

# The Embedded I/O Company

# **TPMC670** 16/8 Digital Inputs (24V) 16/8 Digital Outputs (24V, 0.5A)

### Application Information

The TPMC670 is a standard single-width 32 bit PMC with 16 / 8 24V digital inputs galvanically isolated from the computer system by optocoupler. The inputs are also potential free to each other in groups of four inputs. A high performance input circuit ensures a defined switching point and polarization protection against confusing the pole. All inputs have a common electronic debounce circuit with a freely programmable debounce time. All inputs can generate an interrupt. The signal edge handling is programmable to interrupt on rising, falling or both edges of the input signal.

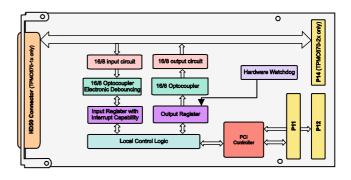


The TPMC670 has 16 / 8 digital high side switches with galvanic isolation from the computer system by optocoupler. The outputs are also isolated against each other in groups of four outputs. All outputs are protected against short-circuit and thermal overload. The output drivers are capable of driving 0.5A continuous per channel. A hardware watchdog clears all outputs in case of trigger fail. The TPMC670-1x provides front panel I/O, the TPMC670-2x provides P14 I/O.

For First Time Users the Engineering Documentation TPMC670-ED is recommended. The Engineering Documentation includes TPMC670-DOC, schematics and data sheets. Software Support (TDRV003-SW-xx) for different operating systems is available.

#### **Technical Information**

- Standard single-width 32 bit PMC module conforming to IEEE P1386.1
- O PCI 2.1 compliant interface
- O 3.3V and 5V PCI Signaling Voltage
- O Board size: 149 mm x 74 mm
- O 16 / 8 interrupt generating digital inputs
- Q 24 V signal voltage for inputs
- O Optocoupler for galvanic isolation
- O All inputs isolated to each other in groups of four inputs
- Programmable electronic debounce circuit (7µs to 440ms in steps of 7µs),
- **O** 16 / 8 digital outputs, high side switches
- O 24V signal voltage, current per output 0.5A
- O Optocoupler for galvanic isolation
- O Outputs are short-circuit protected
- Outputs are isolated to each other in groups of four outputs
- O Outputs protected against thermal overload
- Watchdog timer resets all channels in case of trigger failure



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### **Order Information**

<b>RoHS Compliant</b>		
TPMC670-10R	16 Digital Inputs, 16 Digital Outputs, front panel I/O	
TPMC670-11R	8 Digital Inputs, 8 Digital Outputs, front panel I/O	
TPMC670-20R	16 Digital Inputs, 16 Digital Outputs, P14 I/O	
TPMC670-21R	8 Digital Inputs, 8 Digital Outputs, P14 I/O	
None RoHS Compliant		
TPMC670-10	None RoHS compliant version of TPMC670-10R	
TPMC670-11	None RoHS compliant version of TPMC670-11R	
TPMC670-20	None RoHS compliant version of TPMC670-20R	
TPMC670-21	None RoHS compliant version of TPMC670-21R	



Documentation TPMC670-DOC TPMC670-ED	User Manual Engineering Documentation, includes TPMC670-DOC
Software	
TDRV003-SW-25	Integrity Software Support
TDRV003-SW-42	VxWorks Software Support
	(Legacy and VxBus-Enabled Software Support)
TDRV003-SW-65	Windows XP/XPE/2000 Software Support
TDRV003-SW-72	LynxOS Software Support
TDRV003-SW-82	LiNUX Software Support
TDRV003-SW-95	QNX 6 Software Support
For other operating systems please contact TEWS.	
Related Products	
TA301	Cable Kit for modules with HD50 Connector

connector

PIM I/O Module with HD50 SCSI-2 type

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**TPIM001**