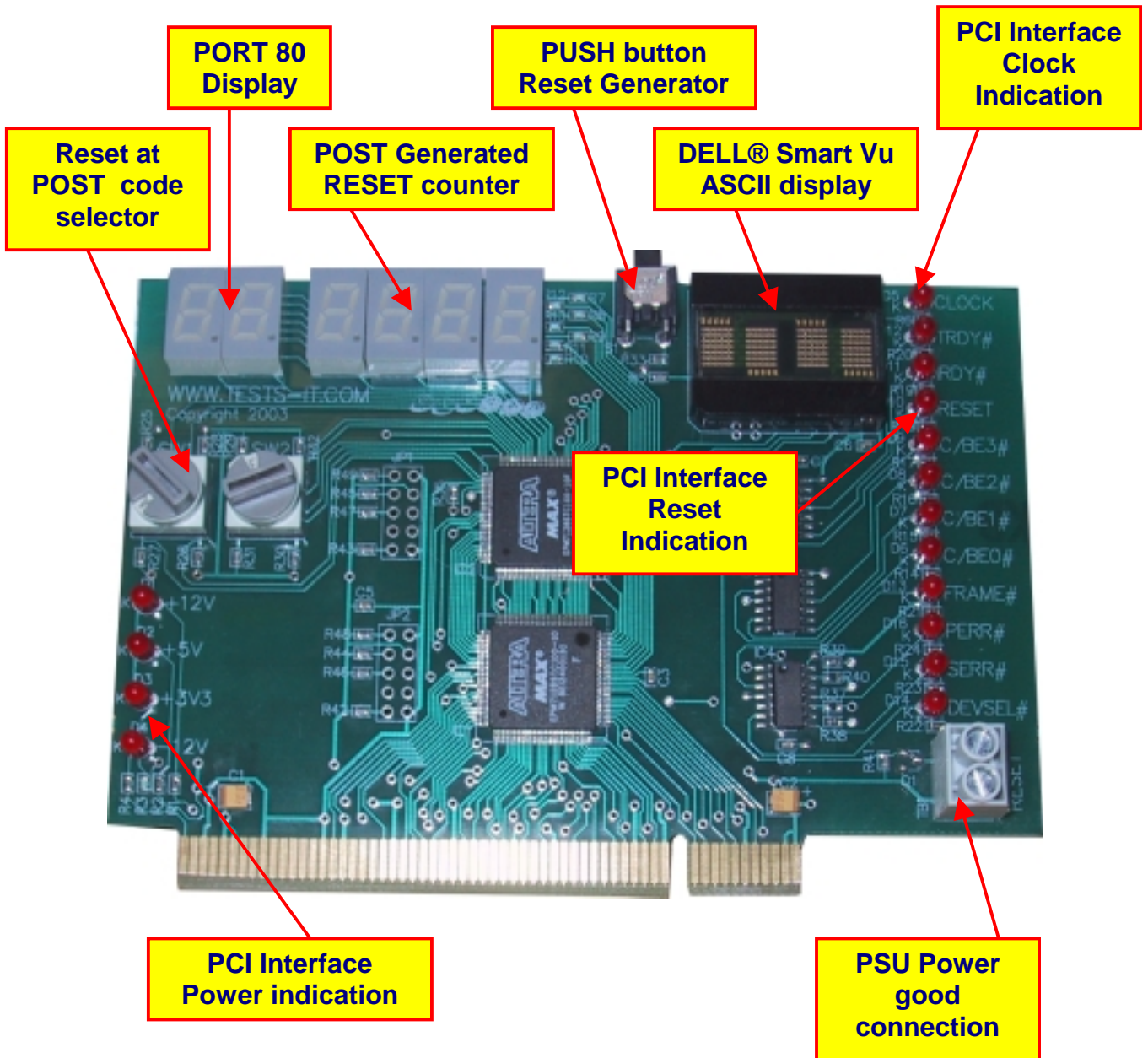


PCI POST 80 + Smart Vu

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PCI POST + Smart Vu Features



What is POST?

POST (Power On Self Test) is a part of the system BIOS (Basic Input Output System) program contained within the ROM or Flash Memory.

