internal flash added.

• Programming support for STA2015 internal flash added.

• Programming support for ADuC7000 internal flash added.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program	☐ V1.04
Firmware for BDI2000	■ V1.16
Logic for BDI2000	☐ V1.06

Date: Dec. 17, 2004
Page: 1/1

Enhancements

• Telnet history buffer no longer filled with repeated commands.

• The erase list accepts a new UNLOCK option (see user's manual).

• For ARM9E, the BKPT instruction is used to implement software breakpoints.
  This frees the otherwise used ICEBreaker watchpoint.

• Support for ST30F7xx internal flash added

Error Correction

• Correct JTAG lockout recovery for MAC7100 Rev.B implemented.

• Error when writing to banked GPR's corrected.

• Error when programming LPC2000 256k devices corrected

bdiGDB _for BDI2000_ ARM7 / ARM9 version	Release Note

Config. program	☐ V1.04
Firmware for BDI2000	■ V1.17
Logic for BDI2000	☐ V1.06

Date: March 11, 2005
Page: 1/1

Enhancements

• Alternate single step mode added (see manual).

• Support for Atmel AT91SAM7S internal flash added.

• Support for FA526 processor added.

• Special reset sequence for S-Gold processor added.

• Optimized flash programming for LPC2xxx devices. A page is programmed only once.

bdiGDB for BDI2000 ARM7 / ARM9 version | Release Note

Config. program	■	V1.05
Firmware for BDI2000	■	V1.18
Logic for BDI2000	☐	V1.06

Date: March 17, 2006
Page: 1/1

Enhancements

- Support for low level scan chain configuration added (see user's manual).

- Enhanced flash erase support via configuration file (see user's manual).

- The Windows setup tools now allows to select a COM port in the range 1 - 19.

- The Telnet CONFIG command displays the firmware version.

- Programming support for LPC213x/LPC214x internal flash added.