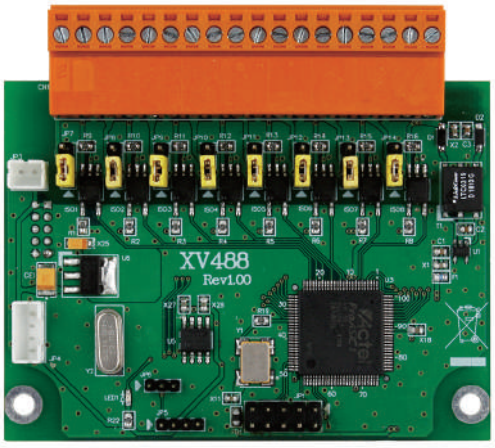



# XV488

8-ch Isolated PWM Output Expansion Board

## Features

- 8-channel PWM Output
- Burst Mode and Continuous Mode for PWM Output
- Software Trigger Mode for PWM Output
- Individual and Synchronous PWM Output
- 4 kV ESD and EFT Protection
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C

## Introduction

The XV488 provides 8-channel PWM (Pulse Width Modulation) Output, and can be used to develop powerful and cost-effective analog control systems. PWM is a powerful technique for controlling analog circuits that uses the Digital Output to generate a waveform with a variable duty cycle and frequency which can then be used to control an analog circuit in applications such as controlling the position or speed of motors, the brightness of lamps, or the speed of fans, etc. Either burst mode or continuous mode can be used for the PWM output depending on the application. In addition, all Digital The XV488 supports both the Modbus RTU and the DCON protocols, which can be configured via software. The XV488 allows the load voltage to be increased from +3.5 to +50 V for the 8-channels PWM (Pulse Width Modulation) output.

## Specifications

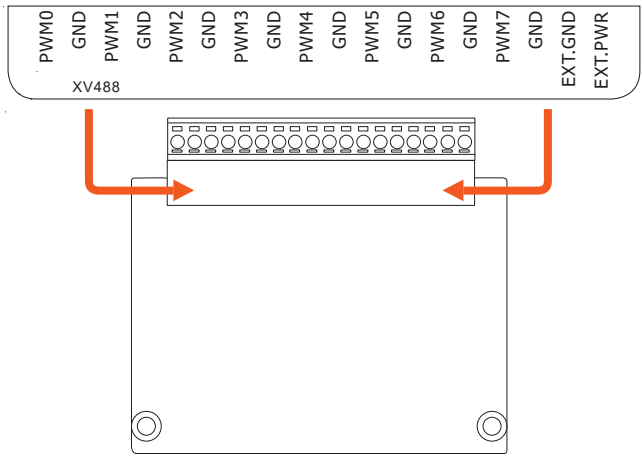
| **Isolation** | | | |
|---|---|---|---|
| Intra-module Isolation | | 2000 VDC | |
| **EMS Protection** | | | |
| ESD (IEC 61000-4-2) | | ±4 kV Contact For Each Terminal | |
| | | ±8 kV Air For Random Terminal | |
| **PWM** | | **Internal Power** | **External Power** |
| Channels | | 8 | |
| Type | | PWM | |
| Sink/Source (NPN/PNP) | | Sink | |
| Load Voltage | | +5 VDC | +3.5 ~ +50 VDC |
| Output Max. Load Current | Sink | +5 VDC @ 10 mA/ Channel | +50 VDC @ 200 mA/ Channel |
| | Source | +5 VDC @ 1 mA/ Channel | - |
| PWM | Frequency | 1 Hz ~ 500 KHz | |
| | Mode | Burst, Continuous | |
| | Burst Count | 1 to 65535 | |
| | Trigger Start | Hardware or Software | |

| **COM Ports** | |
|---|---|
| Ports | 1 x RS-232 |
| Baud Rate | 115200 bps |
| Data Format | N, 8, 1 |
| Protocol | Modbus/RTU |
| **Power** | |
| Consumption | W Max. |
| Powered from Terminal Block | 5 VDC |
| **Mechanical** | |
| Dimensions (mm) | 59 mm x 82 mm x 13 mm (W x L x H) |
| **Environmental** | |
| Operating Temperature | -25 ~ +75°C |
| Storage Temperature | -30 ~ +80°C |
| Humidity | 10 ~ 90% RH, Non-condensing |

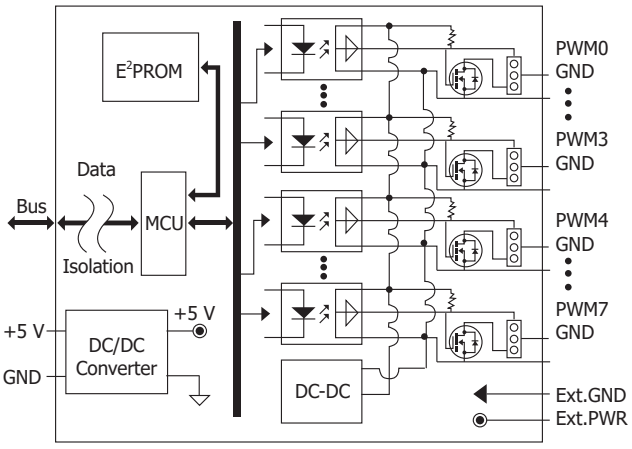


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## Pin Assignments



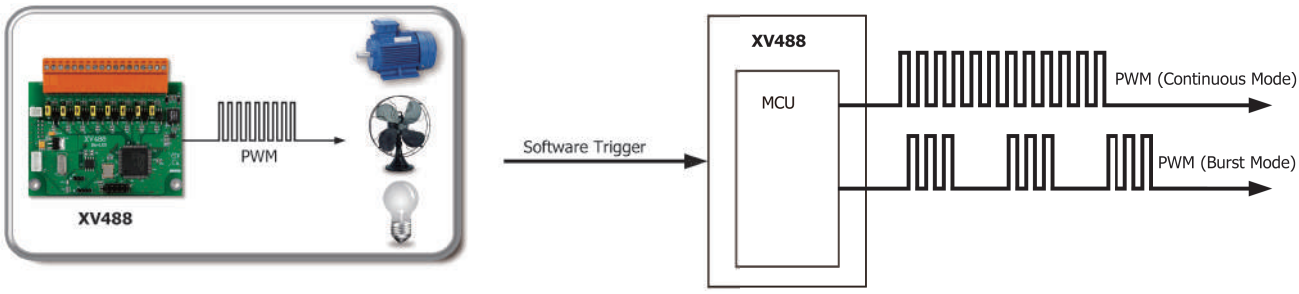

## Internal I/O Structure




## Wire Connections

| Internal Power | | |
|---|---|---|
| **PWM Output** | **ON State Readback as 1** | **OFF State Readback as 0** |
| Sink |   |   |
| Source |   |   |
| **External Power** | | |
| **PWM Output** | **ON State Readback as 1** | **OFF State Readback as 0** |
| Sink |   |   |

## Applications




## Ordering Information

| | |
|---|---|
| **XV488 CR** | 8-ch Isolated PWM Output Expansion Board (RoHS) |



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