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Subject: IMU Card

Posted by [BobSmith](#) on Sat, 11 Apr 2020 01:39:07 GMT

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Build an SPI based IMU card. A simple choice for this might be the BNO055. The Verilog for this peripheral should poll the chip at specified times and repackage the data into a single packet from the FPGA to the host. The host driver software should convert the data to text for display or further processing.

Configuration at the host should allow specifying the sample interval as well as the sensors sensitivities. This means the FPGA peripheral should have a 'pass through' mode to let the host set parameters at initialization time, and then switch to a 'poll' mode to collect the sensor data.

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