

Using this Reference

This Quick Set-Up Reference is supplementary to the SmartWORKS User's Guide. It details essential information about installing a SmartWORKS DP board and establishing connectivity between a board, and customer premises equipment. For information on how to configure the board, refer to the SmartWORKS User's Guide that is included on the product CD-ROM.

To identify and locate board hardware such as LEDs, and jumpers, refer to the information below.

For hardware installation, software installation, and connectivity between a board, the network, and customer premises equipment, refer to the next page.

NOTE: This unit is for use only with compatible UL listed PCs or servers.

Agency Approvals

Agency approvals and homologations are available on the SmartWORKS CD ROM.

LED Descriptions

The SmartWORKS DP:

CR1-16 (DP 6409): DSP started LEDs. Each DSP turns its LED ON to indicate a successful initialization. (DP 3209 has CR1-8).

CR18: TDM clock termination LED. "ON" indicates TDM clocks are being terminated. Note: to terminate clocks, jumper J8 must be closed.

CR21: CPU LED. This LED is turned ON by the local CPU upon successful initialization.

CR17: Three stage power and board initialization monitoring LED with the following occurrences:

"ON," indicates 3.3V power is supplied and the board is ready for the driver to be loaded.

"OFF," indicates the driver has successfully loaded and the board has initialized.

"BLINKING," indicates the board initialization process has failed (possibly wrong firmware or hardware failure) or board panic has occurred.

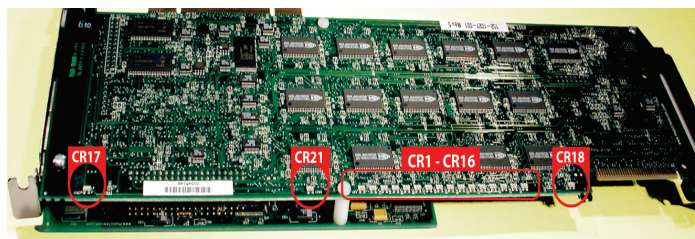
Note: Invoking the MTBlinkBoard() API function causes the LED to blink. The total number of times it blinks equals the board number + 1. Use this function to match board location in a chassis with its board number.

System Requirements

The computer must meet the following requirements prior to installing the SmartWORKS DP:

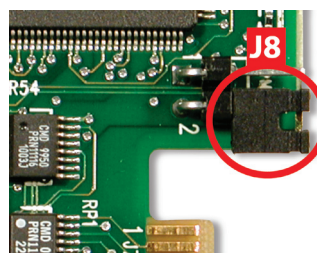
| Hardware System Requirements: | Operating Systems: |
|--|---|
| <ul style="list-style-type: none"> · Pentium IV or equivalent 400 MHz or better · ATX PCI motherboard or passive backplane with 3.3V ATX power supply · PCI 2.2 bus/PCI express | <ul style="list-style-type: none"> · Windows 2000 SP 3 · Windows XP SP 1 · Windows 2003 Server 32-Bit · Linux (Call for availability) |

SmartWORKS DP LEDs





Jumper J8

Jumper J8 terminates the clock and control signals on the MVIP or H100 Bus. When jumper J8 is closed, a connection is established that enables clock termination and activates LED CR18.



Trunk LEDs



-  Framers Reset
-  Singal Present & Alarm
-  Normal Operation
-  No Signal, Framers Started

Hardware and Software Installation

Switch off the power and remove power cords before opening the computer case. Do not re-attach power cords or switch on power to the computer while the computer case is removed.

Exercise ESD Precautions: Wear an ESD wrist strap.



Install the Card: Secure the card in a PCI slot with a chassis screw.

After the PC is powered back on cancel out of the Windows "Found New Hardware" screen. Place the SmartWORKS CD into the CD ROM and allow the board installation to finish. If multiple boards are connected with a MVIP or H.100 cable, they must be configured as Master or Slave. Refer to the *SmartWORKS Developer's Guide* for more information.

Adding an additional SmartWORKS board to an existing system MAY impact the board and channel numbering of all boards. Refer to the SmartWORKS Developer's Guide for more information.

