ECE477 Bill of Materials v1.0
Year: 2023   **Semester: Fall**
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Created: 09/23/2023
Last Modified: 09/23/2023

Project_Component: Seat-Mounted Sensors + Control Unit				
Description	**ID**	**Qty**	**Value**	**Package**
ESP32 MCU w/ Integrated WIFI + Bluetooth	U1	1	-	Tray
Alpha MF02A-N-221-A01 FSR	-	2	9.8N max	Off PCB
AMG8833 Thermal Camera	-	1	-	Off PCB
HLK-LD2140 Human Presence Sensor	-	1	-	Off PCB
3.7V Li-ion Battery	-	2	3.7V	Off PCB
ISL91127IR Buck-Boost Regulator	U2	1	3.3Vout	QFN-20
MCP16411 Low IQ Boost Converter with Auto Bypass	U3	1	5Vout	MSOP-10

Project Name: Smart Seating Sytem

			Qty: 1
Manufacturer	**Mfg. Part #**	**Supplier**	**Supplier Part #**
Espressif Systems	ESP32-WROOM-32UE-H4	Mouser	356-ESP32WRM32UE32US
Alpha	MF02A-N-221-A01	Adafruit	1075
Panasonic	AMG8833	Adafruit	3538
Hi-Link	HLK-LD2140	Amazon	B0BXDL5KHQ
EBL	-	Amazon	B0874R85J2
Renesas Electronics	ISL91127IR	Mouser	968-ISL91127IRNZ-T
Microchip Technology	MCP16411-I/UN	Mouser	579-MCP16411-I/UN