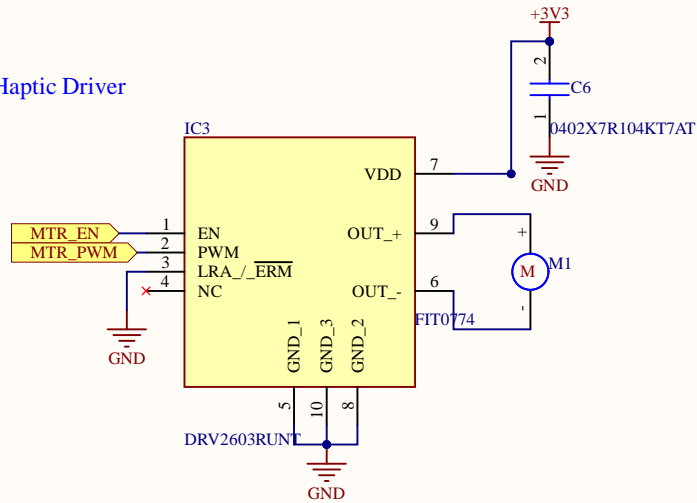
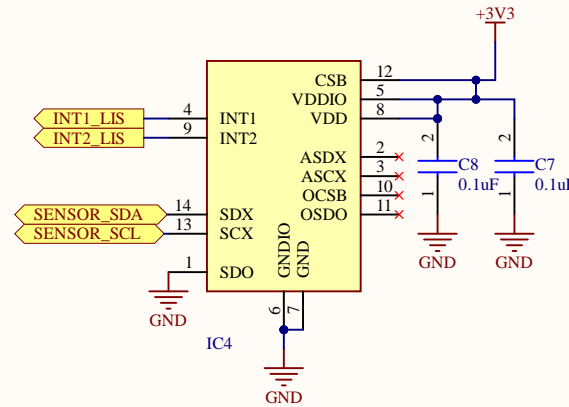


