Bill of Material
Parts List I for CMPE240 S 2018
Harry Li

Note: Partial List, you may need to add "glue logic" parts and other parts if needed, this BOM is for reference purpose only.

HSerial Number	Quantity and Description	Note
1	Wire Wrapping Board	Same as last semester, recommended size: 8.5X11 inches, note you may use half of that size with potential need to add the 2nd tier when adding additional components.
2	LPC Xpresso Module (ARM Cortex-M3)	Choose LPC1769 or if you prefer you may choose LPC1768 which may require different software drivers or sample programs, most of the class examples are for LPC1769.
3	AT45 or equivalent SPI interface serial FLASH	Any SPI based FLASH will do, especially these days a lot of newer ones with dual or quad SPI ports. They are good and better.
4	Wire wrapping tool kit	Same as last semester
5	DC power supply (5VDC 1500 mA)	You can use PC power supply.
6	Bundle of color wires for wrapping	
7	MAX232	No, For labs in class
8	MAX485	No, this component is an optional, but not required for this semester, if you prefer work on an extra this may be needed.
9	1 GPS module	No, this used to be an optional, but not required for this semester (order in class, sign up form to be provided in class).
10	LM35	No, Temperature sensor (analog) not needed for this semester.
11	LCD color display module	SPI interface based color LCD, additional information is provided in the class website
12	TSOP1236 IrDA Transceiver	No, not required for this semester.
13	Solar charge unit (1000 mA or higher)	No, not required for this semester.
14	OV7725 or equivalent SPI camera module	I2C or SPI Interface CMOS Imager with IC chip from Omini-Vision, Optional, to be discussed in the class
15	Microchip RN-171 EK (wifi module)	No, not for this semester
16	USB to serial cable	
17	Arduino UNO and/or NANO	For labs in class