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BOTDRIVE

55 Amps AM32 4-in-1 ESC

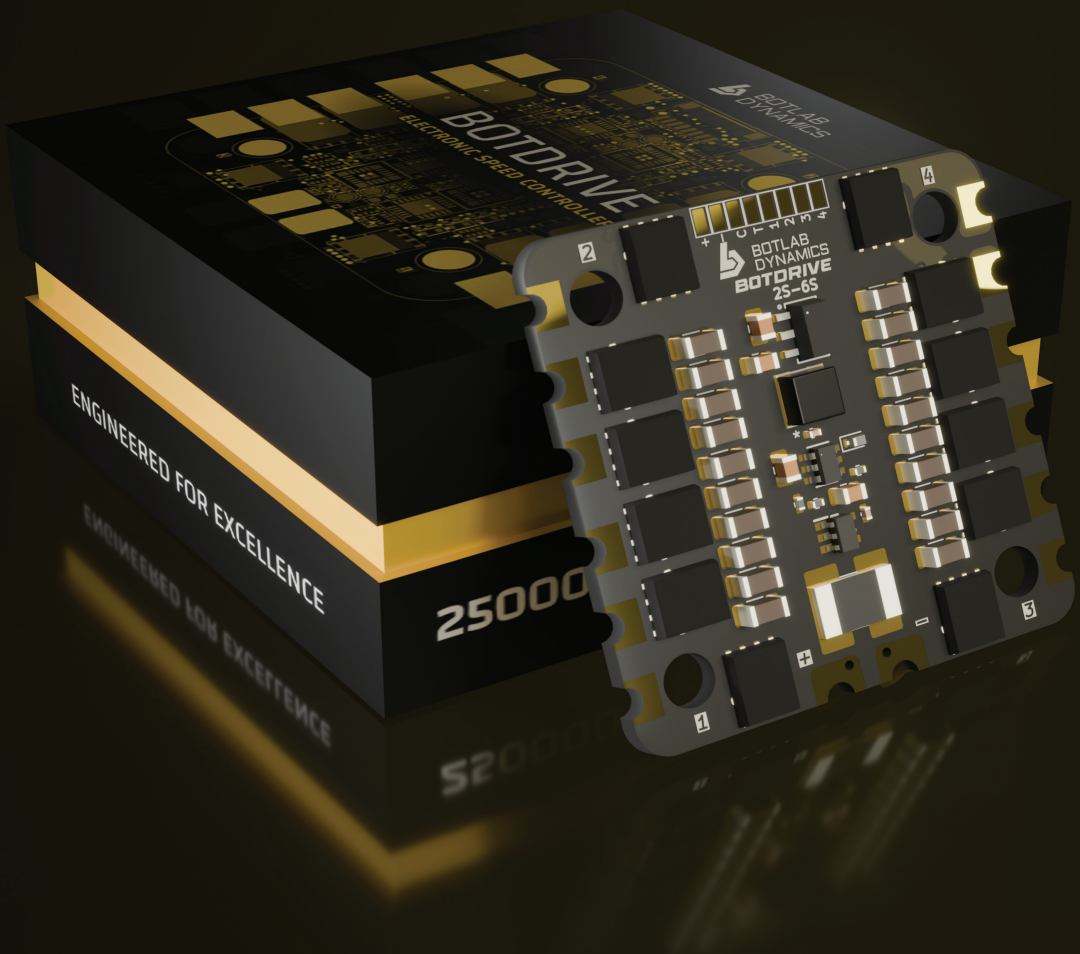
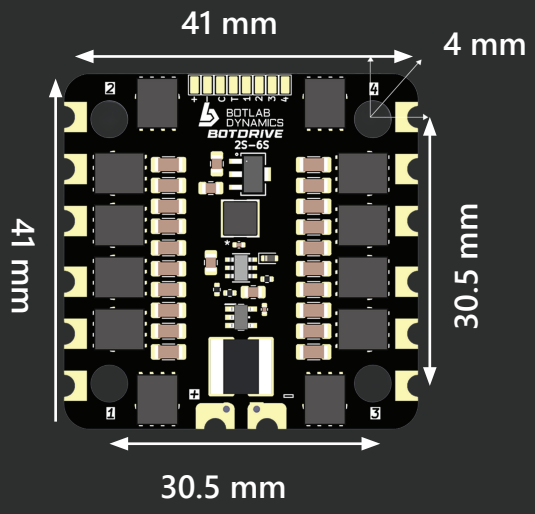
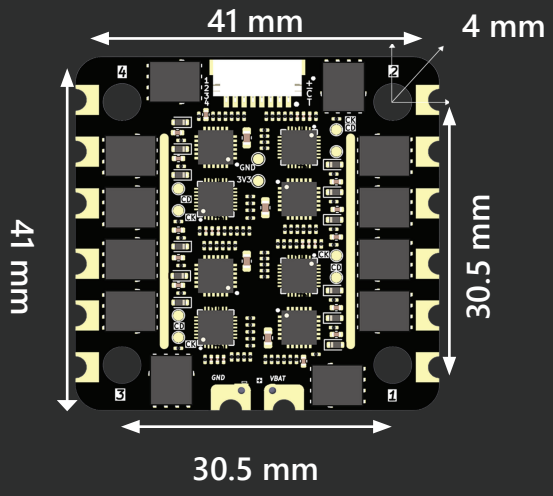