SENSORS

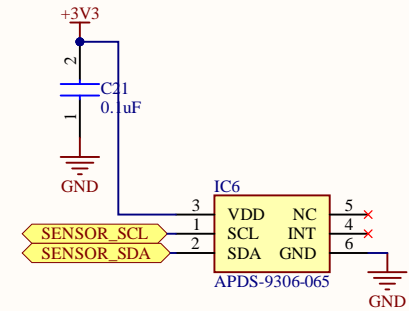
Haptic Driver



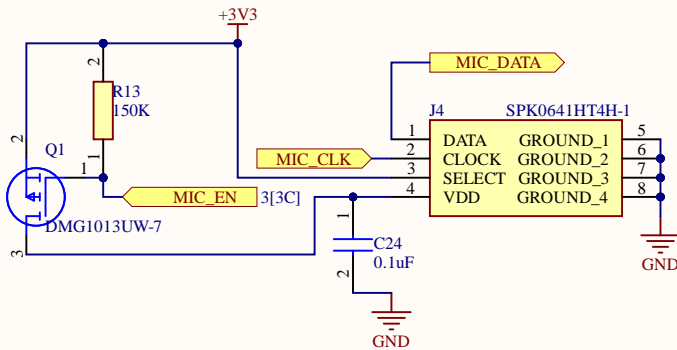
IMU Sensor



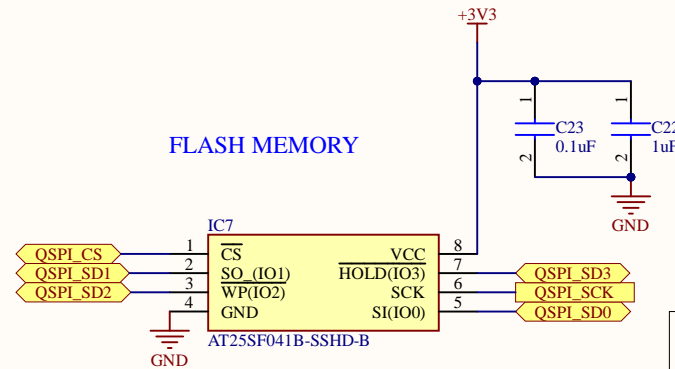
Ambient Light Sensor



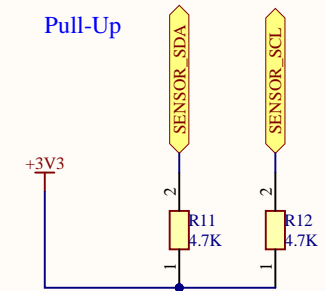
MICROPHONE




FLASH MEMORY



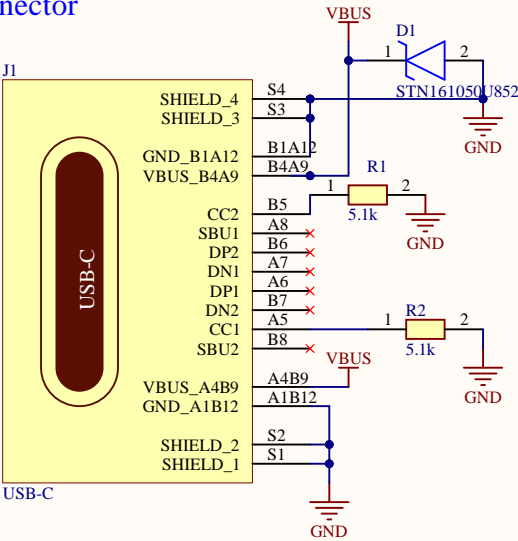
Pull-Up



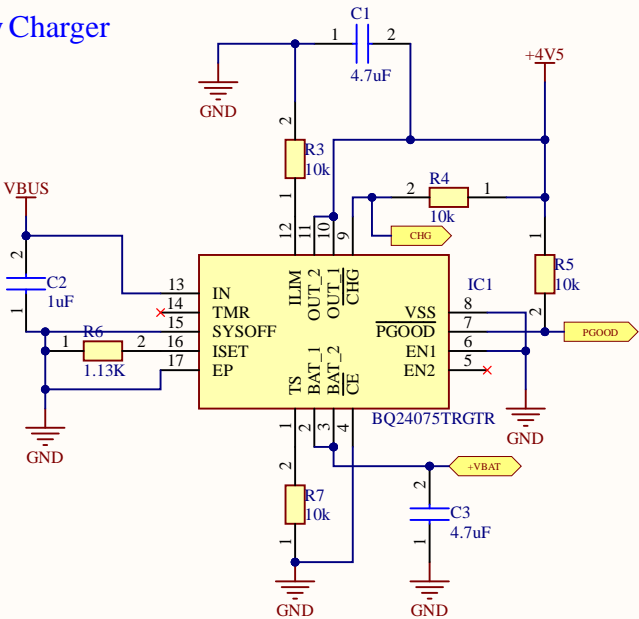
			
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Page Contents: Smartwatch_SensorsAndPeripherals.SchDoc			
Revision:	Designed by:	Checked by:	
Release Date: 22/02/2025	Sheet: 1		of 4

