

School of Electrical Engineering and Computer Science

CptS466/566: Embedded Systems

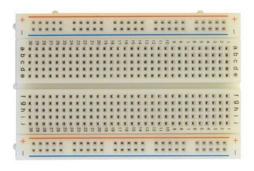
Fall 2021

Required Components List

• EK-TM4C123GXL

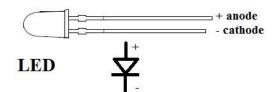


• Breadboard and wires





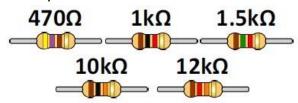
• Six LEDs (2 red, 2 green, 2 yellow)



• Six Switches



• Resistors (6 from each)



Audio jack (DAC)



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



• Photocell (CdS photoresistor) (Analog sensor)



MPU6050 3 Axis Accelerometer Gyroscope Module (I2C communication)



• Sparkfun Ultrasonic distance sensor (Digital sensor)



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



DC Motor - 130 Size (Actuator)



• 1N914 Diode_(Actuator)



• TIP120 NPN Darlington Transistor (Actuator)



• Battery Buckle Snap Connector 15cm Clip (Power)



- Any 9v Battery such as:
 - Duracell CopperTop 9V Alkaline Batteries long lasting, all-purpose 9
 Volt battery for household and business 2 count
- CC3100BOOST (IoT) (Optional Project)



Please purchase the following items

Components	Price
EK-TM4C123GXL	15.59
<u>Wires</u>	6.98
<u>Audio jack</u>	0.88
TMP36	1.71
<u>MPU6050</u>	5.99
<u>Ultrasonic Sensor</u>	3.95
Bluetooth Module	7.99
<u>DC Motor</u>	1.95