Atom JoyStick

SKU:K137

Description

M5Atom Joystick is a versatile programmable dual-joystick remote controller featuring the AtomS3 as the main controller, with an STM32 handling co-processing functions. It is equipped with two 5-way joysticks with hall sensors, two function buttons, and built-in RGB LEDs for human-machine interaction and status indication. The device includes two high-voltage battery charging circuits. It comes pre-loaded with the Stamp Fly control firmware and communicates with Stamp Fly via the ESP-NOW protocol. The firmware source code is open-source. This product is suitable for drone control, robot control, smart cars, and various DIY projects.

Instructions for Use

1. Pairing

- Long press the middle button on the AtomS3 to power on, then press again as prompted on the screen to enter pairing mode.
- Press the reset button on the Stamp Fly to send a pairing broadcast.
- Wait for pairing to complete.

2. Operation

Takeoff and Landing: Single-click the middle button on the AtomS3 to control takeoff or landing.

Control Mode: Press the left front button on the Atom Joystick to switch modes.

- Stable Mode: Provides stable control interaction, suitable for routine flying and cruising.
- Sport Mode: Offers maximum control freedom, capable of performing complex maneuvers, requiring high operating skills.

Altitude Mode: Press the right front button on the Atom Joystick to switch altitude modes.

- Auto Altitude: Keeps altitude stable at a set value; pushing the left joystick up or down changes the set altitude.
- Manual Altitude: Full throttle control of altitude, requiring high operating skills.

Aerial Stunts:

- Flip: During flight, pressing the center button of the right joystick on the Atom Joystick performs a flip maneuver.

Product Features

- STM32F030F4P6
- Equipped with M5AtomS3
- Compatible with Atom Lite, Atom Matrix, AtomS3 Lite, AtomS3
- Dual joysticks, dual buttons, toggle switch

- WS2812 RGB LEDs
- Dual high-voltage lithium battery charging circuits
- Battery detection

Includes

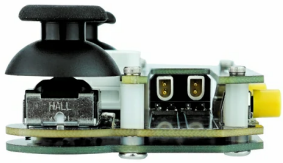
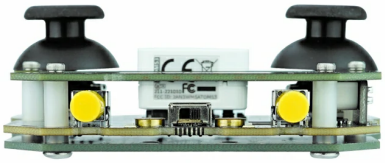
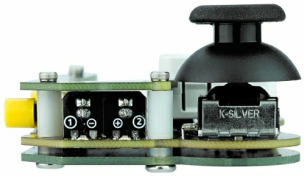
- 1x Atom JoyStick
- 1x 300mAh high-voltage lithium battery

Applications

- Drone control
- Robot control
- Smart cars
- DIY projects

Specifications

Specification	Parameter
MCU	STM32F030F4P6
RGB	WS2812C
Charging IC	TP4067@4.35V
Battery	300mAh
Charging Current	500mA
Buzzer	Built-in Buzzer@5020
Product Size	84*60*30mm
Packaging Size	162*99*36mm
Product Weight	63.5g
Packaging Weight	96.7g

