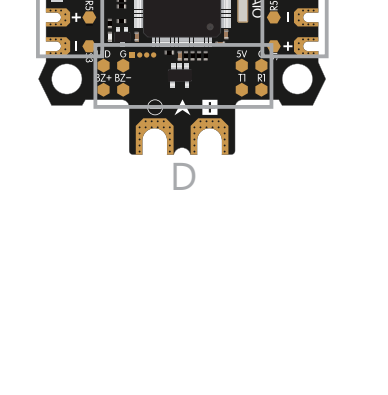


SPEEDY BEE FLIGHT CONTROLLER SETTING THE PARAMETERS VIA APP

Speedy Bee F7 AIO Manual

TOP



Features-A

- ◇ S2: ESC Signal
- ◇ R5: ESC Telemetry
- ◇ T2/R2: UART2
- ◇ SDA/SCL: I2C used for external Compass module
- ◇ G: Ground
- ◇ 5V (Max. 2.5A): 5V output for other devices
- ◇ R5: ESC Telemetry
- ◇ S1: ESC Singal

Features-B

- ◇ Vt: Video input
- ◇ 5V (Max. 2.5A): 5V output for other devices
- ◇ G: Ground
- ◇ G: Ground
- ◇ 5V(Max. 2.5A): 5V output for other devices
- ◇ 9V(Max. 2.5A): 9V output for other devices
- ◇ VO: Video output
- ◇ CC: BetaFlight Camera Control
- ◇ VBAT: Battery voltage filtered
- ◇ R5/T5: UART5
- ◇ S5: ESC Singal
- ◇ R4/T4: UART4

Features-C

- ◇ S4: ESC Signal
- ◇ R5: ESC Telemetry
- ◇ USB
- ◇ R5: ESC Telemetry
- ◇ S3: ESC Singal

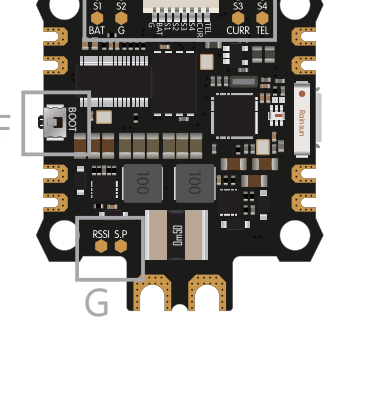
Features-D

- ◇ LED: Used for WS2812 LED
- ◇ G: Ground
- ◇ BZ+ & BZ-: 5V Buzzer
- ◇ 5V(Max. 2.5A): 5V output for other devices
- ◇ G: Ground
- ◇ T1/R1: UART1

LED Indicators

- ◇ LED1--Red: Power Indicator
- ◇ LED2--Blue: Flight controller Indicator
- ◇ LED3--Green: Bluetooth Indicator
- Constantly on: Bluetooth connected/Off: Not connected

BACK



Features-E (4 in 1 ESC)

- ◇ S1: ESC Singal
- ◇ S2: ESC Singal
- ◇ BAT: Battery
- ◇ G: Ground
- ◇ JST 8PIN: G/BAT/S1/S2/S3/S4/CURR/TEL
- ◇ S3: ESC Singal
- ◇ S4: ESC Singal
- ◇ CURR: Current sensor signal IN or OUT
- ◇ TEL: ESC Telemetry

