Exercise 19: slide_intf testing on HW.

You have built and tested **slide_intf.sv** in ModelSim, now you will test it on the HW test platform.

Signal:	Dir:	Description:
clk	in	50MHz clock
RST_n	in	From push button. Goes to <i>rst_synch</i> to produce rst_n
NXT	in	Connected to push button. When button released will move to displaying the next slider
SS_n, SCLK, MOSI	out	SPI interface to A2D on board that is reading the slide potentiometers
MISO	in	SPI serial in from A2D
LEDs[7:0]	out	Used to display the upper 8-bits of selected slide pot

Interface of slide_intf_test.sv

Exercise 19: slide_intf testing on HW. **LEDs VDD LEDs** rst_n . **Counter** NXT clk PB_rise (counts o-5) Push Button1 POT LP SS_n To A2D on DE0 **SCLK** POT B1 reading the slide **MOSI** potentiometers [3:0] POT_B2 **MISO** VDD POT_B3 POT HP **VOLUME** RST_n rst_synch rst_n Push Button1 slide_intf_test

- Produce slide_intf_test.sv.
- Copy over sub-modules and compile in Quartus (.qsf & .qpf files available on Canvas page)

clk

rst_n

Exercise 19: slide_intf testing on HW.

- After successfully compiling in Quartus program your board.
- How do you know it works?
 - What is driving the analog inputs on your board?
 - Yeah...nothing, so it might look kind of random.
 - Call Fego, Eric, or Christian over to test on the HW test platform.
- Once you have checked off with us you are done.