POWER MANAGEMENT

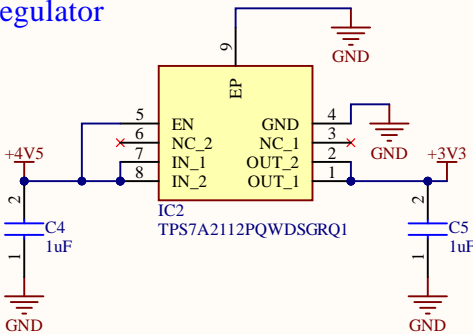
USB-C Connector



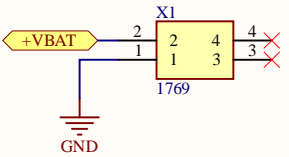
Battery Charger




LDO Regulator



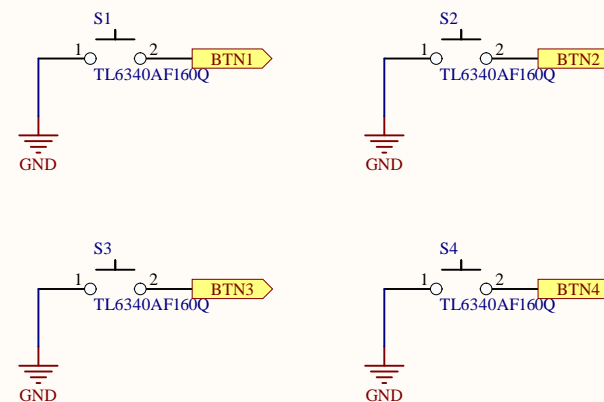
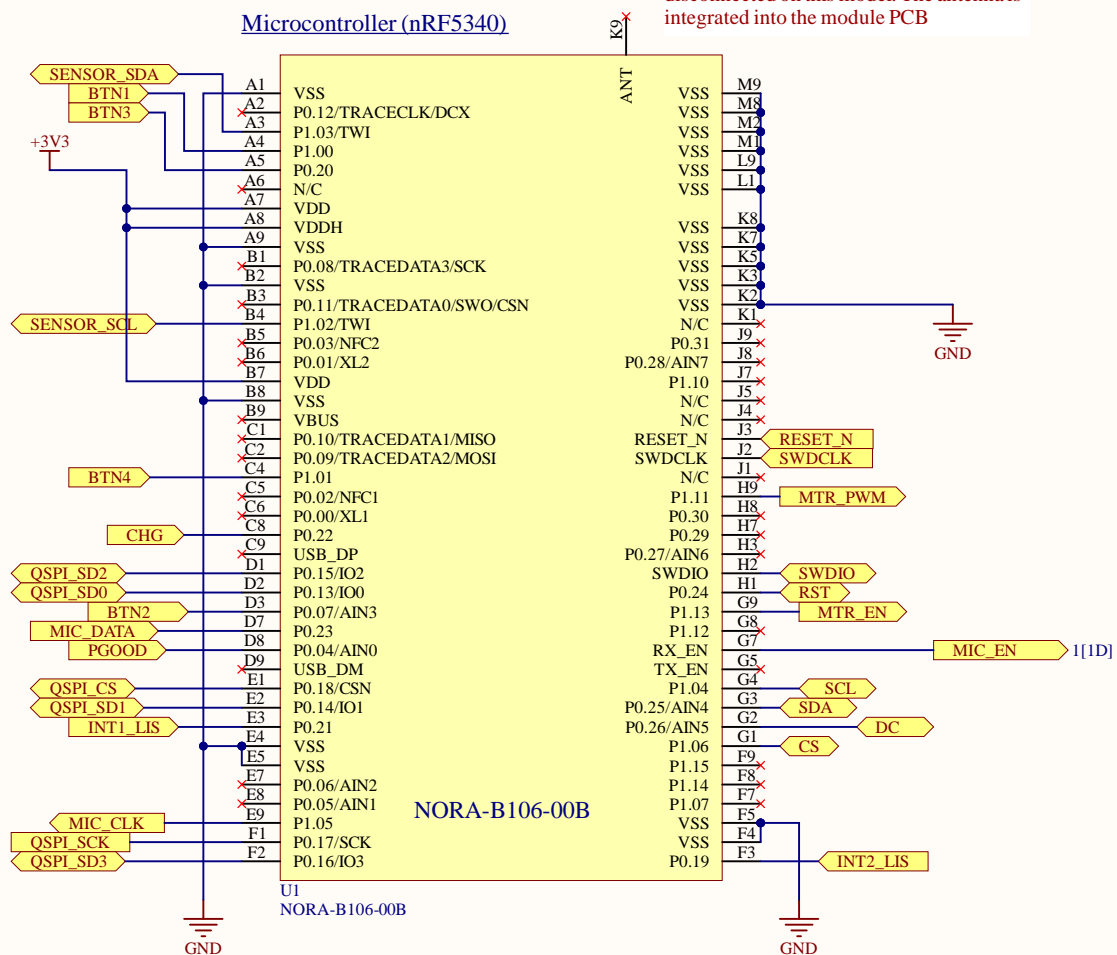
Battery (JST Conn)



