



Legends:

1. Route CAN as bus style
2. GHR1.25 header is the one Robomaster C620 ESC CAN header

HKUST
Robocon Team

Comment	Description	Designator	Footprint	LibRef	Quantity
100nF	Capacitor (Semiconductor SIM Model)	C1, C5, C6, C9, C11, C12, C13, C14, C15	CC1005-0402	Cap Semi	9
20pF	Capacitor (Semiconductor SIM Model)	C2, C3	CC1005-0402	Cap Semi	2
39pF	Capacitor (Semiconductor SIM Model)	C4	CC1608-0603	Cap Semi	1
2.2uF	Capacitor (Semiconductor SIM Model)	C7, C8, C10	CC1005-0402	Cap Semi	3
1uF	Capacitor (Semiconductor SIM Model)	C16, C17	CC1005-0402	Cap Semi	2
3V	Typical RED GaAs LED	D1	D0603	LED	1
5V	Typical RED GaAs LED	D2	D0603	LED	1
LED1	Typical RED GaAs LED	D3	D0603	LED	1
LED2	Typical RED GaAs LED	D4	D0603	LED	1
LED3	Typical RED GaAs LED	D5	D0603	LED	1
LED4	Typical RED GaAs LED	D6	D0603	LED	1
0.4A Fuse	Semiconductor Resistor	F1	CR1608-0603	Res Semi	1
PWM1	Header, 3-Pin	JP1	LOCKEDHDR-3	Header 3	1
PWM2	Header, 3-Pin	JP2	LOCKEDHDR-3	Header 3	1
SWD	Header, 4-Pin	P1	LOCKEDHDR-4	Header 4	1
SPI1	Header, 6-Pin	P2	6410-06	Header 6	1
SPI2	Header, 6-Pin	P3	6410-06	Header 6	1
UART1	Header, 4-Pin	P4	LOCKEDHDR-4	Header 4	1
UART3	Header, 4-Pin	P5	LOCKEDHDR-4	Header 4	1
CAN1	Header, 4-Pin	P6, P7	LOCKEDHDR-4	Header 4	2
ENC1	Header, 5-Pin	P8	lockedHDR-5	Header 5	1
ENC2	Header, 5-Pin	P9	lockedHDR-5	Header 5	1
CAN2	Header, 4-Pin	P10, P11	LOCKEDHDR-4	Header 4	2
RM	1.25mm	P12, P13, P14, P15	GHR1.25 2P SMD	GHR 2P	4
60R	Semiconductor Resistor	R1, R2, R5, R6	CR1608-0603	Res Semi	4
10k	Semiconductor Resistor	R3, R4	CR1005-0402	Res Semi	2
1k	Semiconductor Resistor	R7	CR1005-0402	Res Semi	1
1.5k	Semiconductor Resistor	R8	CR1005-0402	Res Semi	1
1k	4x Resistor Array	R9	ARC241-0603x4	Res Array	1
SW		SW1	SOP SW 4P	4P SOP SW 1.27	1
RESET	Single-Pole, Single-Throw Switch	SW2	PUSH SWITCH 2-PIN	SW-SPST	1
BTN1	Single-Pole, Single-Throw Switch	SW3	PUSH SWITCH 2-PIN	SW-SPST	1
TJA1050	5V to 12V Charge Pump	U1, U3	SOP-8	TJA1050	2
STM32F405RGT6	STM32 ARM-based 32-bit MCU with 128 Kbytes Flash, 64-pin LQFP, Industrial Temperature	U2	LQFP64_N	STM32F103RBT6	1
LP5907	LDO Input: 2.2V to 5.5V Output: 3.3V 250mA Enable: high volt-> turns on	U4	SOT-23	LP5907	1
8.00MHz	Crystal Oscillator	X1	POL_SMD3225	XTAL	1