

EE496 Dragon Fruit Critical Design Review

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Agenda

Block Diagram

Current Progress

Problems

Progress to be made

Block Diagram







Current Progress

Tested charging chip

Recorded Test Data

Verified it charges battery and provides voltage to load

Completed 1st Draft of documentation

BOM (Bill of Materials)

Power Budget

Finished schematic diagram University of Hawaii at Manoa SCEL Almost done routing PCB

ST.

Results

Charging Chip Test

Test Results

BOM

Dragon Fruit Bill of Materials

Power Budget

Dragon Fruit Power Budget

Problems



Do not have breakout boards to test the sensors

Unsure if all schematic connections are correct

Unsure how accurate the power budget is until testing is conducted



Updated Schedule

Finish routing board

Finalize and approve design to send out

Start testing power subsystem and sensors

Start designing the housing

Begin preparing for the Poster Presentation and Report



Questions

Any additional I/O ports to consider

Debugging/verification

Programming

Serial transmission

Would a 5V MCU work with 3.3V SDA, SCL?

Multiple pull-up resistors for SDA, SCL?

Thank You!