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FRONT



BACK

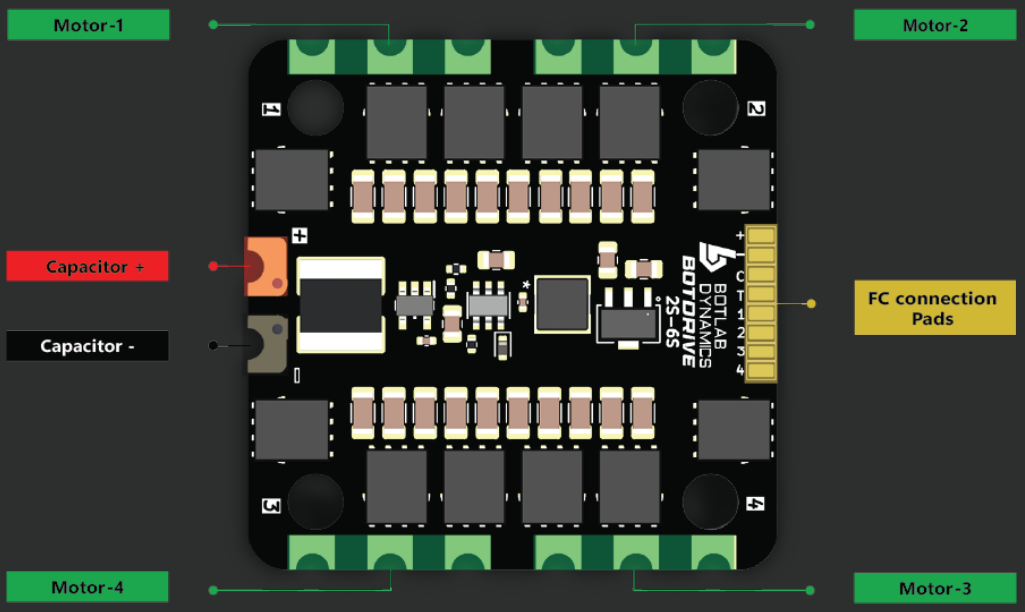


SIDE

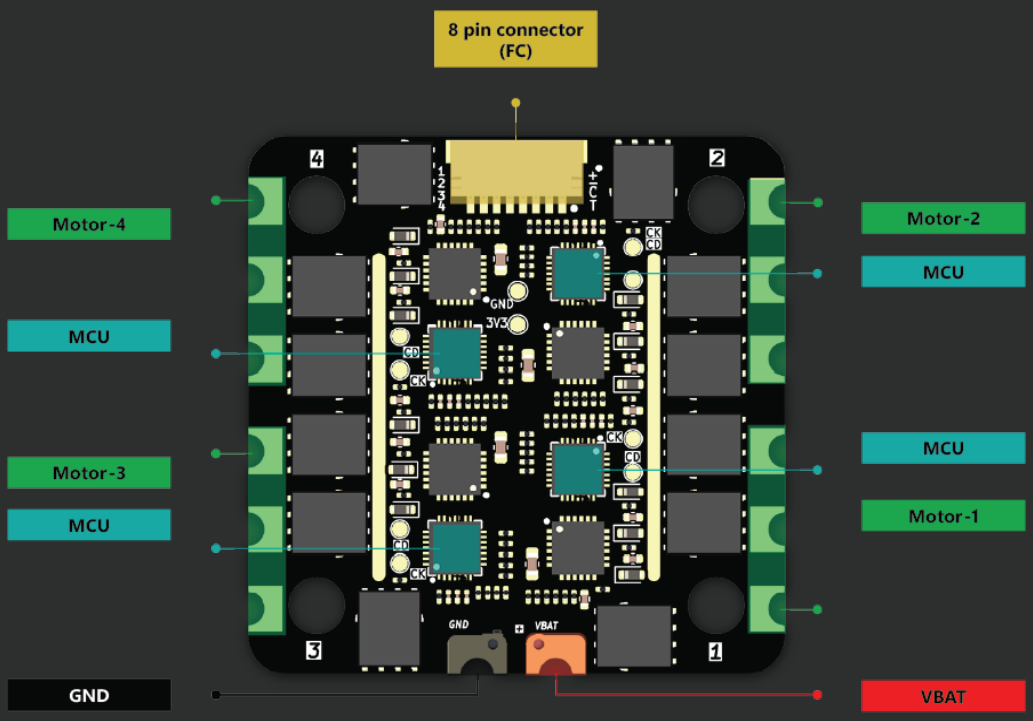
About ESC 32 bit

The 32-bit 55A 30.5×30.5 4-in-1 ESC is a powerful, compact speed controller built for quadcopters, drones and other remote control vehicles. It combines four ESCs in one, keeping things lightweight and easy to install. This ESC can handle up to 55 amps, making it great for high-power setups. This ESC supports 2S-6S (8.4V - 25.2V) voltage range and is equipped with advanced motor controls to ensure smooth, precise throttle response.

LAYOUT



FRONT

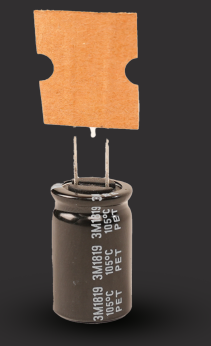


BACK

Specification

MCU	AT32F421G8U7
Mosfet Driver	FD6288Q
Firmware	AM32_AT32PB4_540_F421
ESC_Configurator download link	https://am32.ca/downloads
Continuous Current	55A*4
Burst Current	60A*4
External Capacitor	47uF 35V Low ESR Capacitor
ESC Protocol	DSHOT 300/600,PWM
Telemetry	Yes
Power Input	2S-6S LiPo
Power Output	VBAT
Current Sensor	Support
Mounting	30.5 x 30.5mm(Hole to Hole)
Dimension	41 x 41 mm(edge to edge)
Mounting hole	M4 (hole diameter- 4.2mm)
Weight	12.5 gms

