

OVERVIEW

The **TS-RELAY8** is PC/104 compatible peripheral board that provides a robust interface between the PC/104 bus and external devices through eight independent software controlled PC board relays. This daughter board is compatible with any PC/104 main board.

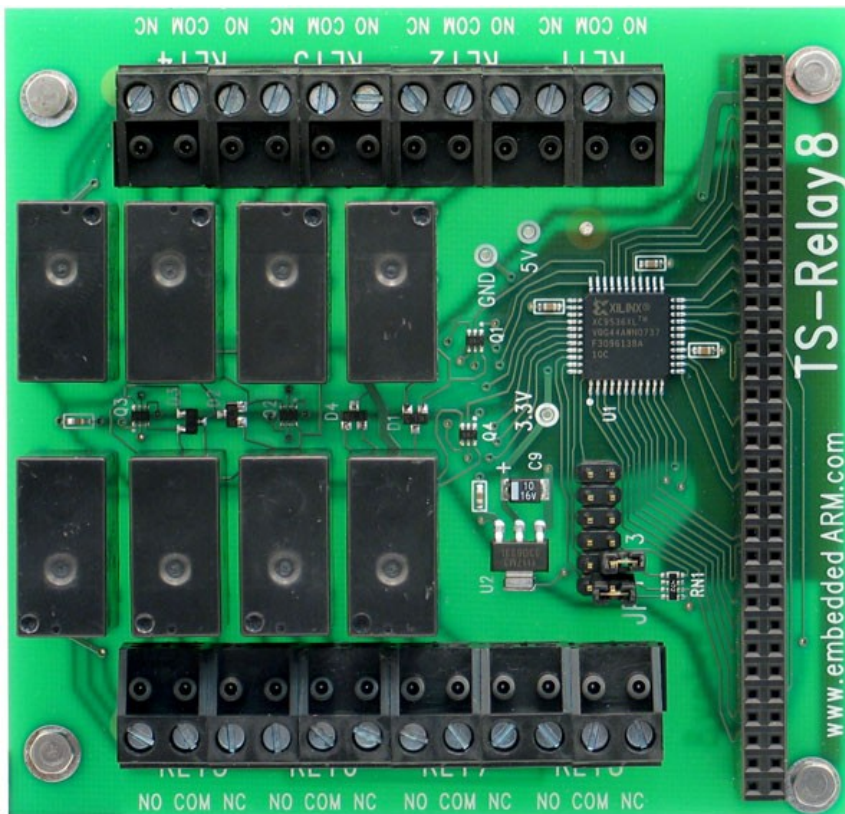
- ✓ Eight independent SPDT relays
- ✓ Software controlled
- ✓ 40mA draw per coil
- ✓ Jumper selectable I/O address
- ✓ RoHS compliant
- ✓ Works with any PC/104 SBC

The TS-Relay8 provides eight independent relays capable of handling up to 277VAC / 30VDC at 5A across the contacts. Each relay coil draws only 40mA when active. It runs on any Technologic Systems product with a PC/104 bus.

Jumpers are used to select one of four I/O addresses allowing up to four boards stacked on a single PC/104 bus. This daughter board is manufactured RoHS compliant by default and has a standard PC/104 form factor.

HARDWARE CONFIGURATION

TS-RELAY8 board's front view



Jumper settings for IO address selection

Addr	JP1	JP2
0x140	OFF	OFF
0x150	ON	OFF
0x160	OFF	ON
0x170	OFF	OFF

BASE PLD REGISTER MAP: TS-RELAY8

The TS-RELAY8 implements 3 PLD registers which appear at the selected base addresses.

I/O Addr	Description	Data	Bits and such
Base + 0	Board Identifier	Read only	Board Identifier is 0x9b
Base + 1	PLD Rev	Read Only	PLD revision
Base + 2	Relay Control	Read/Write	controls relays ON/OFF (bit n corresponds to relay n+1, 0=OFF and 1=ON)



Note

In order to perform PC/104 8-bit bus cycles with the TS-7200 Cirrus platform, use 0x11E00000 as the PC/104 base address. With the TS-7800 Marvell platform, use 0xEE000000 as the PC/104 base address.

DRIVER SUPPORT

If you are using the TS ARM Linux platform, you can make use of the peek and poke (or peekpoke if in busybox) commands to read/write the registers in PC/104 8-bit bus cycles.

For the TS-7200 Cirrus platform and a TS-RELAY8 with all jumpers OFF, add the 0x11E0_0000 base address, i.e:

```
# peek8 0x11e00140 (returns 0x9b)
# peek8 0x11e00142 (returns the ON/OFF status of the relays)
# poke8 0x11e00142 0x00 (turn off all the relays)
# poke8 0x11e00142 0xff (turn on all the relays)
```

For the TS-7800 Marvell platform and a TS-RELAY8 with all jumpers OFF, add the 0xEE00_0000 base address, i.e:

```
# peek8 0xee000140 (returns 0x9b)
```

For further information about this product, contact Technologic Systems.

CONTACT TECHNOLOGIC SYSTEMS

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