

BDI2000

High-speed BDM/JTAG Debug Interface

- BDM support for CPU16/32/32+, PowerPC 5xx/8xx, ColdFire
- JTAG support for ARM, M-CORE, PowerPC 4xx/6xx/7xx/74xx, PowerPC 82xx/83xx/85xx, XScale, MIPS32, MIPS64
- Host communication via RS232 and Ethernet
- Program download speed up to 320 Kbytes/s
- Target communication speed up to 16 Mbit/s
- Supports target system voltage from 1.8 – 5 V
- Supports debuggers from leading vendors
- Same hardware for all supported targets and debuggers
- Flash memory on-board programming
- Easy connection to the target system
- Robust EMC-optimized design
- Excellent price-performance payoff
- 3 years warranty



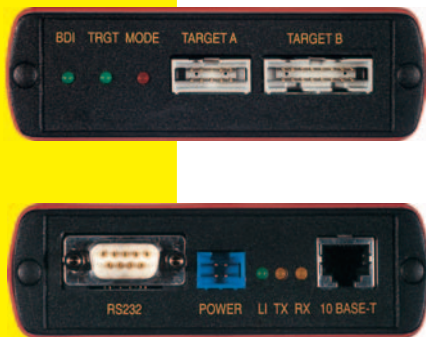
On-chip Debugging

The increasing complexity of today's software and hardware designs is leading to some fresh approaches to debugging. Silicon manufacturers offer more and more on-chip debugging features for emulation of new processors.

This capability, implemented in various processors under such names as Background Debug Mode (BDM), JTAG and on-chip emulation, puts basic debugging functions on the chip itself. With BDM or JTAG debug port, you control and monitor the microcontroller solely through the stable on-chip debugging services. This debugging mode runs even when the target system crashes and enables developers to continue investigating the cause of the crash. You won't waste time and target resources with a software ROM monitor, and you eliminate the cabling problems typical of ICEs.

Capitalizing on this technology, Abatron offers the high-speed BDI2000 BDM/JTAG interface with a comprehensive support for debuggers from leading vendors.

BDI2000 allows communication via RS232 or 10 BASE-T Ethernet between the development computer and the BDM/JTAG interface of the target system.



Excellent Performance

The BDI2000 communicates with the target system with up to 16 Mbit/s and allows very fast program download rates of up to 320 Kbytes/s.

In most cases, the BDI2000 and the associated software packages eliminate the need for expensive hardware such as an in-circuit emulator. Even better, the BDI2000 accesses the on-chip emulation capabilities of today's newest processors which aren't supported by traditional ICEs.

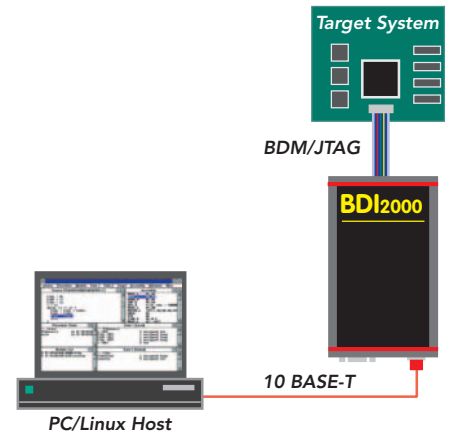
Advanced Hardware Technology

As a result of consistent implementation of latest technology, the BDI2000 is optimally prepared for further enhancements.

The firmware and the programmable logic of the BDI2000 can be updated by the user with a simple Windows based configuration program. The BDI2000 supports target systems from 1.8 Volts to 5.0 Volts.

Typical Application

The following example shows BDM/JTAG debugging via 10 BASE-T Ethernet connection.



Contact your local sales representatives or Abatron for specific debugger and CPU support.



Specifications

Power Supply Voltage Limiting	5 VDC \pm 0.25 V
Power Supply Current	typ. 500 mA
Baud Rates (RS232)	max. 115 Kbaud
Network Interface	10 BASE-T
Target Interface	BDM and JTAG
Serial Transfer Rate between BDI and Target	up to 16 Mbit/s
Supported Target Voltage	1.8 – 5 V (Rev. C)
Operating Temperature	+ 5 °C ... + 60 °C
Storage Temperature	- 20 °C ... + 65 °C
Relative Humidity (non-condensing)	< 90% rF
Size (without cables)	190 x 110 x 35 mm
Electromagnetic Compatibility (EMC)	EN 50081-2, EN 50082-2

©1998-2005 by Abatron AG. All rights reserved. Specification subject to change without notice. All trademarks are property of their respective holders.



ABATRON AG
CH-6343 Rotkreuz (Switzerland)
+41 41 792 09 55 Phone
+41 41 792 09 60 Fax
E-mail: info@abatron.ch
http://www.abatron.ch