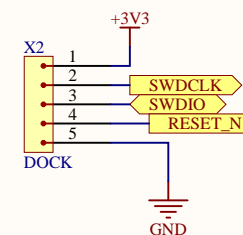
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	Release Date: 22/02/2025	Sheet: 2	of 4


MCU

Tactile Switches



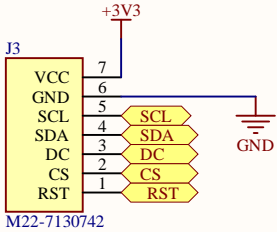
SWD Conection




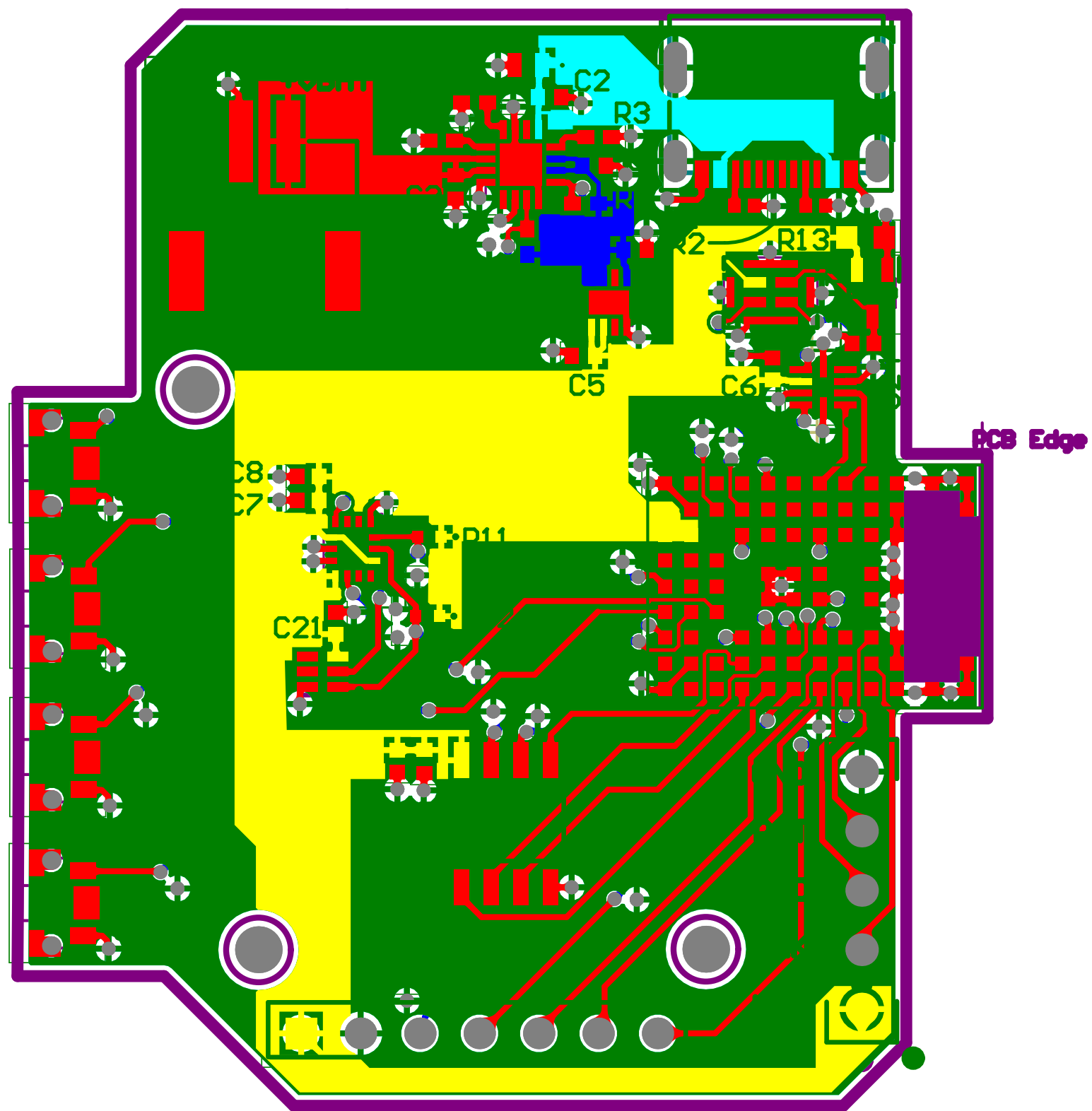
			
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Page Contents: Smartwatch_Microcontroller.SchDoc			
Revision:	Designed by:	Checked by:	
Release Date:	22/02/2025	Sheet:	3 of 4

DISPLAY

Screen



			
	Title:		
Variants: [No Variations]			
Page Contents: Smartwatch_Display.SchDoc			
Revision:	Designed by:	Checked by:	
Release Date:	22/02/2025	Sheet:	4 of 4



