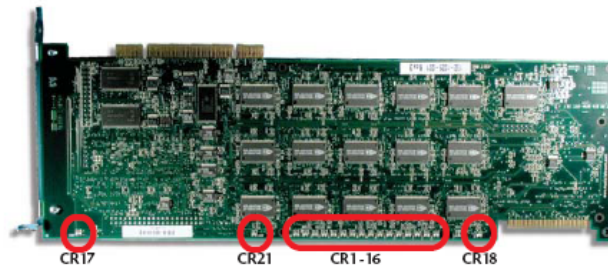


## BOARD LEDs

Nineteen board status LEDs are located on the basecard of the SmartWORKS PCM 6409. The location of each LED is shown in the figure below.

Figure 12-2: LED Locations



### *CR1 - CR16 (CR1-8 ON THE 3209)*

These LEDs indicate that the DSP has started. Each DSP turns its LED ON to indicate a successful initialization.

### *CR17*

A three-stage power and board initialization monitoring LED with the following occurrences:

- "ON," indicating 3.3V power is supplied and the board is ready for the driver to be loaded.
- "OFF," indicating the driver has successfully loaded and the board has initialized.
- "BLINKING," indicating the board initialization process has failed or a board panic has occurred. **NOTE:** Invoking the *MTBlinkBoard()* API 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.

### *CR18*

This LED is used to indicate that TDM clock termination is enabled. "ON" indicates the TDM clocks are being terminated. **NOTE:** to terminate clocks jumper J8 must be closed.

### CR21

This LED indicates the state of the CPU. This LED is turned ON by the local CPU upon successful initialization.

## TRUNK STATUS LEDs





Two Trunk Status LEDs per trunk are included to help troubleshoot installation problems. As shown below, they are located next to the cable connections.

Figure 12-3: Trunk Status LED Locations



The following table shows possible states of the trunk LEDs:

TABLE 12-4: SMARTWORKS PCM TRUNK STATUS LEDs

Lights	Red	Green	Status
	OFF	OFF	Trunk is disabled
	OFF	ON	Normal Operation, trunk is enabled and in sync
	ON	ON	Trunk is enabled, but not in sync
	ON	OFF	Trunk is enabled, but no signal

## Installation and Wiring

The following section reviews the installation of the SmartWORKS PCM cards.

**NOTE:** The maximum allowable cable length from the PBX to the SmartWORKS PCM cards is 30 meters (100 feet).

### PRE-INSTALLATION

Some applications require multiple boards connected via a CT Bus cable (MVIP or H.100). For synchronization purposes the last board in the chain must terminate the TDM clocks. If the last board in your system is a SmartWORKS PCM card close Jumper J8 to enable clock termination.

Refer to the *SmartWORKS Developer's Guide* for guidelines on setting Master/Slave mode and TDM clock termination.

## INSTALLATION AND WIRING

The following section explains how to install the SmartWORKS PCM cards. Wiring diagrams are also provided.

### ESD Precautions

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.

Secure the card in a PCI slot with a chassis screw. **NOTE:** Cancel out of the Windows “Found New Hardware” screen. Place the SmartWORKS CD into the CD ROM and allow the board installation to finish. The SmartWORKS PCM card requires the same installation procedure as other SmartWORKS cards. Follow the installation instructions available on any quick install for more information.

### CABLE LENGTHS

The front end of the SmartWORKS PCM cards is designed to comply with a standard RS485 interface. The maximum allowable cable length from the PBX to the card is 30 meters (100 feet).

### WIRING REQUIREMENTS

For correct functionality, the SmartWORKS PCM cards must be wired properly. Refer to the wiring diagram below.

Figure 12.5: SmartWORKS PCM Wiring Diagram

## SmartWORKS PCM Wiring Diagram

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