

School of Electrical Engineering and Computer Science

CptS466/566: Embedded Systems

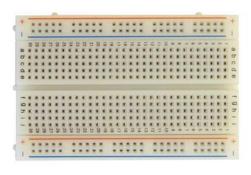
Fall 2021

Required Components List

• EK-TM4C123GXL

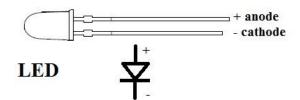


• <u>Breadboard</u> and <u>wires</u>





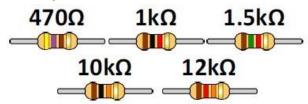
• Six LEDs (2 red, 2 green, 2 yellow)



• Six Switches



• Resistors (6 from each)



- <u>470 Ω</u>
- <u>1k Ω</u>
- <u>1.5k Ω</u>
- <u>10k Ω</u>
- <u>12k Ω</u>
- Audio jack (DAC)



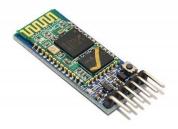
• TMP36 - Analog Temperature sensor - TMP36 (Analog sensor)



• Photocell (CdS photoresistor) (Analog sensor)



 HC-05 Wireless Bluetooth RF Transceiver Master Slave Integrated Bluetooth Module (Bluetooth UART)



MPU6050 3 Axis Accelerometer Gyroscope Module (I2C communication)



• Sparkfun Ultrasonic distance sensor (digital sensor)



• CC3100BOOST (IoT) (Optional Project)



• DC Motor - 130 Size (Actuator)



• <u>L298N Motor Drive Controller</u> (Actuator)



• Battery Buckle Snap Connector 15cm Clip (Power)



• Any 9v Battery such as:

- Amazon Basics 4 Pack 9 Volt Performance All-Purpose Alkaline Batteries, 5-Year Shelf Life
- Duracell CopperTop 9V Alkaline Batteries long lasting, all-purpose 9
 Volt battery for household and business 4 count
- <u>Duracell CopperTop 9V Alkaline Batteries long lasting, all-purpose 9</u>
 <u>Volt battery for household and business 2 count</u>