Doc #	Name	Description	Package	Revision ID	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
4	1uF	Multi-layer Ceramic Capacitors MCCC-SMD 09047 4.7 uF 10 VDC 20% SMD X5R	C1, C3			2	Murata	GRM131C914A796A01L	Not Recommended for New Design	Digkey	490-9756-1-ND	0.37	0.74
	1uF	Multi-layer Ceramic Capacitors MCCC-SMD 09047 10V 1uF X5R 0402 10% H CY	C2, C4, C5			3	Taioco	CC0402R05R88B105	Volume Production	Digkey	311-1426-1-ND	0.017	0.17
	5002X7R10MKT7AT	Multi-layer Ceramic Capacitors MCCC-SMD 09047 16V 0.5 uF X7R 10%	C6			1	Epcos/AVE	0402X7R10MKT7AT		Mouser	851-0402X7R10MKT7AT	0.27	0.27
	0.1uF	Multi-layer Ceramic Capacitors MCCC-SMD 09047 16V 0.1 uF X7R 10%	C7, C8, C21, C24			4	Murata	GRM1555R71C104KABD	Volume Production	Digkey	490-3261-1-ND	0.004	0.04
	1uF	Multi-layer Ceramic Capacitors MCCC-SMD 09047 10V 1uF X5R 0402 10% H CY	C22			7	Taioco	CC0402R05R88B105	Volume Production	Digkey	311-1426-1-ND	0.08	0.08
	0.1uF	Multi-layer Ceramic Capacitors MCCC-SMD 09047 16V 0.1 uF X7R 10%	C23			7	Murata	GRM1555R71C104KABD	Volume Production	Digkey	490-3261-1-ND	0.08	0.08
	STN161050J8G2	TVS Diode (Unidirectional)	D1			1	Eaton Bussmann	STN161050J8G2		Digkey	283-STN161050J8G2CT-ND	0.37	0.37
	RS2405TRGTR	General-Purpose diode 1.5A USB-Friendly Li-Ion Bat. Charger	E1			1	Texas Instruments	RS2405TRGTR	Volume Production	Digkey	796-25405-1-ND	2.14	2.14
	TP51A2112PQW05GR01	LED Voltage Regulators Automotive, 500mA, Low noise ultra-low EMI-high PSRR low-dropout (LDO) voltage regulator	E2			1	Texas Instruments	TP51A2112PQW05GR01		Digkey	296-TP51A2112PQW05GR01CT-ND	0.77	0.77
	DRV260SRUN1	Motor / Motion / Ignition Controllers & Drivers Haptic Driver w/Auto Resonance	E3			1	Texas Instruments	DRV260SRUN1	Volume Production	Digkey	296-DRV260SRUN1CT-ND	1.42	1.42
	BM270	IMU - Inertial Measurement Units Smart Ultra-Low Power Inertial Measurement Unit (IMU) for Wearable Applications	E4			1	Bosch Sensortec	BM270		Future Electronics	W11534	3.97	3.97
	APDS-9306-065	Advanced Light Sensors Digital Ambient Light Sensor	E6			1	Broadcom Avago	APDS-9306-065	Volume Production	Mouser	420-APDS-9306-065	0.96	0.96