Package Include



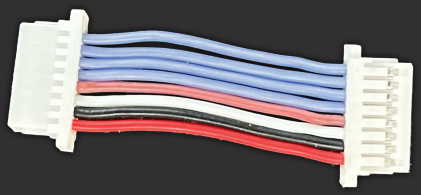
1 x 35V 1000uF low ESR Capacitor



4 x M3 Anti-Vibration Silicone Grommet Insert



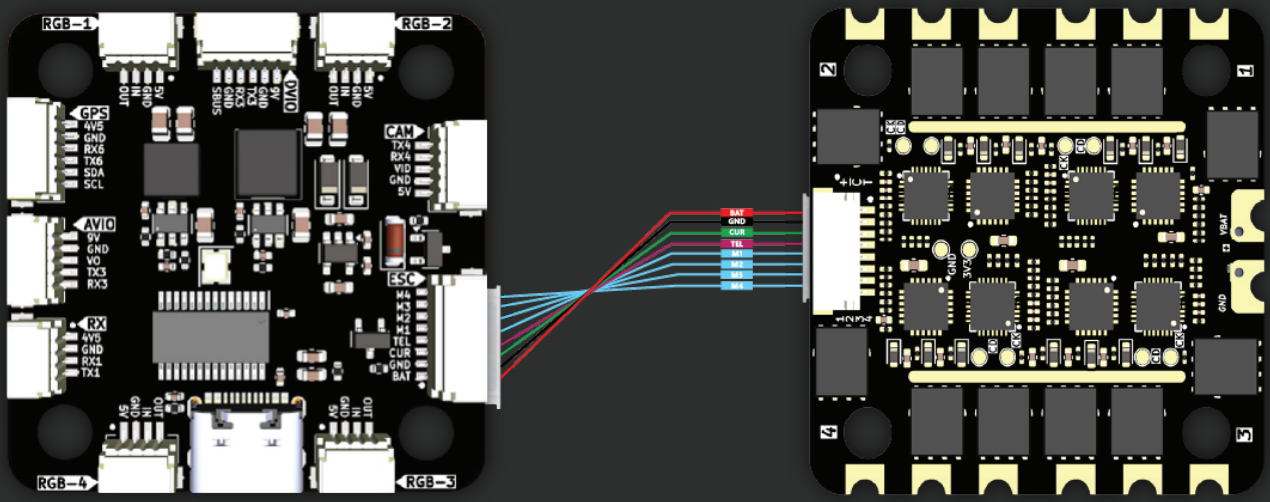
1 x XT60 Power cable(70mm)



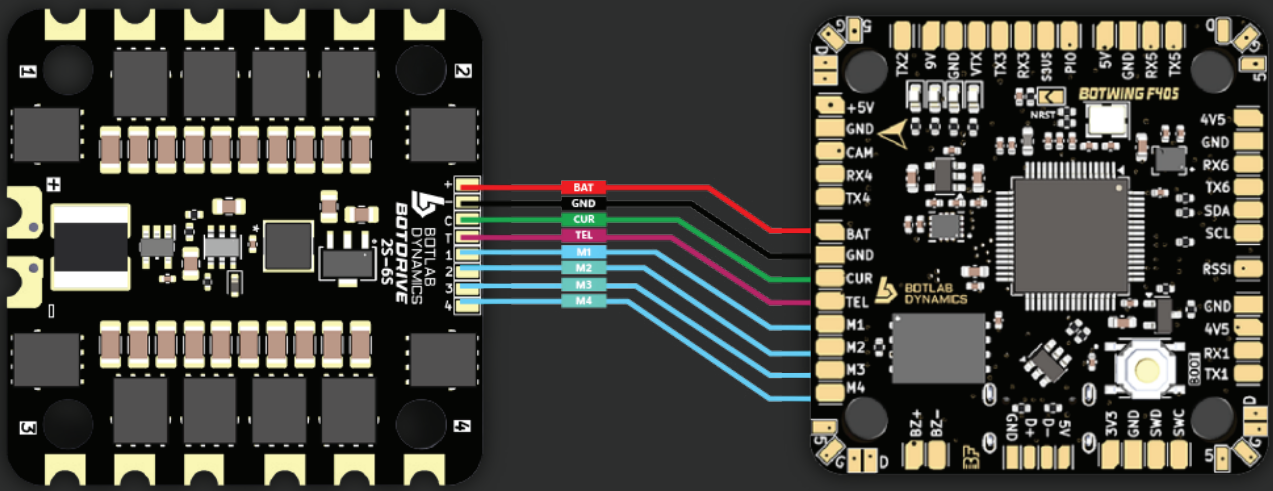
1 x JST-SH 45 mm length 8pin cable (for FC-ESC connection)