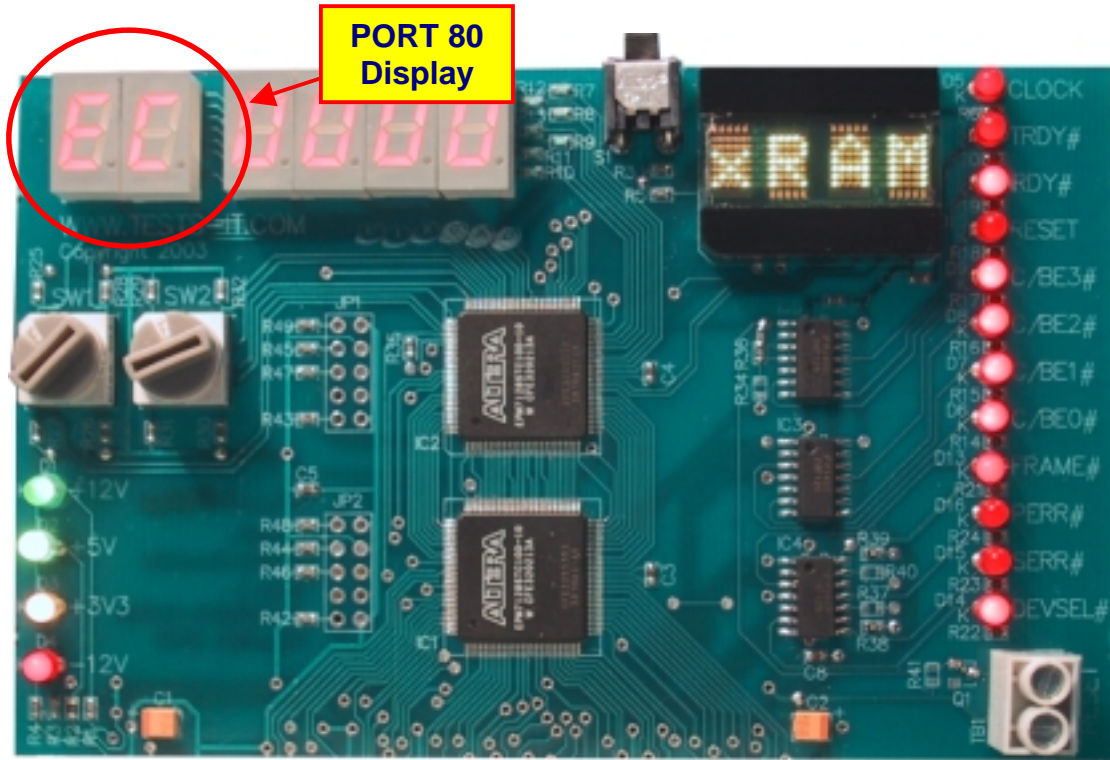
The POST sequence sets up and tests system components, and reports progress writing a value to an I/O Port. IBM® compatible systems write to Port 80h, and Compaq® use Port 84h.

Each BIOS manufacturer has unique POST Code sequences, please see appendix for some popular BIOS POST Code lists.

PORT 80h is an 8 Bit register within the DMA controller used for the page address for DMA channel 0. The PCI POST + Smart Vu catches writes to this I/O Port and displays the value on two seven segment displays.

PORT 80 Codes

The Port 80h display indicates the current POST CODE. If the system has hung with a constant value on the PORT 80 LED's then the board under test will have a failure condition.



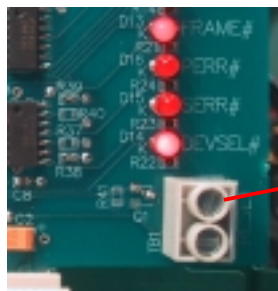
7 Segment Display Hexadecimal representations.

	0		4		8		C
	1		5		9		D
	2		6		A		E
	3		7		B		F

PORT 80 Reset value and Counter

The PCI POST + Smart Vu can LOOP POST from a specific POST code. This feature can be used to verify the PC Motherboard boot reliability. To operate the POST LOOP, Set the POST CODE you wish to loop POST at on SW1 and SW2. Setting the switches to "FF" will disable this feature.

The POST Reset function requires the RESET output to be connected to the ATX PSU POWER GOOD PIN.



