Electronics Team

Design Challenge 1 Specification

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Revision A
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Overview

This board will be taking the data read from a potentiometer and sending its data over the CAN bus.

Special System Considerations

- *This board MUST use an external ADC from the microcontroller.*
- *The potentiometer will be connected to the board via a 4-pin microfit connector.*
- *The standard stacking header will be used*
- *The required Microcontorller is the STM 32 pin*

Electrical

Electrical Specifications

	Min	Typical	Max	Units
Input Voltage	See micro spec	3.3	See micro spec	V
Output Voltage				V
MCU Voltage	See micro spec	3.3	See micro spec	V
Expected Current				A
Power Consumed				W

Mechanical

Board Size, Clearances, and Edge Features

	Min	Max	Units
Width	2000	-	mil
Length	3000	-	mil

Vertical Clearance			mil
Edge Clearance			mil

Mounting Features

Use the standard mounting holes

Communications

Communications Protocol

CAN over the stacking header

Packet IDs & Definitions

Budget

	Budget	**Units**
Parts	-	$
Manufacturing	-	$
Tools & Specialized Equipment	-	$
Maximum Allowable Budget:	**N/A**	**$**

Timeline

Electronics Deadlines

Task	**Deadline**
Block Diagram	N/A

Rough Schematic	N/A
Draft Schematic	4/7/2020
Schematic Review	4/7/2020
Rough Board Layup	N/A
Draft Board Layup	4/9/2020
Board Review	4/9/2020
Final BOM	4/9/2020
Final GERBERS	N/A
Board Ordered	N/A