Features-F

- ◇ Boot: Boot(DFU)mode button

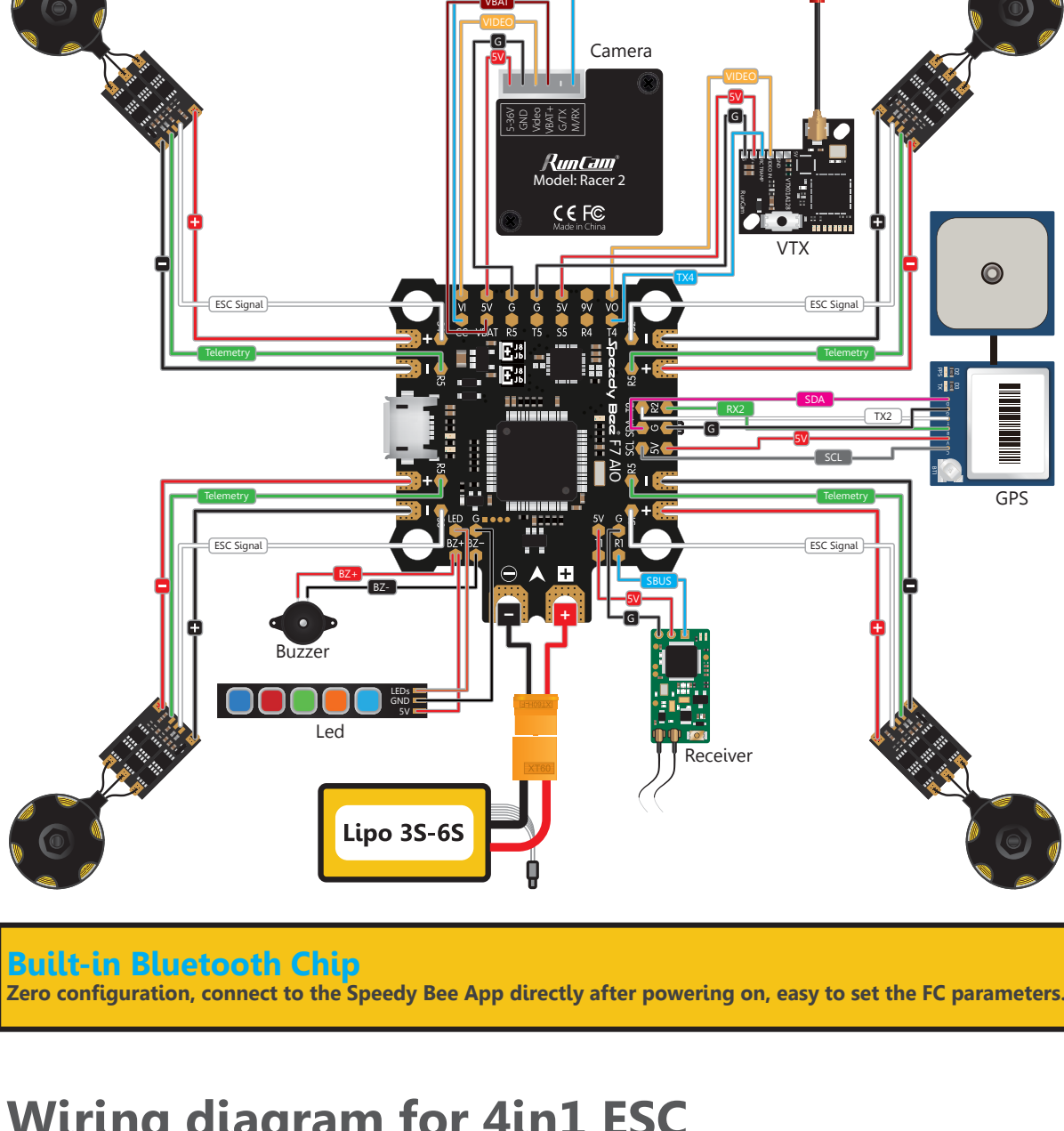
Features-G

- ◇ RSSI: Receiver RSSI IN
- ◇ S.P: SmartPort

Main features

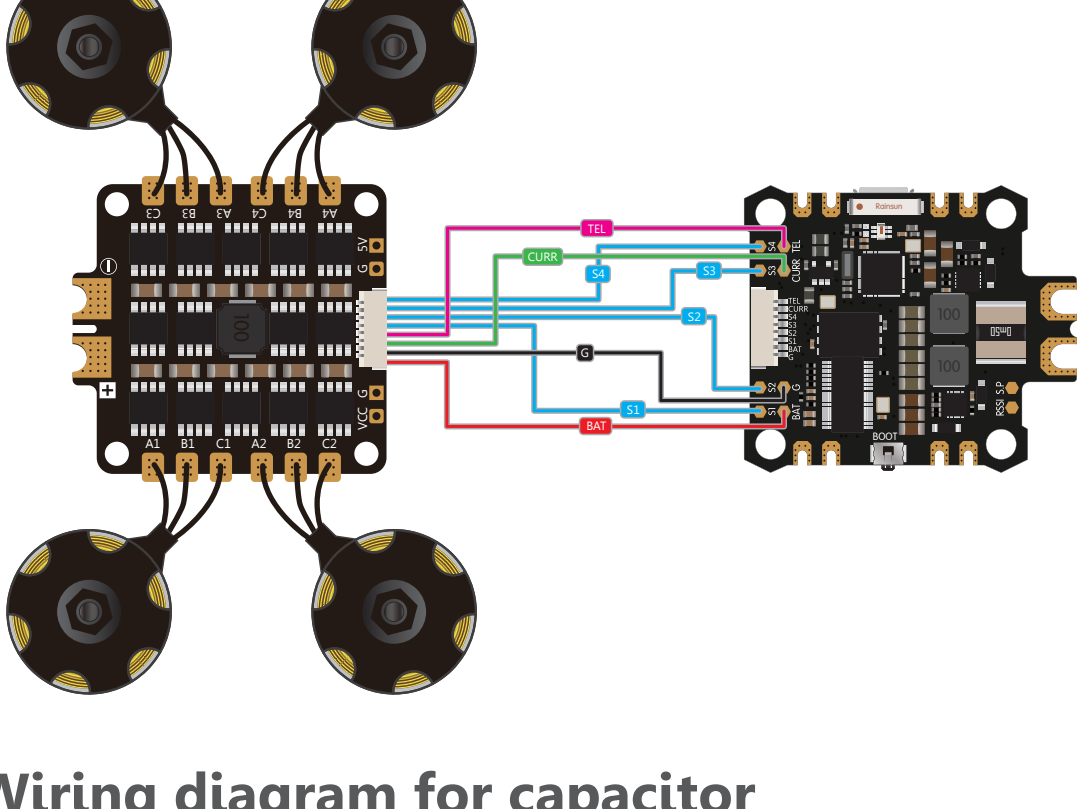
- STM32F722
- ICM20689
- Integrated barometer
- Support 4in1 ESC
- 32mb flash
- BetaFlight OSD
- RSSI input solder pad
- Smartport solder pad
- BetaFlight Camera Control Pad
- BLE Module: inner connect to UART3 for remote setting with Speedy Bee
- App or other similar apps

Wiring Guide

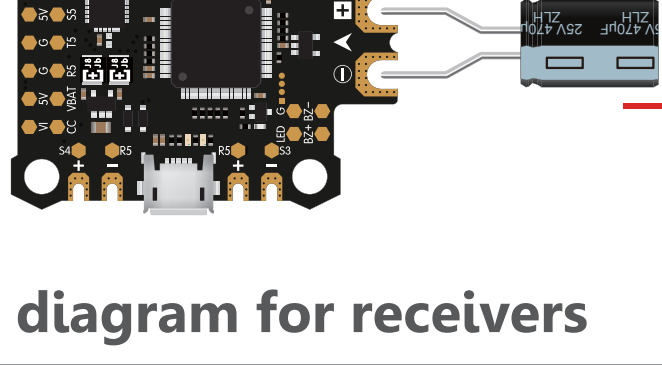


Built-in Bluetooth Chip
Zero configuration, connect to the Speedy Bee App directly after powering on, easy to set the FC parameters.

Wiring diagram for 4in1 ESC



Wiring diagram for capacitor



Wiring diagram for receivers

SBUS RX

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

Serial-based receiver (SPEKSAT:...) Receiver Mode

Note: Remember to configure a Serial Port (via ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

SBUS

Serial Receiver Provider

PPM

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

PPM RX Input

Receiver Mode

Crossfire Nano RX Wiring Diagram

Wiring Diagram 1

Wiring Diagram 2

Wiring Diagram 3

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

Serial-based receiver (SPEKSAT:...) Receiver Mode

Note: Remember to configure a Serial Port (via ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

CRSF

Serial Receiver Provider

Crossfire Micro RX Wiring diagram

Wiring Diagram 1

Wiring Diagram 2

Wiring Diagram 3

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

Serial-based receiver (SPEKSAT:...) Receiver Mode

Note: Remember to configure a Serial Port (via ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

CRSF

Serial Receiver Provider

IBUS

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

Serial-based receiver (SPEKSAT:...) Receiver Mode

Note: Remember to configure a Serial Port (via ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

IBUS

Serial Receiver Provider

SUMD/T Receiver

Identifier	Configuration/RS	Serial Rx
UART0P	112500 2	
UART1	112500 2	
UART2	112500 2	
UART3	112500 2	
UART4	112500 2	
UART5	112500 1	

Receiver

Serial-based receiver (SPEKSAT:...) Receiver Mode

Note: Remember to configure a Serial Port (via ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

SUMD

Serial Receiver Provider