

## Custom Project – Team & Topic

### Project Team

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Circuitry/PCBa development, Hardware Interfacing  
Code planning, Programming

### Project Topic

The Analog CAN Sensor Board will have the use of being a sensor logger to the CAN bus it is connected to. Will have a well labeled H file for use of sensor logging rates and priority identifiers. Will have connections for up to 16 sensors with hardware filters. To be integrated in the Cal Poly Racing Formula Car. The STM32G484RE has been selected as the integrable chip, as a higher clock rate and accelerated math are necessary for fast can rate transmission, ADC sampling, and digital filtering.

### References

STM32G484RE Reference Manual:

[https://www.st.com/resource/en/reference\\_manual/rm0440-stm32g4-series-advanced-armbased-32bit-mcus-stmicroelectronics.pdf](https://www.st.com/resource/en/reference_manual/rm0440-stm32g4-series-advanced-armbased-32bit-mcus-stmicroelectronics.pdf)