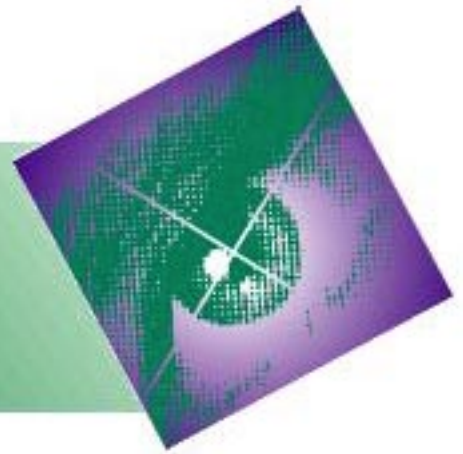


August 26, 1996

Bt848KPF

Bt848 JTAG Implementation



Please note the following implementation requirements when designing a video board with the Bt848. This is not a problem with the part, it is merely a legacy issue when using the Bt848 with older computer motherboards.

The JTAG implementation on the Bt848 includes a $\overline{\text{TRST}}$ (JTAG reset) pin. This reset pin on the Bt848 device is normally connected directly to the $\overline{\text{TRST}}$ pin on the PCI bus. New PC motherboards have no problem with this implementation. However, on a small percentage of older motherboards we have found the $\overline{\text{TRST}}$ pin is left floating. While this does not comply with the JTAG specification, some of these boards are still in use.

When the Bt848 card is installed into one of these older motherboards, the computer may not boot-up correctly. Because the $\overline{\text{TRST}}$ pin is floating, the JTAG controller may power-up in a test mode as opposed to an operational mode.

The solution is to ground the $\overline{\text{TRST}}$ pin on the Bt848 card. In this scenario the Bt848 cannot be used for JTAG, but guarantees that the Bt848 powers-up in the correct state.

If JTAG is required for board-testing purposes, a jumper may be installed in the card. When testing the card with JTAG, install the jumper in the configuration that connects the $\overline{\text{TRST}}$ pin to the PCI bus. When sending the card to customers, install the jumper so that $\overline{\text{TRST}}$ is connected to ground.

For technical support, contact our applications support group at 1-800-2BT-APPS.