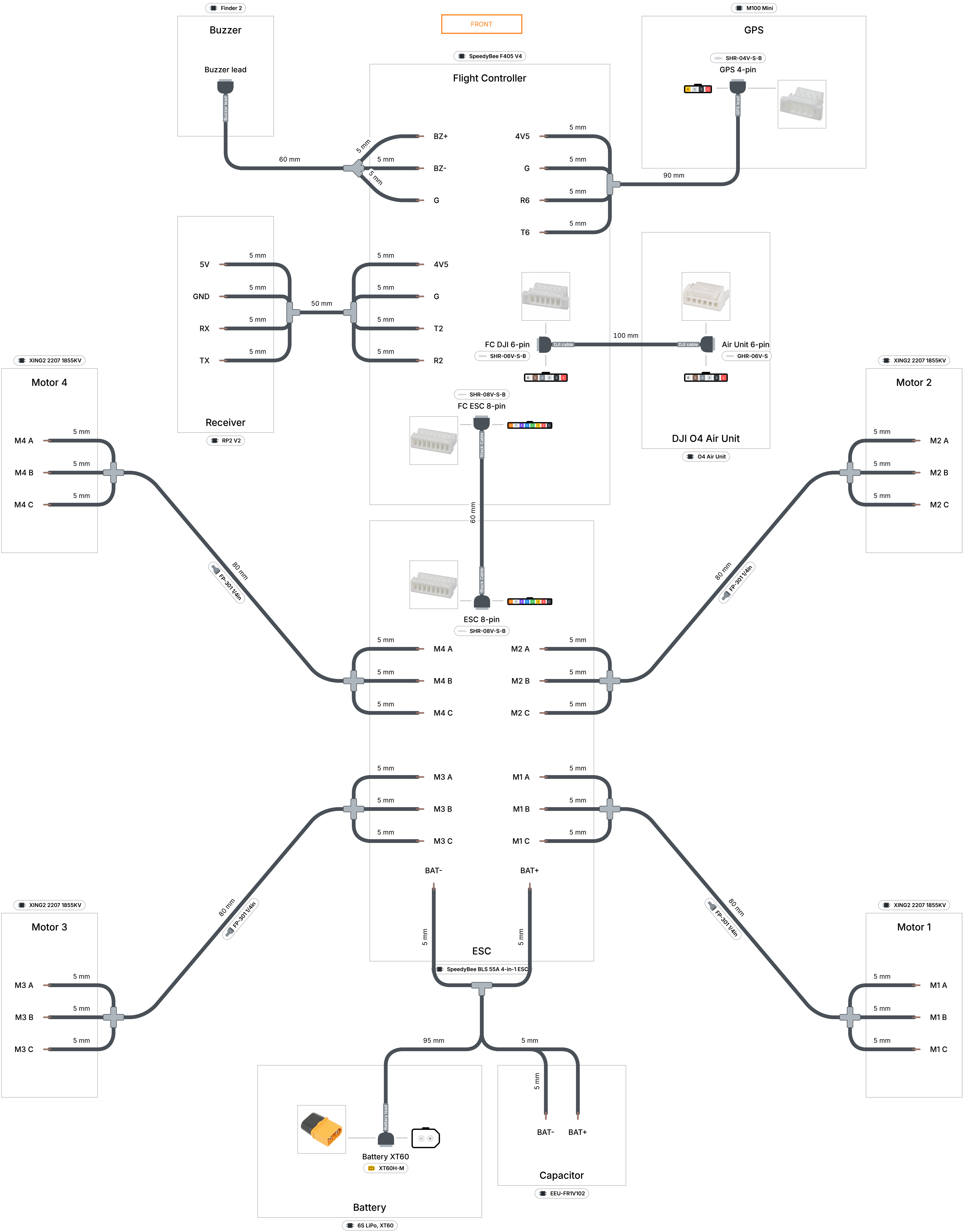


Schematic

Sin 6S freestyle quad: SpeedyBee F405 V4 BLS 55A stack, DJI O4 Air Unit, RadioMaster RP2 V2 ELRS, HGLRC M100 Mini GPS, VIFLY Finder 2, iFlight XING2 2207 1855KV. The XT60 pigtail, stack cable and capacitor ship with the stack; the DJI cable ships with the air unit.





