

# PCI-TMC12A

PCI Bus, 12-ch Timer/Counter Board



## Features >>>

- PCI Bus (5 V) interface
- 4 on-board 8254 timer/counter chips
- 12-ch 16-bit timers/counters
- 12 external clock inputs
- 12 external gate control inputs
- 12 timer/counter output channels
- 16-bit timer/counter can be cascaded to 32/48-bit timer/counter
- Gate input can be from external or previous timer/counter output
- 4 interrupt source
- 2 internal clock sources
- 16-ch 5 V TTL D/I; 16-ch 5 V TTL D/O

## Introduction

The PCI-TMC12A is a general purpose timer/counter card that supports the 5 V PCI bus and "Plug & Play" functionality to automatically obtain I/O resources from the BIOS. This card contains twelve 16-bit timers/counters (four 82C54 chips x 3 timers/counters), 16 TTL digital input channels and 16 TTL digital output channels. The two onboard clocks (8 M/1.6 M and 0.8 M/80 K) are jumper selectable and provide a high-resolution clock source for timers/counters. Counters/timers can be used for industrial and laboratory applications such as pulse/event/switch-toggle counting, frequency readings, elapsed time measurement, pulse-width measurement, PWM (pulse-width-modulated) output, and pulse (square wave) and rate generation, etc.

## Software

- DOS Lib and TC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB sample programs with source codes
- DLL and OCX SDK for 32-bit/64-bit Windows XP/2003/Vista/2008/7/8
- Support LabVIEW and Linux

## Hardware Specifications

Digital I/O	
Channels	D/I: 16-ch, 5 V/TTL D/O: 16-ch, 5 V/TTL
Input Logic Low	0.8 V max.
Input Logic High	2.0 V min.
Output Source Current	15 mA max.
Output Sink Current	24 mA max.
Timer/Counter	
Channels	12 x 16-bit
Reference Clock	Internal: 8 MHz
General	
Bus Type	3.3 V/ 5 V Universal PCI, 32-bit, 33 MHz
Connectors	Female DB37 x1; 20-pin box header x2
Power Consumption	500 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Humidity	5 ~ 85% RH, non-condensing

## Ordering Information

PCI-TMC12A	PCI bus, 12-ch Timer/Counter Board Includes one CA-4002 D-Sub connector.
PCI-TMC12A CR	PCI bus, 12-ch Timer/Counter Board (RoHs) Includes one CA-4002 D-Sub connector.

## Pin Assignments

