

The *in\_vld* signals indicate that the data on the input *in* signal is valid.

If the design is ready for input data, but the input valid (*in\_vld*) is Low, the design stalls and waits for the input valid signal to be asserted to indicate a new input value is present.

The *out\_vld* signals indicate that the data on the output *out* signal is valid.

When an output port is written to, its associated output valid signal is simultaneously asserted to indicate valid data is present on the port.