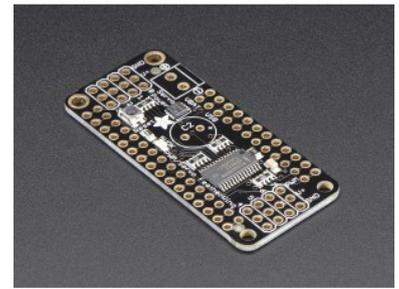**PRODUCT NAME** : 8-Channel PWM or Ser
vo FeatherWing Add-on For All F
eather Boards

PRICE : Rs 1,150.00
SKU : RM3215

DESCRIPTION

A Feather board without ambition is a Feather board without FeatherWings! This is the **8-Channel PWM or Servo? FeatherWing**, you can add 8 x 12-bit PWM outputs to your Feather board. Using our Feather Stacking Headers or Feather Female Headers you can connect a FeatherWing on top or bottom of your Feather board and let the board take flight!

You want to make a cool robot, maybe a hexapod walker, or maybe just a piece of art with a lot of moving parts. Or maybe you want to drive a lot of LEDs with precise PWM output. What now? You could give up OR you could just get our handy PWM and Servo FeatherWing. It's a lot like our popular PWM/Servo Shield but with half the channels & squished into a nice small portable size and works with any of our Feather boards.

Since the FeatherWing only uses the I2C (SDA & SCL pins), it works with any and all Feathers- ATmega32u4, ATSAM M0 or ESP8266-based. You can stack it with any other FeatherWing or with itself (just make sure you have each wing with a unique I2C address)

Specs:

- There's an I2C-controlled PWM driver with a built in clock. That means that, unlike the TLC5940 family, you do not need to continuously send it signal tying up your microcontroller, its completely free running!
- It is 5V compliant, which means you can control it from a 3.3V Feather and still safely drive up to 6V outputs (this is good for when you want to control white or blue LEDs with 3.4+ forward voltages)
- 6 address select pins so you can stack up to 62 of these on a single i2c bus, a total of 992 outputs - that's a lot of servos or LEDs
- Adjustable frequency PWM up to about 1.6 KHz
- 12-bit resolution for each output - for servos, that means about 4us resolution at 60Hz update rate
- Configurable push-pull or open-drain output

We wrapped up this lovely chip into a FeatherWing with a couple nice extras:

- Terminal block for power input (or you can use the 0.1" breakouts on the side)
- Reverse polarity protection on the terminal block input
- Green power-good LED
- Two groups of 4 outputs on either side, 8 total.
- Stackable design. You'll need to pick up stacking headers and right angle 3x4 headers in order to stack on top of this shield without the servo connections getting in the way.
- A spot to place a big capacitor on the V+ line (in case you need it)
- 220 ohm series resistors on all the output lines to protect them, and to make driving LEDs trivial

- Solder jumpers for the 6 address select pins

This product comes with a fully tested and assembled wing as well as 2 pieces of 3x4 male straight header (for servo/LED plugs), a 2-pin terminal block (for power) and a stick of 0.1" header so you can plug into a Feather. A little light soldering will be required to assemble and customize the board by attaching the desired headers but it is a 15 minute task that even a beginner can do.