

Overview:

The VRM-TIP570 is an IndustryPack® compatible module with an optically isolated 16 channel multiplexed 12 bit ADC and an optically isolated 8 channel 12 bit DAC. The ADC can be software configured to operate as 16 input channels in single-ended mode or 8 input channels in differential mode. The ADC input multiplexer is overvoltage protected up to 70Vpp. A programmable gain amplifier supports gains of 1, 2, 5, 10 (VRM-TIP570-10) or gains of 1, 2, 4, 8 (VRM-TIP570-11). The full-scale input voltage range is +/-10V. The data acquisition and conversion time is mode-dependent: up to 1µs typical without channel or gain change, up to 12.5µs typical with channel or gain change. The 8 channel DAC full-scale output voltage is +/-10V. The output amplifier is capable of sinking and sourcing 2mA for each DAC channel (1000pF load). The output voltage settles to 12 bits in 5µs typical. Each VRM-TIP570 is factory calibrated. The calibration data is stored in the EEPROM unique to each IP.

For First-Time-Buyers the Engineering Documentation VRM-TIP570-ED is recommended. The Engineering Documentation includes VRM-TIP570-DOC, schematics and data sheets. Driver support (VRM-TIP570-SW-xx) for different operating systems is available.

Features:

- Interface according to IndustryPack specification
- Identification-PROM supports auto-configuration
- Single Size IndustryPack
- 16 channel multiplexed isolated 12 bit analog input
 - Input voltage range: +/-10V
 - Input gains: 1, 2, 5, 10 or 1, 2, 4, 8
- 8 channel isolated 12 bit analog output
 - Output voltage range: +/-10V
 - Output sources and sinks 2mA / 1000pF load
- Factory calibrated, calibration information in
- Identification-PROM unique to each IP
- Operating temperature -40°C to +85°C



Ordering options:

- VRM-TIP570-10** 16 Channel Multiplexed Isolated 12 bit ADC with Gain = 1, 2, 5, 10 and 8 Channel Isolated 12 bit DAC
- VRM-TIP570-10R** RoHS compliant version of VRM-TIP570-10
- VRM-TIP570-11** 16 Channel Multiplexed Isolated 12 bit ADC with Gain = 1, 2, 4, 8 and 8 Channel Isolated 12 bit DAC
- VRM-TIP570-11R** RoHS compliant version of VRM-TIP570-10
- VRM-TIP570-IO-10** Mounting Rail I/O module, provides 50 terminals, 50 pin flat cable
- VRM-TIP570-IO-10R** RoHS compliant version of VRM-TIP570-IO-10
- VRM-TIP570-DOC** User Manual
- VRM-TIP570-ED** Engineering Documentation, includes VRM-TIP570-DOC
- VRM-TIP570-SW-42** VxWorks Software Support
- VRM-TIP570-SW-65** Windows XP/PE/2000 Software Support
- VRM-TIP570-SW-72** LynxOS Software Support
- VRM-TIP570-SW-82** LINUX Software Support
- VRM-TIP570-SW-95** QNX 6 Software Support
- For other operating systems please contact V Rose.

