Simplified NPU Raigh Schematic Christian Cherry 18-224 LIS33DE SDA H Accelerometer SCL Master Receiver swid data AXX News Y-ax3-2-m3-X\_axis\_ Newson Newon Newon Mother Newsork RIGHT\_ BACK\_ UP-LEFT\_ FORVARD-DOWN-Newson Newson Newon Newon Newon Newon offet array LEDS

I2C Maper General FSM START GET DATA RESET Axi3 Newons General FSMG(X-axi7 example) MAIN Nework General FSMG

MAIN NOWORK GENERAL FIRE

## Testbench Overview

Testbench i'M act as the accolerenter and generate a soil of serial IIC data townsactions corresponding to physical mations to replicate the data townsfer of the physical mations to replicate the data townsfer of the LIS33DE Accoloration. The Eusign i'M output a six LIS33DE Accoloration. The Eusign i'M output a six warray corresponding to what motion of thinks it saw, array corresponding to what motion of thinks it saw, and the TB will take this output and compare it and the TB will take this output to the dust. against the actual motion it imput to the dust.