

Order Code: PCA9685

Brand : Generic

Name: 16-Channel 12-Bit PWM/Servo Driver I2C Interface PCA9685 For Arduino Raspberry Pi



Specification : -

- Adjustable Frequency PWM Up To About 1.6 KHz
- 12-Bit Resolution For Each Output – For Servos, That Means About 4us Resolution At A 60hz Update Rate
- Configurable Push-Pull Or An Open-Drain Output
- The Output Enable Pin To Quickly Disable All The Outputs
- Terminal Block For Power Input
- Reverse Polarity Protection On The Terminal Block Input
- Green Power-Good Led
- If You Want To Make A Robot Which Has Lots Of Moving Parts Or If You Want To Control Too Many Leds With Pwm Outputs, Then The Limited Pwm Outputs Of Your Microcontroller Would Be A Big Problem For You. To Overcome This Problem, The Only Thing You Should Do Is To Get A 16-Channel 12-Bit Pwm/Servo Driver.
- You Can Control 16 Free-Running Pwm Outputs With 16-Channel 12-Bit Pwm/Servo Driver Using Only 2 Pins. You Can Even Chain Up 62 Breakouts To Control Up To 992 Pwm Outputs.
- It's An I2C-Controlled Pwm Driver With A Built-In Clock. That Means You Do Not Need To Continuously Send It To Signal To Tie Up Your Microcontroller, It Is Completely Free Running!

- It Is 5V Compliant, Which Means You Can Control It From A 3.3V Microcontroller And Still Safely Drive Up To 6V Outputs. This Is Good When You Want To Control White Or Blue Leds With 3.4+ Forward Voltages. 6 Address Select Pins So You Can Wire Up To 62 Of These On A Single I2c Bus, A Total Of 992 Outputs.

Features :

- Adjustable Frequency PWM Up To About 1.6 KHz
- 12-Bit Resolution For Each Output – For Servos, That Means About 4us Resolution At A 60Hz Update Rate
- Configurable Push-Pull Or An Open-Drain Output
- The Output Enable Pin To Quickly Disable All The Outputs
- Terminal Block For Power Input
- Reverse Polarity Protection On The Terminal Block Input
- Green Power-Good Led
- 3 Pin Connectors In Groups Of 4 So You Can Plug In 16 Servos At Once
- Chainable Design
- A Spot To Place A Big Capacitor On The V+ Line
- 220-Ohm Series Resistors On All The Output Lines To Protect Them, And To Make Driving Leds Trivial.
- This Board/Chip Uses I2C 7-Bit Address Between 0x60-0x80, Selectable With Jumpers.
- 1 X 16-Channel 12-Bit Pwm/Servo Driver