Install the Software:

Choose Products > SmartWORKS Series > Install Software > Install Software.

When prompted, select **Automatically Upgrade Firmware** and **Configure Boards**. For configuration details, refer to the SmartWORKS User's Guide.

The computer must be re-booted each time a new AudioCodes board or SmartWORKS software is installed.

Board Configuration:

Open the SmartControl Panel Applet (located on your PC's Control Panel).

Select the **Digital Network** tab and set the following (this information must be obtained from the local carrier):

Select either the *T1/E1* option. Then configure the following to match the local network:

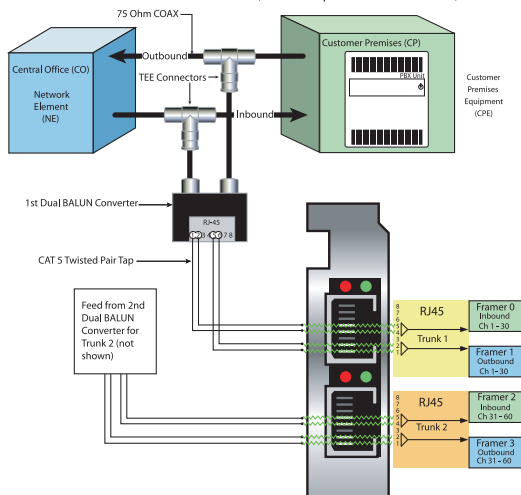
Trunk Framing, Line Coding, Signaling Protocol, and Variant.

NOTE: When changes are made in the Control Panel board drivers must be restarted for the changes to take effect. Use the Windows Device Manager to restart board drivers or reboot the PC.

Verify Setup:

1. Run the SmartWORKS Control Panel.
2. Click on the **Board** tab. Select the board number that represents the DP board. Verify that the board information is displayed correctly.
3. Click on the **System** tab. Verify that the settings are correct.

SmartWORKS DP Wiring Diagram for E1 Dual Trunk
(For Twisted pair TAP under 30 meters)



Verify Events:

Run SmartView: From the Start Menu select **Programs > Ai-Logix > SmartWORKS > SmartView.exe**.

Open Channels: From the Tool Bar, select **System > MTSysStartup**. This opens the board and all channels.

At this point, the system is set up to operate and capture events. Verify that the first trunk is connected to a simulator or a network connection so that the call can be monitored with the DP:

1. Highlight the first channel on the first trunk using the SmartView Interface.
2. From the Toolbar, select **Settings** then select **MT(Set/Get)EventFilters...** Enable Activity and Silence by placing a check in each box.
3. Place a call on the simulator or digital line.
4. Look for the following events in the SmartView Event Viewer window:

EVT_CC_ (call control events)

-OR-

EVT_INCOMING_SIGCHANGE (If ABCD was enabled, FramersStatistics > ABCDSignaling...)

EVT_ACTIVITY

EVT_SILENCE

If no events are generated - verify the following:

1. Use SmartView to look for errors on the line indicating a connectivity issue: **FramerStatistics > MTGetT1/E1FramerStatistic...**
2. Check your tap and verify that the wiring matches the tip and ring schematic provided.
3. Monitor another channel to verify the channel is not bad.

Check Recording:

1. Using SmartView, highlight a monitored channel.
2. Initiate a phone call and keep the line open.
3. From the Tool Bar select Media > MTRecFile...

Set the following:

- File Name: [Filename].wav - the .wav extension must be appended to the file name
- Data Format: This must be set as MSGSM.
- Click the Advanced button: Under the MS Wave Option, select **RIFF Format**..

4. Stop recording: from the toolbar select **Channel Functions** then **MTStopChannel**.
5. You can play this back using any standard Media Player.

If the recording contains static or noise:

1. View the tap connection and verify that there are no loose lines.
2. Check whether the actual phone line contains static, it may just be a bad line.
3. Send the recording to AudioCodes for evaluation.

SmartWORKS DP Wiring Diagram for T1 Trunks

