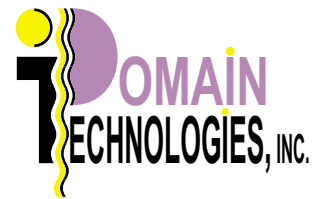


# SB-56K Motorola DSP56xxx

## Multi-Target JTAG / OnCE Emulator with Boundary Scan



### Features

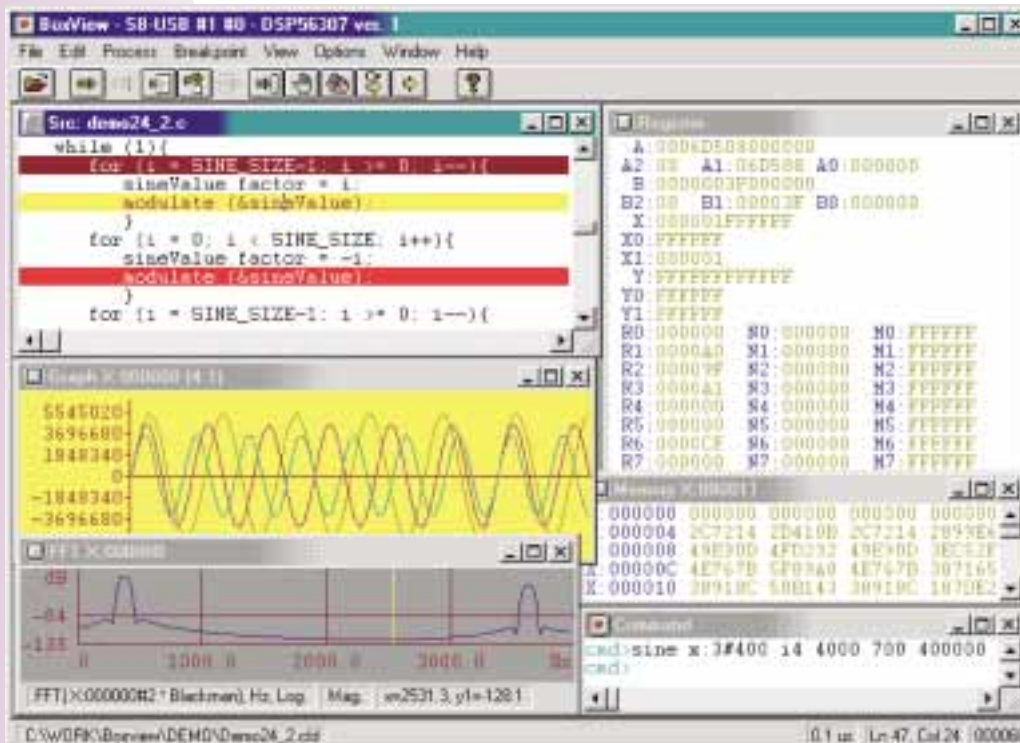
- ◆ Supports Motorola DSP56xxx family Digital Signal Processors.
- ◆ RS-232 connection to the host PC, and JTAG connection to one or more target DSPs.
- ◆ RS-232 connection to the host PC, and OnCE connection to one or two DSP56xxx.
- ◆ Seamless operation with Domain Technologies BoxView™ high level language debugger.
- ◆ Motorola, TASKING, and Metrowerks C compilers are fully supported at the source and object level.
- ◆ Customizable DSP-based emulation system comprises a 100 MHz DSP56303, 128k bytes external flash memory, and embedded code for JTAG and OnCE interfaces.
- ◆ Timing section includes 56-bit, 8 MHz counter capable of 125ns resolution for precision benchmarking.
- ◆ Optional BoxServer™ software allows remote debugging of one or more target DSPs via TCP/IP connection.
- ◆ Support for JTAG Boundary Scan monitoring and testing.



### General Description

The SB-USB is designed to support software development of Motorola DSP56xxx family DSPs via a host PC or notebook computer's RS-232 port.

The main advantages of the Domain Technologies RS-232 JTAG / OnCE debugger include traditional RS-232 connectivity, versatility as both a JTAG and OnCE port debugger pod, small size and the ability to optionally debug multiple target DSPs via the SB-56K's JTAG or OnCE interface and do it remotely via a TCP/IP connection.



