

Electronics BOM							
Quantity	Unit	Reference Designators	Part name	Part Number	Cost	URL to part	URL to Data sheet
1	each	Microprocessor	Raspberry Pi Zero W	3708	\$14.00	<a href="https://www.adafruit.com/product/3708">https://www.adafruit.com/product/3708</a>	<a href="https://www.raspberrypi.org/documentation/hardware/raspberrypi/zero/">https://www.raspberrypi.org/documentation/hardware/raspberrypi/zero/</a>
1	each	Digital_Display	128x32 Mini OLED Display	3527	\$14.95	<a href="https://www.adafruit.com/product/3527">https://www.adafruit.com/product/3527</a>	<a href="https://cdn-learn.adafruit.com/assets/assets/000/035/277/3527.png">https://cdn-learn.adafruit.com/assets/assets/000/035/277/3527.png</a>
1	each	Temp_sensor	Contact-less Infrared Scanner	MLX90614	\$15.95	<a href="https://www.adafruit.com/product/3030">https://www.adafruit.com/product/3030</a>	<a href="https://cdn-shop.adafruit.com/product_images/3030/3030.jpg">https://cdn-shop.adafruit.com/product_images/3030/3030.jpg</a>
1	each	Input_sensor	IR Beam Break Sensor	2167	\$1.95	<a href="https://adafruit.com/product/2167">adafruit.com/product/2167</a>	<a href="https://media.digikey.com/pdf/Data%20Sheets/Microchip%20Technologies/2167.pdf">https://media.digikey.com/pdf/Data%20Sheets/Microchip%20Technologies/2167.pdf</a>
2	each	AUDIO_IN, SPEAKER	HDR-F-2.54_1x2	C49661	\$0.03	<a href="https://lcsc.com/product-detail/Headers/HDR-F-2.54_1x2-C49661.html">https://lcsc.com/product-detail/Headers/HDR-F-2.54_1x2-C49661.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C49661.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C49661.pdf</a>
4	each	C1,C2,C4,C5	100nF	C527375	\$0.12	<a href="https://lcsc.com/product-detail/Passive%20Components/100nF-C527375.html">https://lcsc.com/product-detail/Passive%20Components/100nF-C527375.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C527375.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C527375.pdf</a>
1	each	C3	10uF	C380537	\$0.25	<a href="https://lcsc.com/product-detail/Passive%20Components/10uF-C380537.html">https://lcsc.com/product-detail/Passive%20Components/10uF-C380537.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C380537.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C380537.pdf</a>
1	each	F_HEADER	HDR-F-2.54_2x20	C50982	\$0.16	<a href="https://lcsc.com/product-detail/Headers/HDR-F-2.54_2x20-C50982.html">https://lcsc.com/product-detail/Headers/HDR-F-2.54_2x20-C50982.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C50982.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C50982.pdf</a>
5	each	5V_HEADER, I2C_BUS_1, I2C_BUS_2, I2C_BUS_3, I2C_BUS_4	HDR-F-2.54_1x4	C225501	\$0.09	<a href="https://lcsc.com/product-detail/Headers/HDR-F-2.54_1x4-C225501.html">https://lcsc.com/product-detail/Headers/HDR-F-2.54_1x4-C225501.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C225501.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C225501.pdf</a>
1	each	M_HEADER	HDR-M-2.54_2x20	C50980	\$0.12	<a href="https://lcsc.com/product-detail/Headers/HDR-M-2.54_2x20-C50980.html">https://lcsc.com/product-detail/Headers/HDR-M-2.54_2x20-C50980.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C50980.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C50980.pdf</a>
5	each	R1, R5, R6, R7, R8	10K	C270956	\$0.03	<a href="https://lcsc.com/product-detail/Resistors/10K-C270956.html">https://lcsc.com/product-detail/Resistors/10K-C270956.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C270956.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C270956.pdf</a>
1	each	R2	10K	C81167	\$0.32	<a href="https://lcsc.com/product-detail/Resistors/10K-C81167.html">https://lcsc.com/product-detail/Resistors/10K-C81167.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C81167.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C81167.pdf</a>
2	each	R3,R4	100	C63036	\$0.04	<a href="https://lcsc.com/product-detail/Resistors/100-C63036.html">https://lcsc.com/product-detail/Resistors/100-C63036.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C63036.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C63036.pdf</a>
1	each	U1	PAM8302AADCRC	C112137	\$0.23	<a href="https://lcsc.com/product-detail/Integrated%20Circuits/PAM8302AADCRC-C112137.html">https://lcsc.com/product-detail/Integrated%20Circuits/PAM8302AADCRC-C112137.html</a>	<a href="https://datasheet.lcsc.com/lcsc/2019091411/C112137.pdf">https://datasheet.lcsc.com/lcsc/2019091411/C112137.pdf</a>
1	each	JLPCPB	PCB	Y3-3565453A	\$20.00		
1	each	N/A	SAMSUNG EVO Select 64GB microSDXC	MB-ME64HA	\$10.99	<a href="http://www.amazon.com/SAMSUNG-MB-ME64HA-64GB-MicroSDXC-Card/dp/B077333333">http://www.amazon.com/SAMSUNG-MB-ME64HA-64GB-MicroSDXC-Card/dp/B077333333</a>	
				Subtotal:	\$79.23		
Enclosure BOM							
Quantity	Size	Part in Assembly	Length	Estimated Cost			
3	M4	Temperature Scanner Mount to Backboard	12-15mm	\$1			
8	M4	Beam Break Sensor Mount to Backboard	13-15mm	\$3			
4	M3	Raspberry Pi Mount to Backboard	10-13mm	\$1			
1	M3	OLED Mount to Backboard	8-10mm	\$1			
4	M4	Speaker Mount to Backboard	25-27mm	\$1			
2	M3	Beam Break Sensor Mount	13-15mm	\$1			
4		Command Strips		\$3			
1 Kg		3D Printer Filament for Enclosure		\$25			
1		1/4" Brass nut		\$4			
				Subtotal:	\$36		
				Total:	\$115		