# Model WDT500-P

# **Multifunction Watchdog Timer Card**





# **FEATURES**

- Software Selectable Timeout: 10ms to 4800s
- Relay Output & Reset Line Output
- Half-size, AT Compatible
- Optional Temperature Monitor/ Alarm, Fan Speed Detect, & Buzzer Plus More! (WDT501-P)

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# **DESCRIPTION**

The newest member of the Watchdog Timer Family is the Model WDT500-P Series. The basic model, WDT500-P provides a software selectable timeout from 10 microseconds to 4800 seconds. In the event that your application program does not reset the card during that period, a relay output and/or a reset line output is available to reset the computer.

The Model WDT501-P adds features options to the card. The first is a voltage monitor. This monitor checks all four computer voltages to see if they have exceeded 7% of nominal. The next two are for temperature monitoring. The first temp option is an alarm if the temperature exceeds 50°C. An adjustment is available to set the temp either lower or higher. The next temperature option is an actual monitor. The temperature can be read to within ±0.7°C. Another option is a buzzer that will sound if the watchdog times out. A fan speed detector is provided that will trigger if the fan tachometer output drops below 50Hz. Still another option provided is two isolated input lines that are tied to a change of state detector. If either of these lines changes, the state detector will generate an IRQ if desired. The last option is two isolated output lines that are connected to the reset output. They are of opposite polarity.

#### WDT501-P MONITOR FEATURES

#### Voltages

IRQ and Status register indication if +5, -5, +12, or -12VDC supply voltages exceed 7% of nominal.

#### **Temperature Alarm**

Factory preset at 122°F (50°C), adjustable via oncard potentiometer.

#### **Temperature Sensor**

Read to within 0.7°F

#### Change-of-State

Output whenever either of the isolated inputs changes state.

#### **Fan Speed**

Output whenever fan speed drops below 50Hz (factory set).

#### **Buzzer**

Signals Watchdog time-out.

# **Interrupt Output**

Jumper selectable, IRQ2-7, 10-12, 14 or 15.

#### Alternate Output

Can be read at Base Address+4.



SPECIFICATIONS WDT500-P

#### **WATCHDOG TIMER**

**Time-Out** 

Selectable from 10µs to 4800s

Clock

894.88625kHz, derived from color clock (14.31818MHz/16)

**Relay Contact Rating** 

Max switching current 2A DC or AC, 30VA max

**GENERAL** 

I/O Space

8 bytes

IRQ Selections

2-7, 10-12, 14, or 15

**Power Required** 

WDT500-P: +5VDC @ 125mA WDT501-P: +5VDC @ 250mA

#### **PHYSICAL**

**Temperature Range** 

Operating: 0° to 60°C Storage: -50° to +120°C

Humidity

10% to 90% RHNC

Size

6.5 x 3.9in (165 x 99mm)

**Connector Type** 

DB25 female

# **SOFTWARE**

A disk is provided that includes a graphical Set-up program, and a routine titled FINDBASE that helps select an I/O base address that will not conflict with other resources already installed in the computer. Another software feature included is Windows DLLs that are designed to work with any Windows language that allows calls to DLLs. These DLLs support Windows 3.1x, Windows 95 and Windows NT.

# **Operating Systems Supported**

DOS 3.3 and higher Windows 3.1x Windows 95 Windows NT

#### **Languages Supported**

QuickBASIC V4.5 Turbo C V2.0 Turbo Pascal V6.0 or higher

#### **Demo/Example Programs Included**

Examples in C, and Pascal as well as Windows sample programs in C.

### **ORDERING GUIDE**

Model WDT500-P

Basic card, software, manual

Model WDT501-P

Card w/ options, software, manual

