

**Checkoff Sheet**  
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**Motion Module:**

- **The A/D Interface works correctly – A signal in the range 0.8V – 2.5V will be applied to the A/D from the accelerometers, the interface will then read these values, convert them to produce the appropriate 8-bit digital value and then output the result to the motion module as well as to the dot matrix display of the 6.111 labkit**
- **The Low Pass Filter in the module attenuates signals greater than 1 KHz.**
- **The Integrators will accept input from the labkit switches (acceleration), and then integrate to get velocity and position. These numbers will be displayed on the LED display on the labkit.**
- **Values for acceleration, velocity, and position inside the motion module will only change if the accelerometers are moved. If the accelerometers are motionless the values on the LED displays on the labkits will not change.**

**Movement Module:**

- **Can detect single-stroke movements and display movement number on FPGA.**
- **Can interpret multiple movements as commands and display action number on FPGA.**
- **Given a labkit switch input representing accelerometer velocities, perform interpretation based on those values and display result to LEDs.**

**Whiteboard Module:**

- **Updates on-screen cursor as one hand moves.**
- **Freehand drawing or erasing**
- **Copy/cut/paste functionality**
- **Selecting portion of whiteboard and dragging around screen.**
- **Switches modes based on commands, updating on-screen status text**
- **Accept labkit switch input representing actions, and labkit buttons (up/down/left/right) representing accelerometer data, and simulate behavior based on these values.**