	AT25SF041B-SSHD-B	NOR Flash 4Mbit, 2.5V (2.5V to 3.6V), 40C to 85C, SLC-N, 512Kbit (Block), Single-Bank, Quad SPI, NOR Flash	E7			1	Atmel Semiconductor	AT25SF041B-SSHD-B		Digkey	7695-AT25SF041B-SSHD-B-ND	0.38	0.38
	USB-C	USB Connector 16-Contact(s), Female, Right Angle, Surface Mount Terminal, Locking, Receptacle	J1			1	Molex	217179-0001		Farnell	3702965	0.91197	0.91197
	MEM-7130742	Connector	B			1							
	SPK0641HT46-1	Microphone MEMS PSOC/MEMS MEMS/PHONE Display Top/4.5dB SMD 120dB SPL -24 uV, 180V 35mg 20dB PSRR Low Power 250 / Standard 4401 RV	E4			1	Knowles	SPK0641HT46-1	Volume Production	Mouser	721-SPK0641HT46-1	1.39	1.39
	F110774	Motor Vibration Motor 1/2" 28mm	M1			1	DFRobot	F110774		Digkey	1738-F110774-ND	0.99	0.99
	DMC1013JW-7	MO-151 LP Channel	D1			3	Broadcom	DMC1013JW-7	Volume Production	Mouser	427-DMC1013JW-7	8.25	8.25
	0.1k	Fixed Resistor Metal Glass/Thick Film, 0.040W, 0170dms, 50V 0.5% w/ Tol, 100ppm/Cel, Surface Mount, 0602	R1, R2			2	Panasonic	ERJ-28R05012X	Obsolete	Mouser	447-ERJ-28R05012X	0.15	0.24
	10k	Resistors de Filme Fino - SMD 0603 10k 0.040W 5% SMD Zigzag Auto	R3, R4, R5, R7			4	Wishay Bourns	MC3040MD1000BE100	Volume Production	Digkey	MC3040-100K-BMCT-ND	0.45	1.8
	1.1K	Fixed Resistor Metal Glass/Thick Film, 0.040W, 110dms, 50V 1% w/ Tol, 100ppm/Cel, Surface Mount, 0602	R6			1	Taioco	AF1040R-07K13L	Volume Production	Digkey	13-AF1040R-07K13CT-ND	0.16	0.16
	4.7K	Thick Film Resistor - SMD 0602 1% 4.700m Anti-Surge AEC-Q200	R11, R12			2	Panasonic	ERJ-PA24701X	Volume Production	Digkey	P1722BCT-ND	0.19	0.38
	150K	Thick Film Resistor - SMD 1/10W 150K 0.040W	R13			1	RODA Speer	8K7381UTD0154J	Volume Production	Mouser	440-8K7381UTD0154J	0.11	0.11
	TLA3404716Q2	Integrated Switch, 1 Switches, SPST, Momentary, tactile, 0.02A, 12VDC, 0.17N, 2 PCB Hole Cnt, Solder Terminal, Surface Mount, Right Angle	E1, E2, E3, E4			4	Switch	TLA3404716Q2	Volume Production	Digkey	141-TLA3404716Q2CT-ND	0.91	2.04
	NORA-8106-008	Bluetooth Module - 802.15.1 nRF52840, PSoC Antenna, open CPU	E1			7	u-blox	NORA-8106-008	Volume Production	Mouser	377-NORA-8106-008	9.12	9.12
	1769	Adapter Accessories RS-TH 2-pin SMT Right Angle Connect	K1			1	Adaptfruit Industries	1769		Mouser	485-1769	0.75	0.75
	DOCK	Mini SWD 0.01 Pinout Connector 10 Pin SMT Box Header / Adapter Industries 4081	K2			1							