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This is the test plan for the Hall Effect Sensors

Goal: We are testing 3 things:

1. Confirm that the package handles all of the sensors on the layout
2. See if multiple simultaneous sensor triggering will overwhelm the computer
3. Test if a magnet (train) is over the sensor

Set up: We initialize the hall sensor interface electronics and enable the hall sensor interrupts. We   
 initialize the hall sensor interface electronics and disable the hall sensor interrupts. We test if a  
 magnet is over the hall sensor

Expected Results: when enabled, the procedure designated by Callback is called with the ID number of   
 the Hall sensor that was triggered. When disabled, triggering a hall sensor will be   
 ignored. Is\_Triggered will return yes if there is a magnet over the sensor and no   
 otherwise.

1. Test for enable procedure:  
   for all the 51 sensors, if a sensor is enabled, the procedure designated by the callback is called with ID number of the sensor that is triggered.
2. Test for disable procedure  
   For all the 51 sensors, if enabled, triggering effects will be ignored.
3. Test for Is\_Triggered function:

For all the 51 sensors, Is\_Triggered returns true for a sensor if the sensor has a magnet on it, otherwise it returns falls.