EasyLoader

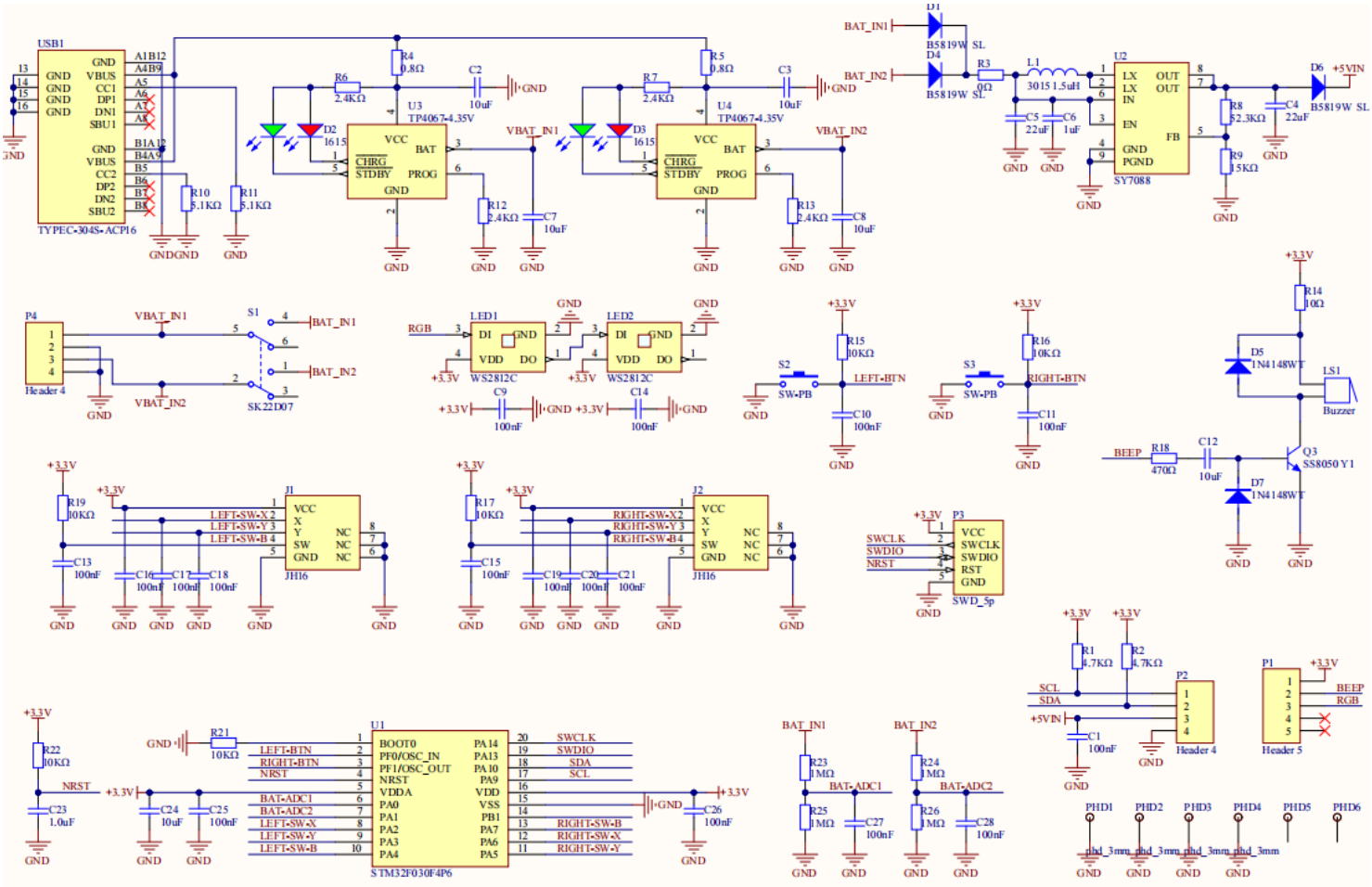
> **EasyLoader is a simple and fast program burner that comes with a product-related example program. By following a few easy steps, you can burn the program to the main controller and perform a series of functional verifications.**

Download Windows Version EasyLoader

Related Links

- TP4067 (Battery Charge Chip)

Schematic Diagram



Download Full Schematic Diagram

PinMap

Buzzer and RGB LEDs

Atom JoyStick (AtomS3)	G5	G6
BEEP	BEEP	
WS2812C		RGB

Joysticks

STM32F030F4P6	PA1	PA2	PA3	PA6	PA5	PA7
JoyStick_LEFT	LEFT-SW-X	LEFT-SW-Y	LEFT-SW-B			
JoyStick_RIGHT				RIGHT-SW-X	RIGHT-SW-Y	RIGHT-SW-B

Buttons and Battery Detection

STM32F030F4P6	PF0	PF1	PA0	PA1
Button_LEFT	LEFT-BTN			
Button_RIGHT		RIGHT-BTN		
BAT1-Detect			BAT-ADC1	
BAT2-Detect				BAT-ADC2

Example

Arduino

M5Atom JoyStick 固件源码