

Breadboard Demo

Semester: SP 25

Team No. 13

Reviewer: OELZE

Demo should include a circuit with a microprocessor on a devboard or PCB that is connected to a project subsystem. The microprocessor should have a downloaded program in its memory. The program should control the subsystem or receive data from it. The data should be displayed on a pc or other display. The project team should be able to describe the circuit and justify design choices. They should be able to explain how the circuit fits in to the project.

Full Credit: The circuit works and is of adequate complexity. A good explanation its features is given by team.

Point Reductions

Circuit fails to work:

-2 ✓

Circuit lacks complexity:

-2 ✓

Circuit seems inappropriate for project:

-2 ✓

Explanation lacks clarity:

-2 ✓

No circuit

-10

No show

-20

Breadboard Demo Grade:

20/20

Breadboard Demo Checklist

Project No.

Microprocessor

ATMega	
STM32	
ESP32	✓
Other	
Dev board	
PCB	

Comm. Protocol

I2C	125
SPI	
UART	

Wireless

433/900 MHz	
Bluetooth	
Wi-fi	

Power Subsystem

Source

Lab PS	✓
Battery	
Comm. DC PS	
110 VAC/Variac	

Regulator

Linear	
Switching	
Voltages	
Currents	

Subsystem 1

Subsystem 2

Function		
Motor		
Actuator		
Light or sound source		
LED		
Speaker	✓	
Sensor	—	
IR	—	
lidar	—	
radar	—	
Ultrasonic	—	
Comments	DAC - RUNNING ; SWITCHES	