PBD-PC

GETTING STARTED

Overview

The purpose of the PBD-PC module is to act as a buffer and provide voltage level shifting between the target debug/ITP port and the ECM-50. This allows the emulator to work with a number of different processors.

Note: PBD-PC modules are specifically designed for use only with the ECM-50. It is extremely important that the jumpers are in the correct position PRIOR to installation. Jumpers set in the wrong position may cause damage to the target system.

Configure Emulator TCK Current Level Setting

The JTAG current level is set in the SourcePoint™ debugger. Select **Options|Emulator Configuration** from the menu bar. After the dialog box opens, go to the **JTAG** tab. Set the JTAG current at 4 on the PBD if the TCK termination resistor is 39 ohms. Otherwise, set to 3 or less.

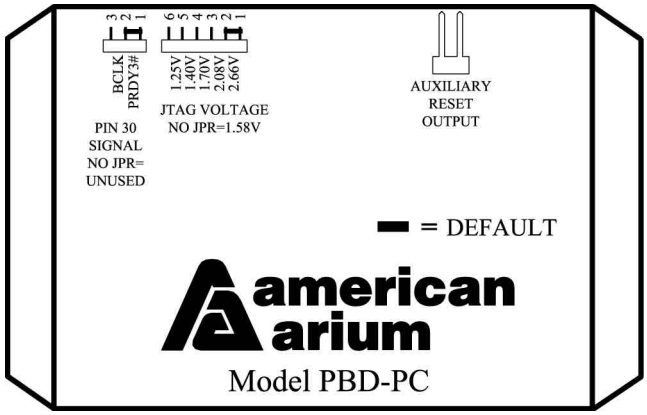
For Intel® Pentium® Pro Processors:
Move the JTAG voltage jumper to the 2.66 position. TCK DLY can be set in either position. Select PRDY3# for multi-processor systems.

For Intel® Pentium® II, Pentium® III, and Celeron® Processors:
Determine the I/O voltage of the target processor's debug port and use the appropriate setting. (See the table in the next column.)

For situations where the available debug port does not or cannot cause a system reset, an Auxiliary Reset Output is provided on the PBD. For example, when using many of the American Arium TAP adapters, the TAP usually has no access to a system reset signal. In this case, connect the reset adapter (yellow and black twisted pair cable) to the Auxiliary Reset Output on the PBD. Connect the other end to the target wherever a reset switch normally would be connected.

Note: The reset adapter is not polarized and does not need to be connected in any particular orientation since it is effectively just a switch closure.

Jumper Position	I/O Voltage	Comments
1.25V	1.25 Volts	
1.40V	1.40 Volts	
1.70V	1.70 Volts	
2.08V	2.08 Volts	
2.66V	2.66 Volts	For 2.5V-3.3V systems
Removed	1.58 Volts	For 1.5V systems



TCK rate and internal or external clock source for TCK generation are set in the SourcePoint™ debugger. Select **Options|Emulator Configuration** from the menu bar. After the dialog box opens, go to the **JTAG Clock** tab. Set as appropriate for your target.

If Pin 30 (Pin 29 of receptacle version) of the debug port is used as PRDY3#, set the jumper towards PRDY3#. If Pin 30 (Pin 29 of the receptacle version) is used as BCLK# (differential BCLK), set the jumper towards BCLK. Otherwise, leave it open.

If you have any problems or questions, contact Technical Support at 877-508-3970 toll free or 714-731-1661 outside the US or e-mail support@arium.com for assistance. For help outside North America, contact your local distributor.

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