

CS 4910

Project: Blacktop

TPS Report

2/3/2020

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Task	Who will complete	Time	Risk 1-10	% complete	Actual time	review
T1	SS	1 hour	1	100%	1 hour	AK TH EJ
T2	SS AK TH EJ	5 hours	3	100%	TBD	TBD
T3	SS AK TH EJ	10 hours	3	80%	TBD	TBD
T4	SS AK TH EJ	10 hours	6	75%	TBD	TBD
T5	SS AK TH EJ	10 hours	5	100%	10 hours	SS EJ TH
T6	AK TH	5 hours	1	100%	5 hours	SS EJ
T7	AK	3 hours	3	100%	3 hours	SS EJ TH
T8	AK	1 hour	1	100%	1 hour	SS EJ TH
T9	AK	1 hour	1	100%	1 hour	SS EJ TH

T10	AK	1 hour	1	100%	1 hour	SS EJ TH
T11	SS	1 hour	1	100%	1 hour	AK EJ TH

T1: Write the requested deliverables for the week

Write the TPS Report and Stories for the week

T2: Test the board to see if it can handle all of the peripherals being turned on at once

The maximum current load of the board must be determined, and if turning on all peripherals exceeds that load a failsafe must be developed to prevent the board from breaking.

T3: Finish breadboarding a prototype board.

The components will have to be socketed into a breadboard and tested for full functionality. This is currently the largest portion of the project to overcome and time specifications will have to be further analyzed.

T4: Develop drivers using SPI to interface with the on-board EEPROM

Drivers must be developed using a serial peripheral interface to transfer data from the main board to the on-board EEPROM

T5: Develop the CAD files for the production circuit board

The circuit board must be designed via KiCAD before a prototype board can be ordered

T6: Develop a testing plan for the project.

A testing plan for accessibility, user, unit, and system testing must be developed to confirm the projects completeness.

T7: Develop improved kicad files for revision 2 of the prototype board

Allin Kahrl has begun and continued development on an improved board schematic based on conventions used in professional CAD development that will improve the overall board layout

T8: Order the revision 1 boards

T9: Order the revision 2 boards

T10: Order surface mount components

T11: Research hand soldering techniques for the surface mount components

Since several components use pads rather than pins another approach will need to be taken to adhere the components to the board.