RS-232 MULTI-TARGET JTAG / ONCE EMULATOR

PRODUCT BRIEF

# SB-56K Motorola DSP56xxx

## Multi-Target JTAG / OnCE Emulator with Boundary Scan



### Ordering Information

#### Motorola DSP56xxx DSPs

**SB-56K-LE**  
Single user, single target, includes BoxView HLL debugger software.

**SB-56K-LOC**  
Single user, multiple targets, includes BoxView HLL debugger software.

**SB-56K-1RU**  
Single user, multiple targets, remote access via TCP/IP connection, includes BoxView HLL debugger software and single user BoxServer TCP/IP upgrade.

**SB-56K-2RU**  
Multi-user, multiple targets, remote access via TCP/IP connection, includes BoxView HLL debugger software and multi-user BoxServer TCP/IP upgrade.

#### BoxServer TCP/IP Multi-Target Upgrade

**BoxServer-56K**  
Multi-user, multiple targets, remote access via TCP/IP connection, includes BoxView HLL debugger software and multi-user BoxServer TCP/IP upgrade.

### BoxView™ with Boundary Scan

BoxView SB-56K supports boundary scan testing and monitoring of system signals via JTAG by reading the device's boundary scan cell values.

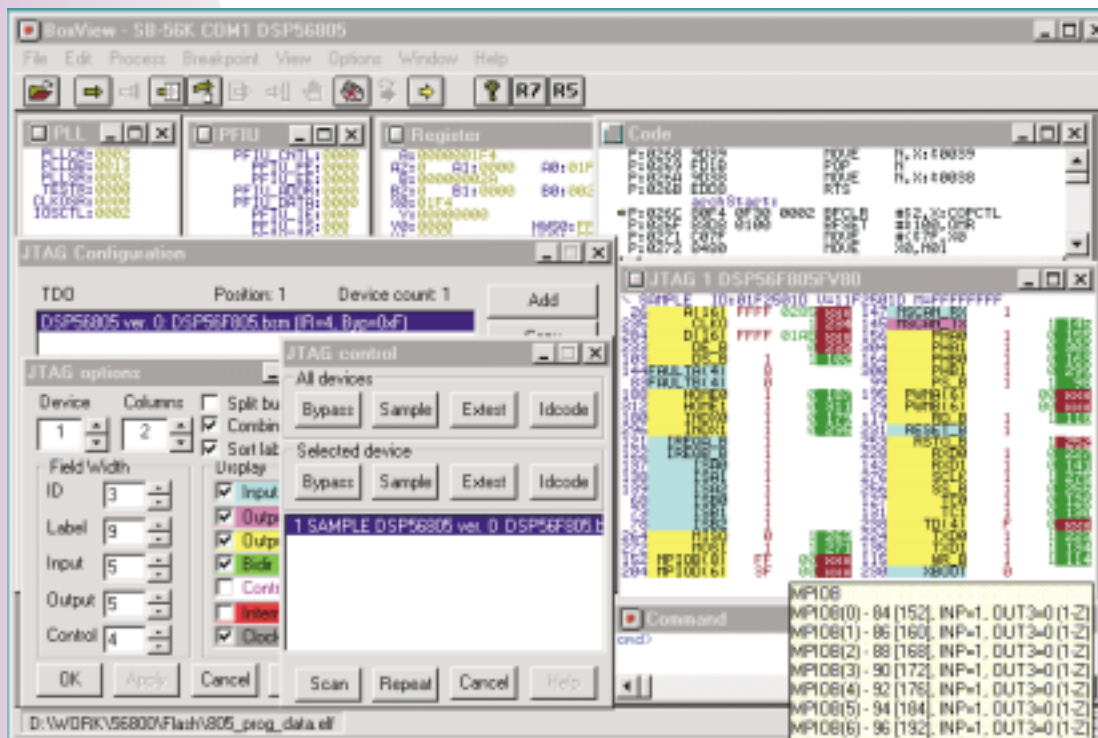
The SAMPLE operation is non-intrusive and can be executed while the target system is operating under normal conditions. The snapshot of the target status is displayed in the BSDL windows as shown in an actual screen capture below.

The BoxView boundary scan feature is invaluable for testing and monitoring of interconnections between components on a target application board. For proper JTAG EXTEST operation, target devices under test must be operated in test mode.

BoxView supports Boundary Scan Description files provided by the device manufactures as well as schematic netlist files from which real signal names for the particular project may be extracted and displayed.

### Supported devices include:

- ◆ Motorola DSP560xx \*
- ◆ Motorola DSP561xx
- ◆ Motorola DSP563xx
- ◆ Motorola DSP568xx



**BoxView™ now supports boundary scan testing and monitoring of DSP56K\* pins.**

\* Boundary Scan not available for Motorola DSP560xx.