

WEEKLY REPORT and MEETING AGENDA

Report #: 5

Date: 11/2

Project Name: MIKey

Prepared by: Team MIKey

Agenda for the meeting

1. Accomplishments since last meeting, including:
 - A. PCB footprint for switches
 - B. Design of main PCB
 - C. Keycap spacing for main PCB, with 4x3 prototype
 - D. Raspberry Pi/Pico communications
 - E. Pi GPIO output to LCDs
 - F. Decoder + inverter circuit test
 - G. External housing and footprint dimensions
2. Overall team sync
3. Issues/roadblocks/queries
4. Plans moving forward

Overall accomplishments since last meeting

1. Raspberry Pi is able to output suggestions to the LCD displays
2. PCB logic has been tested and integrated into schematic design
3. Prototype of 4x3 PCB spacing has been tested
4. Progress on R-Pi/PICO communication
5. External housing and footprint dimensions calculated

Tasks completed by each team member since last meeting

Task description	Assigned to	Completed?
PCB Footprint for switches	Andrew	Yes
Design main PCB	Andrew, Brittany	Yes
Test Spacing of Keycaps	Andrew	Yes
Raspberry Pi / PICO communication	Jackson, Max	Yes
Pi GPIO LCD Output	Abhishek	Yes
Tested decoders and inverters	Brittany	Yes
External housing and footprint dimension calculations	Connie	Yes

Plans for next period

1. Order PCB (highest Priority)
2. Integrate software & hardware
3. Begin modelling and printing external housing
4. Put together the preliminary system as a whole
5. Finish unit testing & and begin system testing

Task assignment per team member (to be completed before the next meeting)

Task description	Assigned to
Order PCB	Andrew, Brittany
Finalize Pi software	Abhishek, Jackson, Max
3D modeling and printing of external housing	Connie, Andrew

Project management status

1. IRB still has not been approved. It is still pending initial review.
2. Will likely be waiting on PCB for a couple of weeks, team needs to create a backup plan in the chance we cannot get it in on time
3. Software and Hardware teams have been more flexible, with Jackson, Max, and Abhishek doing software and Andrew, Connie, and Brittany working on hardware
4. Team will close out sprint 3 and begin sprint 4

Minutes from previous meeting

10/26 meeting minutes

- Breadboard prototype demo (in python)
 - o Prototype has interrupt logic and system with two Pico's
 - o Buttons act as keys
- Demo with manual keystrokes (000A results in 'a' for USB output)
 - o Macro keystrokes also work through USB output on Windows OS
 - o MENA encoding also provides support for special keys (Caps Lock, Ctrl, Alt, etc)
- Keycaps
- PCB design + ordering
- Decoder circuit also working for key scanning matrix
- FEDC is relatively empty for PCB queue