

Component	Designator	Datasheet		
Microcontroller	STM32F405RG76	https://www.st.com/content/ccc/resource/technical/document/datasheet/ef/92/76/6d/bb/c2/4f/f7/DM00037051.pdf/files/DM00037051.pdf/jcr:content/translations/en.DM00037051.pdf		
Flash Memory	W25Q32JVZPIQ (Quad SPI)	https://www.lcsc.com/datasheet/lcsc_datasheet_2304140030_Winbond-Elec-W25Q32JVZPIQ_C571260.pdf		
Static RAM	IS61LV5128AL-10TLI (Parellel)	https://www.lcsc.com/datasheet/lcsc_datasheet_1806101621_ISSI-Integrated-Silicon-Solution-IS61LV5128AL-10TLI_C40493.pdf		
Inertial MU (ACCEL, GYRO, MAGNO)	ICM-20948 (I2C)	https://invensense.tdk.com/wp-content/uploads/2016/06/DS-000189-ICM-20948-v1.3.pdf?ref_disty=digikey		
Barometric Pressure Sensor	LPS22HBTR (I2C or SPI)	https://www.st.com/content/ccc/resource/technical/document/datasheet/bf/c1/4f/23/61/17/44/8a/DM00140895.pdf/files/DM00140895.pdf/jcr:content/translations/en.DM00140895.pdf		
Temperature Sensor	TMP1075DSGR (I2C SMBus)	https://www.ti.com/lit/ds/symlink/tmp1075.pdf		
Global Positioning System	MAX2771ETI (SPI)	https://www.analog.com/media/en/technical-documentation/data-sheets/MAX2771.pdf		
RF Transceiver	SX1262IMLTRT (LoRA Modulation)	https://semtech.my.salesforce.com/sfc/p/#E0000000.JelG/a/2R000000HT7B/4cQ1B3JG0iKRo9DGRkVuxcifwB.3fSUCGr.S_dPd4		
DC-DC Converter	MPM3810QGB-33-Z (None)	https://www.monolithicpower.com/en/documentview/productdocument/index/version/2/document_type/Datasheet/lang/en/sku/MPM3810GQB/document_id/2083		
Battery Management System	BQ7790S08PW (I2C)	https://www.lcsc.com/datasheet/lcsc_datasheet_1806022223_Texas-Instruments-BQ7790S08PW_C206178.pdf		
Analog-to-Digital Converters (HIGH-RES)	MCP3221A6T-E/OT (I2C)	https://ww1.microchip.com/downloads/en/DeviceDoc/20001732E.pdf		
Digital-to-Analog Converters (HIGH-RES)	MCP4726A0T-E/CH (I2C)	https://ww1.microchip.com/downloads/en/DeviceDoc/22272C.pdf		
Pulse Width Modulation Motor Driver	A4935KJPTR-T (None)	https://www.mouser.com/datasheet/2/1115/Allegro_62524_A4935_Datasheet-3464793.pdf		
Crystal Oscillator	ECS-2333	https://ecsxal.com/store/pdf/ecs-2325-2333.pdf		
Piezo Buzzer	CPT-1117-83-SMT-TR	https://www.cuidevices.com/product/resource/cpt-1117-83-smt-tr.pdf		
LiPo Battery				
2.94 (Microcontroller)	0.91 (Flash Memory)	2.60 (Static RAM)	4.79 (Inertial MU)	0.89 (Barometric Pressure Sensor)
0.34 (Temperature Sensor)	12.98 (GPS)	1.91 (RF Transceiver)	0.99 (DC-DC Converter)	2.25 (Battery Management System)
2.06 (ADC (HIGH-RES))	2.31 (DAC (HIGH-RES))	0.93 (PWM Motor Driver)	5.24 (Crystal Oscillator)	0.70 (Piezo Buzzer)
(We're getting digital servos for the sake of accuracy)				
Use one DC-DC converter for each level of necessary voltage				
DARYL YOU HAVE TO PURCHASE CURRENT-LIMITING ICs				
Thank you past me				