

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

ABATRON

Date: Dec. 17, 2003
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Enhancements

- New startup mode added (see user's manual).
- Via Telnet, target memory can be accessed while the processor is running.

Error Correction

- Memory write via core does no longer make use of the COP/JTAG auto increment mode. This did not work for slower JTAG clock rates.
- The BDI no longer sets the DBCR0[FT] bit because clocking does not restart even when DBSR is cleared and the core restarted.

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

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Date: June 17, 2004

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Enhancements

- New LOOP breakpoint mode added (see user's manual).
- New ICMP single step mode added (see user's manual).
- 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.
- New Telnet DELAY command added. Maybe useful when working with GDB command scripts.
- The file names in the configuration file maybe relative to the configuration file path.
- Reset/Startup sequence has been improved.
- The BDI enables processor halt in response to a debug event only if the processor is started via GDB or there are breakpoints set via Telnet. This allows to let the BDI connected while using GDB or GDB stub on the target.

Error Correction

- The target is no longer forced to debug mode when it enters NAP/DOZE state.

Config. program V1.00
Firmware for BDI2000 V1.03
Logic for BDI2000 V1.02

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Date: August 13, 2004
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Enhancements

- The page table search algorithm now also supports systems where the L1 page table entries are physical addresses (NetBSD).
- Position of the page present bit can be defined via the MMU XLAT parameter (see manual).
- The flash unlock command has more features (see manual).
- For virtual to physical address translation, the current L2 CAM (L2 TLB1) is also searched for a match.

Error Correction

- Address translation via page table works now also when MSR[DS] is cleared. In the previous firmware, only default translation has been used if MSR[DS] was cleared.
- Correct display of L2 TLB content (Telnet L2TLB command)

Config. program ■ V1.01
Firmware for BDI2000 ■ V1.04
Logic for BDI2000 ■ V1.05

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Date: August 26, 2005
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Enhancements

- Optimized LOOP mode startup sequence.
- Option to select slower JTAG clocks added.
- Initial support for MPC8548 added, including JTAG work-around for Rev.1 silicon.
- Support for 36-bit addresses added.
- Option to transfer E500 register list to GDB added.
- Telnet history buffer no longer filled with repeated commands.
- Support for multiple devices on the JTAG scan chain added.
- Initial support for 64-bit Linux page table entries added (not tested yet).
- The Windows setup tools now allows to select a COM port in the range 1 - 19.

Error Correction

- Correct address translation of GDB requested memory blocks that crosses a page boundary.

Config. program V1.02
Firmware for BDI2000 V1.05
Logic for BDI2000 V1.05

ABATRON

Date: August 16, 2006
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Enhancements

- Support for MPC8548/47/45/43 Revision 2 added.
- Enhanced flash erase support via configuration file (see user's manual).
- New configuration parameter for Reset Mode and Reset Time added (see user's manual).
- Improved Telnet history buffer handling.
- A Telnet/GDB (TCP) connection request to an already open TCP channel is accepted if the host IP is the same as the initial one. The old TCP channel will be closed immediately.

Config. program V1.02
Firmware for BDI2000 V1.06
Logic for BDI2000 V1.05

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Date: Dec. 6, 2006
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Enhancements

- New flash algorithm types added (S29M64X8, S29M32X16).
- The MirrorBit algorithm uses the write buffer also when no workspace is defined.
- New RECONNECT option to the DEBUGPORT parameter added. When present, a Telnet/GDB (TCP) connection request to an already open TCP channel is accepted if the host IP is the same as the initial one. The old TCP channel will be closed immediately.
- New init list entry WREG PC added.
- MMU default translation can be disabled with „MMU XLAT 0xFFFFFFFF“.
- If PTBASE is not defined, TLB0 is also searched in order to translate a virtual address.

Error Correction

- Correct setup of L2SRAM for MPC8548 Rev.2 when startup mode LOOP is selected.

Config. program V1.02
Firmware for BDI2000 V1.07
Logic for BDI2000 V1.05

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Date: June 22, 2007
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Enhancements

- Telnet accepts now multiple commands separated by a semi-colon on one line.
- Enhanced power-down mode handling (doze / nap / sleep).
- Support for MPC8533/44 added.

Config. program V1.02
Firmware for BDI2000 V1.08
Logic for BDI2000 V1.05

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Date: Sept 28, 2007
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Enhancements

- Telnet IAC option handling improved.
- If BREAKMODE LOOP is selected then single step is also implemented by setting loop breakpoints on the next instructions. Allows to debug critical code in RAM where the requirements for JTAG debugging are not met (IVOR15 does not point to valid/fetchable code).
- Support for Dual-Core MPC8572 added (see manual for dual-core support).

Config. program V1.02
Firmware for BDI2000 V1.09
Logic for BDI2000 V1.05

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Date: June 20, 2008

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Enhancements

- Enhanced Telnet „go“ and „halt“ command for MPC8572 dual-core processor.

Error Correction

- Error in e500 GDB register packet format corrected.

Config. program V1.02
Firmware for BDI2000 V1.10
Logic for BDI2000 V1.05

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Date: Febr. 13, 2009
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Enhancements

- Support for MPC8536 added
- New MT Telnet command for a simple bus/memory test added.

Error Correction

- Error when single-stepping in JTAG mode corrected.

Config. program V1.02
Firmware for BDI2000 V1.11
Logic for BDI2000 V1.05

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Date: June 24, 2009

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Enhancements

- Support for MPC8569 added
- Support for P2020 added

Config. program V1.02
Firmware for BDI2000 V1.12
Logic for BDI2000 V1.05

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Date: Febr. 12, 2010
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Enhancements

- Support for Boot Page translation added, define „MMU XLAT 0xffff000“.
- Support for P2020 Rev.2 (new PVR) added.
- Download speed via GDB improved.
- Maximal number of software breakpoints increased to 64.
- Support for GDB p - packet (single register read) added.

Error Correction

- Display all 512 TLB0 entries for e500v2.

Config. program V1.02
Firmware for BDI2000 V1.13
Logic for BDI2000 V1.05

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Date: June 25, 2010

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Enhancements

- Support for P1020 added
- Some GDB protocol improvements.

Config. program V1.02
Firmware for BDI2000 V1.14
Logic for BDI2000 V1.05

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Date: June 10, 2011

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Enhancements

- Special reset sequence required for P1010/14 added.
- For some devices, overriding the Boot ROM Location is supported via the ROMLOC option.
- GDB hardware watch reporting enhanced by using the T05watch response packet.

Config. program V1.02
Firmware for BDI2000 V1.15
Logic for BDI2000 V1.05

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Date: Sept. 9, 2011

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Enhancements

- Accept new e500v2 PVR numbers.