

Date: 9/19/23

Overview: Team meeting to start Design Document

Record: Met with the team to start our design document. We started the design process by first picking the necessary parts. When looking for parts, we made sure that the high voltage interacting parts were rated for international standards of 250 V, 20 Amps. As a team we decided to use the following parts:

Description	Manufacturer	Part #	Quantity	Cost
Microcontroller	Renesas Electronics	R7FA6M4AF 3CFP#AA0	1	\$8.10
Current Sensor	Allegro Microsystems	ACS712ELCT R-20A-T	1	\$3.79
Voltage Sensor	Noyito Technologies	ZMPT101B	1	\$6.99
Bluetooth Module	Renesas Electronics	US159-DA145 31EVZ	1	\$1.93
Power Relay	Omron Electronics	Omron g5le-1 5vdc	1	\$1.52
Battery	N/A	N/A	1	\$2
Extension Cord	N/A	N/A	1	\$8
DC-to-DC Step Down Converter	Advanced Monolithic Systems	AMS1117	2	\$4.33

The microcontroller and bluetooth module were picked by Guneet Sachdeva as he has had prior experience using these components. Once we picked parts, we split up tasks where I was given the cost and schedule section, and the ethics section. I also helped with the subsystem description and requirements.