

Designator	Footprint	Description	Comment	Manufacturer Part	Quantity
[NoValue], stm	Quad64	STMICROELECTRONICS	STM32F405RGT7	STM32F405RGT7	2
AD	CP-20-4_M	IC ADC 16BIT 4CH 2	AD7682BCPZRL7	AD7682BCPZRL7	1
C1, C7, C8, C13, C14	cap_100nf	0603 0.1 uF 16 V ±10	0.1uf	VJ0603Y104KXJC	9
C12, C17	Cap-1uf	TAIYO YUDEN - TMK	1uf	TMK107B7105KA	2
C, C2, C4, C5	Cap-22uf	CAP CER 22PF 10V	22pf	C0805C220J8GA	4
cap1, cap2, cap3, cap	Cap-10	CAP 10UF 10V X7R 2	10uf	C0805C106M8RA	6
CR1	crytal	Crystal 0.032768MHz	SSPT7F-7PF20-R	SSPT7F-7PF20-R	1
CR2	crystal-12mhz	Crystal 12MHz ±20pp	12Mhz	ABLS7M-12.000M	1
H1	connector	WURTH ELEKTRON	61300511021	61300511021	1
IC1	FT9013	RICHTEK RT9013-1	RT9013-12GB	RT9013-12GB	1
L1	inductor	Fixed Inductors 4700	4.7uH	AIML-0603-4R7K	1
LED1	LED-Green	LED GREEN DIFFUS	geen	LT Q39G-Q100-2	1
LED2	LED-RED	LED RED CLEAR CH	RED	APT1608SRCPRV	1
MC*	mcp2551	CAN Interface IC Hi S	MCP2551T-I/SN	MCP2551T-I/SN	1
R1, R6	Resistor-510	Res Thick Film 0805	510	RC0805FR-07510	2
R1N	res-1k	RES SMD 120 OHM 0	120	Y1629120R000Q9	1
R2, R5	Resistor-10k	MCU 0805-25 0.1% A	10k	MCU0805MD1002	2
R3, R4, R7	Resistor-smd-4.7k	TR / Thin Film Chip R	4.7k	RG2012L-472-L-T	3
R8, R9, R10, R11	Resistor-390	RES SMD 390 OHM	390 Ohms		4
RS	res-1k	RES SMD 1K OHM 0	1k	RG2012L-102-L-T	1
S1	DIP6	Switch DIP ON OFF S	219-3LPSTR	219-3LPSTR	1
sw1	switch	E-SWITCH - TL3305A	TL3305AF160QG	TL3305AF160QG	1
sw2	JST_SM04B-SRSS-T	JST (JAPAN SOLDE	SM04B-SRSS-TB(LF	SM04B-SRSS-TB	1
U1, U2, U3, U4	Omron_EE-SX1108_		EE-SX1108		4
VR1, VR2, VR3, VR4	variable-resistor	Res Trimmer 10K Oh	10k	TC33X-2-103E	4

Total Price

Calculation for

electronic

component

25\$

Mechanical design

Using CNC Machine

5\$

Total Price of

Composed sensor

30\$