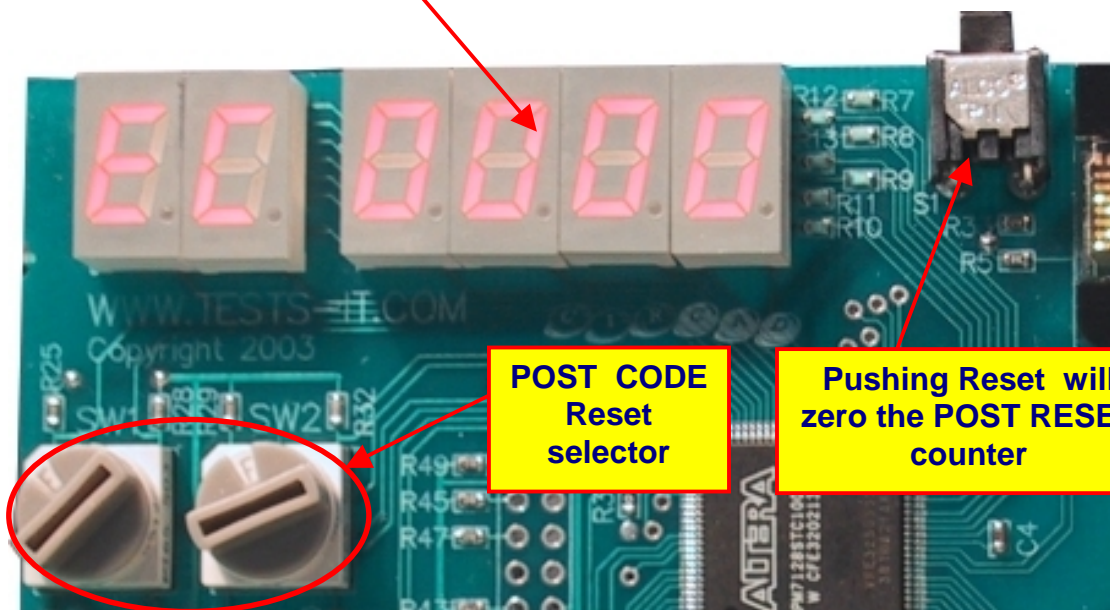
PCI POST + Smart Vu
RESET OUTPUT

**PIN 8
PWRGOOD**



ATX PSU CONNECTOR

**POST RESET Counter,
indication of number of
times a POST Reset
has occurred**

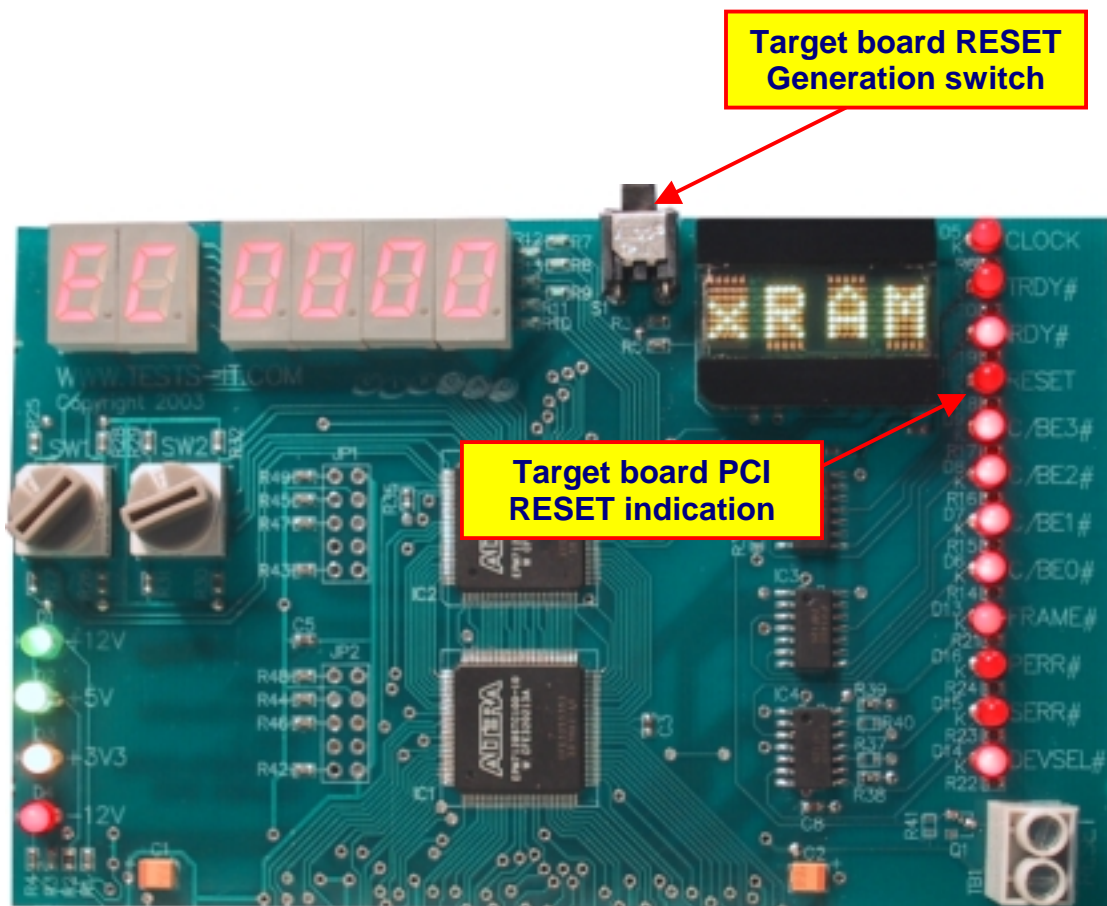


**POST CODE
Reset
selector**

**Pushing Reset will
zero the POST RESET
counter**

