

M-7088/M-7088D

8-Channel PWM Output and 8-Channel High Speed Counter Module



Model: M-7088

Model: M-7088D

Features

- Automatic generation of PWM outputs by hardware, without software intervention.
- 10Hz ~ 500KHz PWM output frequency with 0.1%~99.9% duty cycle
- Software and hardware trigger mode for PWM output
- Individual and synchronous PWM output
Using software trigger mode, you can set configuration for all PWM channels then trigger them one by one or all of them at the same time.
- Burst mode PWM operation for standby
- DI channel can be configured as simple digital input channel or hardware trigger source of the PWM output.

Introduction

M-7088 has 8 PWM output channels and 8 counter inputs. It can be used to develop powerful and cost effective analog control system. PWM (Pulse width modulation) is a powerful technique for controlling analog circuits. It uses digital outputs to generate a waveform with variant duty cycle and frequency to control analog circuits. It can be used to Controlling the position/speed of motors, Dimming the brightness of lamps, Controlling the speed of fans... etc.

Applications

- Controlling the position/speed of motors
- Dimming the brightness of lamps
- Controlling the speed of fans

Specifications

PWM Output	
Channels	8
Type	TTL, Isolated
Max. Frequency	1 Hz ~ 500 KHz
Duty Cycle	0.1% ~ 99.9%
PWM Mode	Burst mode, Continuous mode
Burst mode counter	1~65535 counts
Trigger Start	Hardware or Software
ESD Protection (IEC 61000-4-2)	4 kV Contact for each terminal and 8 kV Air for random point
Isolation	2500 Vdc
Digital Input	
Channels	8
Type	Sink, Isolated
ON Voltage Level	+2.4 V ~ +5 V
OFF Voltage Level	+1 V Max.
Max. Frequency	1 MHz
Max. Counts	32-bits (4,294,967,295)
Built-in Virtual Battery Backup for Counter Value	Yes
ESD Protection (IEC 61000-4-2)	4 kV Contact for each terminal and 8 kV Air for random point
Isolation	2500 Vdc

Interface	
Interface	RS-485
Format	N, 8, 1 (details)
Baud Rate	1200 ~ 115200bps
Power	
Input Voltage Range	10 ~ 30 Vdc
Power Consumption	2.4 W (max.)
Power reverse polarity protection	Yes
+/- 4 kV ESD , +/- 4 kV EFT and +/- 3 kV Surge Protection	Yes
Environment	
Operating Temperature	-25 ~ 75°C
Storage Temperature	-40 ~ 85°C
Humidity	5 ~ 95%, non-condensing

Ordering Information

M-7088 CR	8-Channel PWM Output and 8-Channel High Speed Counter Modbus RTU Module (RoHS)
M-7088D CR	M-7088 with 7-segment LED Display (RoHS)