Connections

Method 1 - Soldering

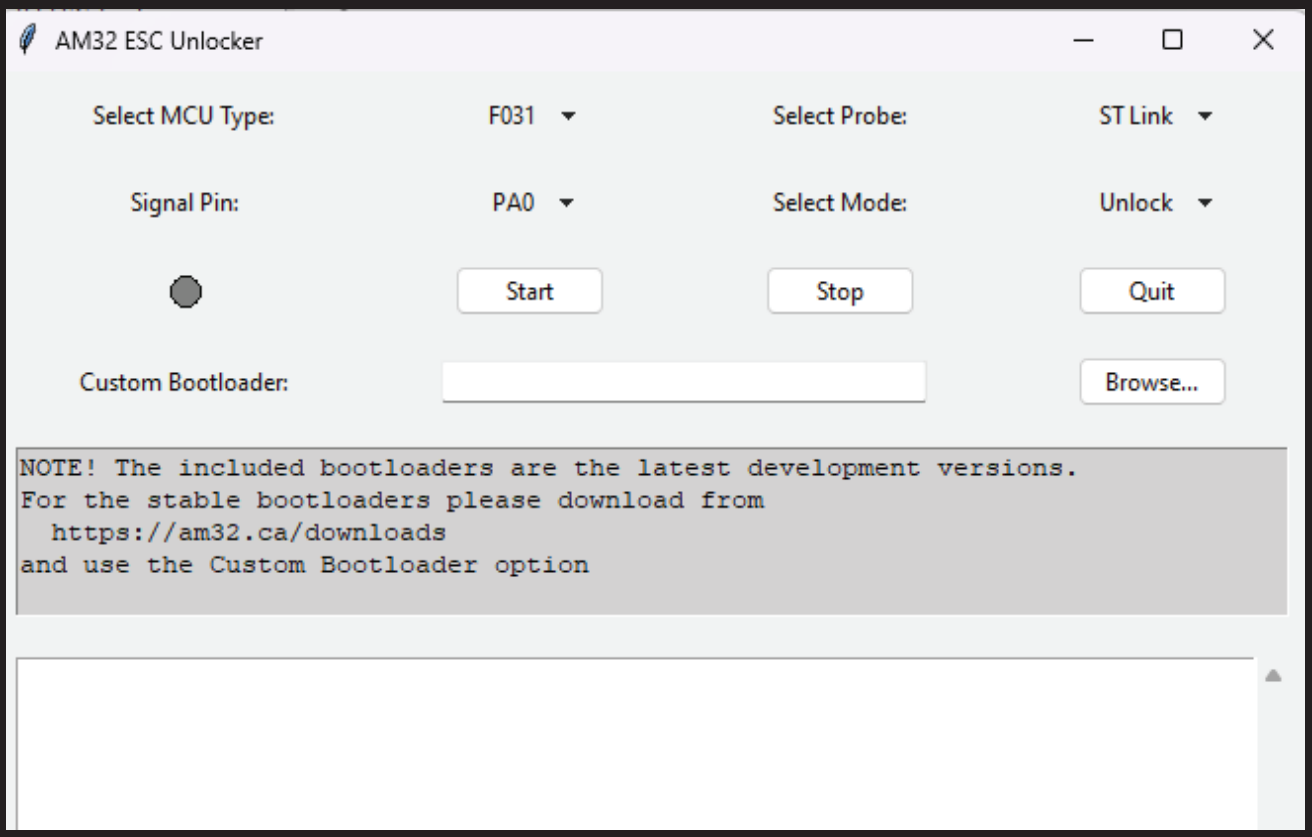


FC-ESC



ESC-FC

Firmware Flashing

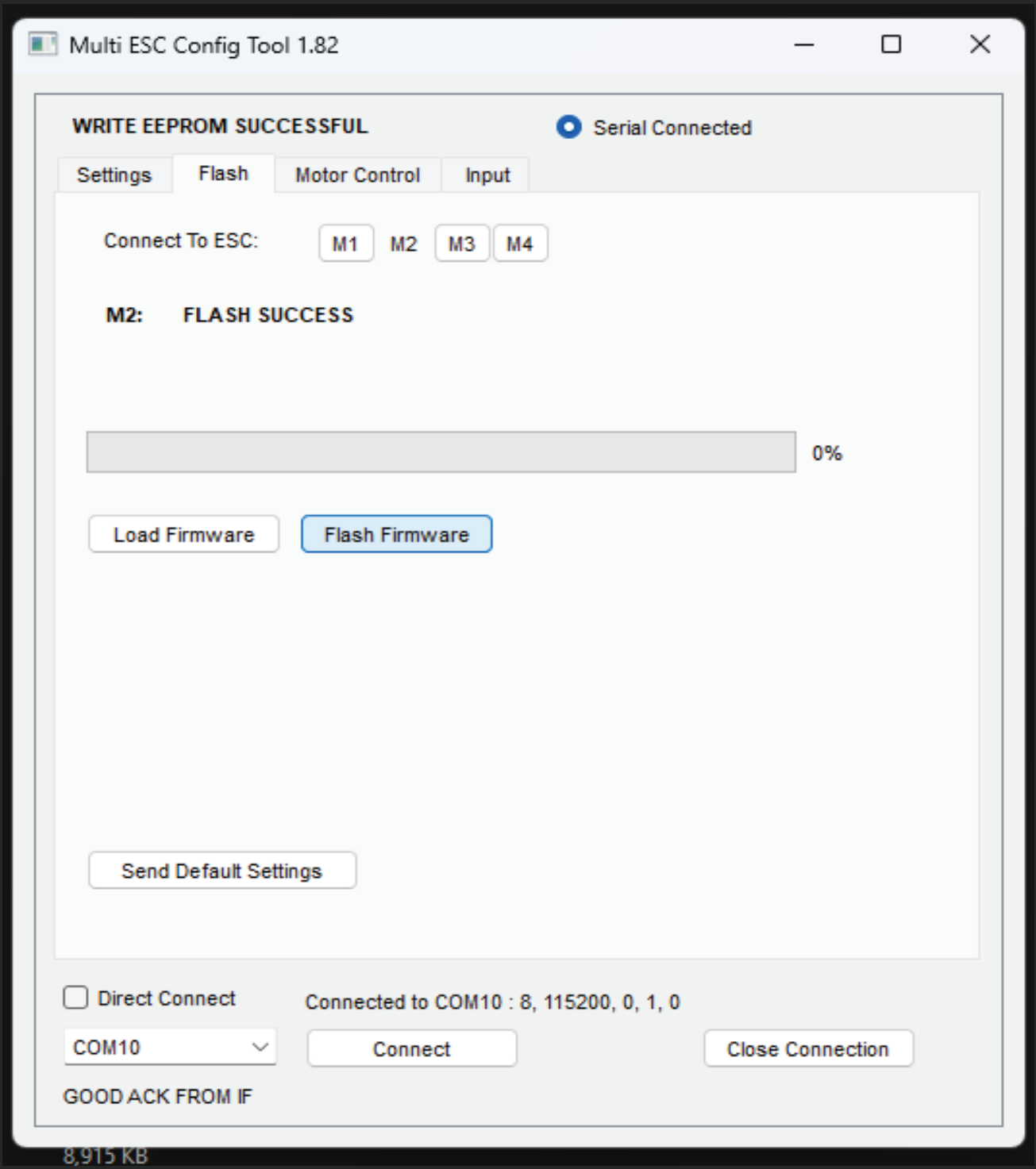


Steps to Update Bootloader

1. Download ESC unlocker tool and bootloader file for PB4.
   https://github.com/AlkaMotors/AT32F421_AM32_Bootloader
3. Connect ST-Link debugger with the ESC.
4. Open esc unlocker tool.
5. Select MCU type “F421” and Signal pin “ PB4”.
6. Browse the bootloader and add the path of the file.
7. Then press the Start for flashing the bootloader file.

Steps to Upload Firmware

1. Connect FC to PC via USB. Connect ESC with FC and enable BLHeli FC passthrough.
2. Open Multi ESC Config Tool. Connect FC and go to the “Flash” tab.
3. Load Firmware file “AM32_AT32PB4_540_F421” from your PC then Flash the firmware file.



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Let's Connect

Please visit the botlabdynamics.store for manuals and support.