Reset Switch and PCI Reset Indication

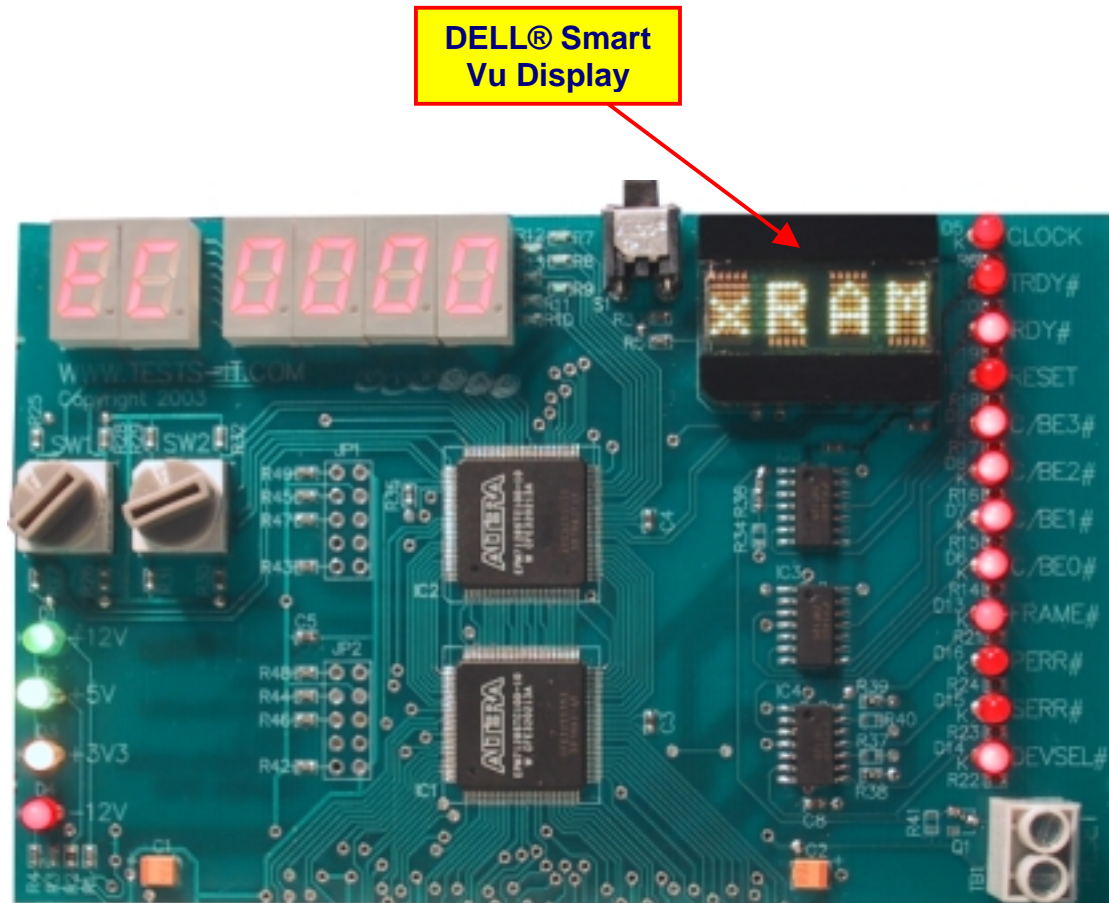
The Push button Reset switch when pressed will generate a pull down on the RESET output at TB1. The RESET output can be connected to the PSU Power Good or an active LOW reset switch. This will generate a Reset on the PC motherboard.



