

BDI3000

High-Speed BDM/JTAG Debug Interface



Features

- BDM debug support for ColdFire, PowerPC 5xx/8xx
- JTAG debug support for PowerPC, ARM, XScale, MIPS
- Host communication via RS232 and Ethernet (10/100)
- Program download speed up to 1500 Kbytes/s
- BDM/JTAG clock up to 32 MHz
- Supports target system voltages from 1.2 – 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 a 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.

Capitalizing on this technology, Abatron offers the high-speed BDI3000 BDM/JTAG interface with a comprehensive support for debuggers from leading vendors. BDI3000 allows communication via RS232 or 10/100 BASE-T Ethernet between the development computer and the BDM/JTAG interface of the target system.





Excellent Performance

The BDI3000 communicates with the target system with up to 32 Mbit/s and allows very fast program download rates of up to 1500 Kbytes/s.

Advanced Hardware Technology

As a result of consistent implementation of latest technology, the BDI3000 is optimally prepared for further enhancements. The firmware and the programmable logic of the BDI3000 can be updated by the user with a simple configuration program. The BDI3000 supports target systems voltages from 1.2 Volts to 5.0 Volts.

Specifications

Power Supply Voltage Limiting	5 VDC ± 0.25 V
Power Supply Current	max. 1 A
Baud Rates (RS232)	max. 115 Kbaud
Network Interface	10/100 BASE-T
Target Interface	BDM and JTAG
BDM/JTAG clock	up to 32 MHz
Supported Target I/O Voltages	1.2 – 5 V
Operating Temperature	+ 5 °C ... + 60 °C
Storage Temperature	- 20 °C ... + 65 °C
Relative Humidity (non-condensing)	< 90% rF
Size (without cables)	160 x 85 x 35 mm
Electromagnetic Compatibility	CE compliant
Restriction of Hazardous Substances	RoHS 2002/95/EC compliant

Support

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

Typical Application

The following example shows BDM/JTAG debugging via 10/100 BASE-T Ethernet connection.

