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PCI Bus I/O Boards

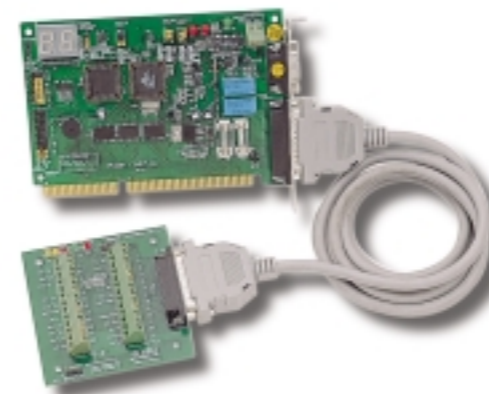
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WDT-01/WDT-02 *Intelligent Watchdog Timer Card*



Functional Description

The WDT-01/WDT-02 are watchdog card that provides watchdog timer, temperature monitor and power monitor functions.

It also provides many signals and mechanism such as relay control, reset signal, power-good signal that allow the user to control their system as soon as the errors are occurred. There are also many signals, such as IRQ, I/O status, RS-232, LED, Buzzer, will tell the user or operator that some errors are occurred. Once the WDT-01 has been power on, it will monitor the power and the tmperature of PC automatically. After the software enable the watchdog timer, the WDT-01 will monitor the operations of software and hardware in the most inexpensive cost with the excellentprotections. The WDT-02, is an economical version of WDT-01. Refer to the following comparison table.

Output Signals:

	WDT-01	WDT-02
Software driver	Yes	Yes
On-board 7-seg LED	Yes	No
Temperature measurement	Yes	No
On-board buzzer	Yes	No
Relay output for watchdog alarm	Yes	No
Relay output for temperature alarm	Yes	No
Terminal board	Yes	No
Other	Yes	Yes

Specifications

- ◆ **Watchdog timer:**
 Software programmable from 0.01 second to 167772.15 seconds.
- ◆ **Temperature monitor:**
 Temperature: 0°C~75°C;
 Precision: ±1°C; onboard 2 digital LED display;
 Warning temperature
 Setting: 50°C, 60°C, 70°C or none.
- ◆ **Computer power monitor:**
 PC Power +5V, External Power +12V

- ◆ **RS232 output:**
speed: 9600, 4800, 2400 or 1200 bps.
transmit message includes:
 watchdog timer state, Temperature status, Current Temperature scale, External & PC power state...etc.
- ◆ **Power required:** 1. External power: +12V, 3W or
 2. Internal power: +12V, 3W

- ◆ **Printer-like I/O interface:**
 LPT0(3bch), LPT1(378h), LPT2(278h) or User Define, only need 3 I/O ports

Output Signals:

Signal/Function	WDT timeout	Over Temperature	Power failure
Reset	Yes		
IRQ	Yes	Yes	
I/O status	Yes	Yes	Yes
RELAY	Yes	Yes	
TTL	Yes	Yes	
LED	Yes	Yes	Yes
ES232	Yes	Yes	Yes
Buzzer	Yes	Yes	Yes

WDT <=> Watchdog
 power failure LED dispaly only on terminal board.

- ◆ **IRQ:** 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15
- ◆ **4 BIT TTL outputs:** logic high: 2.4VDC min, source 400µA.
 logic low: 0.5VDC max, sink-10mA
- ◆ **Two Relay for watchdog or temperature failure:**
 Contacts: FORM C.
 Max switched current: 1A 30V/DC
 Max switched voltage: 120VAC/60VDC
 Max carry current: 1.25A, AC/DC

Program Example:

WDT-01 is assigned to the LPT2 (278) I/O address.

<CR>means Hexcode 0d

The content of **Set.da** files: t=4<CR>s<CR>

The content of **End.da** files: <CR>e<CR>
 <DOS command>

type Set.da>1pt2

(set the period of the watchdog timeout, and start counting)

type End.da>1pt2 (stop watchdog counting)

☐ Please note: If with DOS command

☐ **Copy con LPT2**

the DOS wil send <CR> <LF> after press ENTER key.
 WDT-01 will not accept <LF> code.

Software

Support DOS, Windows driver

Order Description

WDT-01: Intelligent Watchdog Timer card with terminal Board and 1 meter cable

WDT-02: Intelligent Watchdog Timer card without terminal board, cable, buzzer, relay, LED, temperature sensor.