Under normal operation the RESET LED will not light. If the RESET LED Flashes this indicates a target board failure condition. PCI RESET is STUCK LOW.

Dell ® Smart Vu Codes

Dell® Edview or Smart Vu is an extension of the Phoenix BIOS POST codes. Edview messages give more detailed diagnostic information, and include extended and more specific target board tests than standard POST.

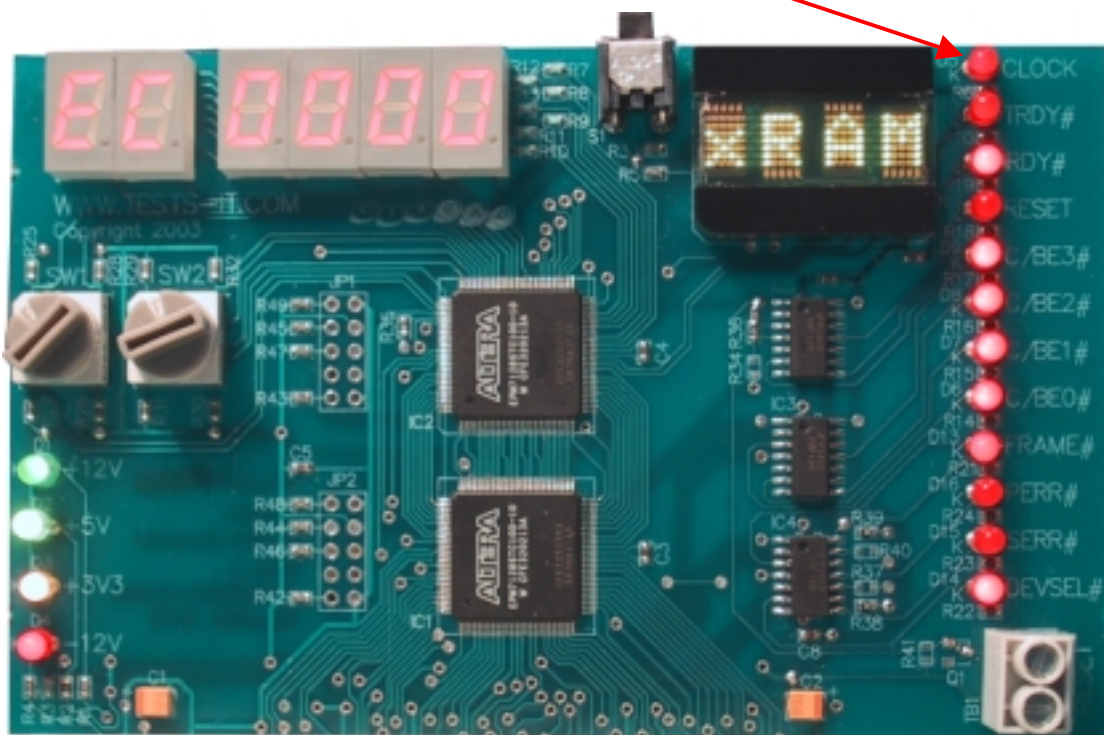


PCI Clock Test

Under normal operation, with the PCI Clock running at 33 MHz the CLOCK LED will flash at 15KHz to indicate that the PCI clock is running.

If the LED is constantly on then the PCI Clock is stuck at a logic High, if Low the PCI Clock is stuck at a logic Low.

**Flashing LED
indicates PCI Clock
is running.**



PCI Supply Voltage Tests

PCI Supply voltage is indicated by 4 LED's. The presence of a PCI supply voltage will illuminate the LED.