	Part Number	Manufacturer	Details	Description	Quantity	Price	Total Price
Connectors							
	XT60H-M	Amass	2 cavities, Male	XT60 male plug with protective sheath. Gold-plated brass solder-cup contacts, 12 AWG, 30 A continuous / 60 A peak. Mates with the battery's XT60 female.	1		
	SHR-08V-S-B	JST	8 cavities, Female	SH series 1.0 mm pitch 8-way receptacle housing	2		
	SHR-06V-S-B	JST	6 cavities, Female	SH series 1.0 mm pitch 6-way receptacle housing	1		
	SHR-04V-S-B	JST	4 cavities, Female	SH series 1.0 mm pitch 4-way receptacle housing	1		
	GHR-06V-S	JST	6 cavities, Female	GH series 1.25 mm pitch 6-way receptacle housing (air unit end of the DJI cable)	1		
Wires							
	Silicone wire 12 AWG		Red, 12 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C. Battery lead	100 mm		
	Silicone wire 12 AWG		Black, 12 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C. Battery lead	100 mm		
	Silicone wire 20 AWG		Black, 20 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C. Motor phase lead, supplied on the motor	Excluded		
	Silicone wire 28 AWG		Black, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	380 mm		
	Silicone wire 28 AWG		Red, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	380 mm		
	Silicone wire 28 AWG		Yellow, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	215 mm		
	Silicone wire 28 AWG		Green, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	60 mm		
	Silicone wire 28 AWG		Blue, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	125 mm		
	Silicone wire 28 AWG		Violet, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	60 mm		
	Silicone wire 28 AWG		White, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	315 mm		
	Silicone wire 28 AWG		Orange, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	60 mm		
	Silicone wire 28 AWG		Gray, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	100 mm		
	Silicone wire 28 AWG		Brown, 28 AWG	Silicone-insulated, fine-stranded tinned copper, 200 C	100 mm		
Contacts							
	SSH-003T-P0.2-H	JST	Crimp, Female, 32–28 AWG	SH series 1.0 mm pitch crimp socket contact, AWG 32-28	25		
	SSHL-002T-P0.2	JST	Crimp, Female, 30–26 AWG	GH series 1.25 mm pitch crimp socket contact, AWG 30-26	5		
Coverings							
	FP-301 1/4in	3M	3.2–6.4 mm	Polyolefin 2:1 heat shrink, black. Sleeves the three motor leads along each arm.	320 mm		
Group Parts							
	6S LiPo, XT60			6S (22.2 V nominal) LiPo pack with XT60 female lead, typically 1100-1500 mAh 100C+ for 5in freestyle	1		
	EEU-FR1V102	Panasonic		1000 uF 35 V low-ESR electrolytic. The SpeedyBee stack ships with an equivalent 35V 1000uF low-ESR capacitor.	1		
	SpeedyBee BLS 55A 4-in-1 ESC	SpeedyBee		30x30 BLHeli_S 4-in-1 ESC, 3-6S, 55 A continuous per motor. Half of the F405 V4 BLS 55A stack.	1		
	SpeedyBee F405 V4	SpeedyBee		30x30 F405 flight controller. Betaflight target SPEEDYBEEF405V4.	1		
	O4 Air Unit	DJI		Digital HD video transmitter. 6-pin FC cable, same pinout as O3 / O4 Pro. 3.7-13.2 V input, powered from the FC 9V rail.	1		
	RP2 V2	RadioMaster		ExpressLRS 2.4 GHz nano receiver, CRSF, 5 V, onboard antenna	1		
	M100 Mini	HGLRC		M10 GNSS module, 3.3-5 V, 115200 baud, SH 1.0 4-pin socket. Used for Betaflight GPS Rescue.	1		
	Finder 2	VIFLY		Self-powered lost-model buzzer, 4.5-8.5 V input, internal 80 mAh cell	1		
	XING2 2207 1855KV	iFlight		2207 brushless motor for 6S. 20 AWG x 160 mm leads, trimmed to length at the ESC.	4		