

The desired first 1 / 4 single Mux below has less flexibility because we can't break-out and get access to any of the 2 single select lines (ie the Mux and Demux components apparently only allow their select inputs to be of the BUS type). Therefore the equivalent circuit to the right uses a total of three 1 / 2 Muxs which we have confirmed provides the same resultant output but allows us to change the Control Register outputs to Non-BUS. This allows us to tap any single select line and use it to drive other hardware logic (also preserving Control Reg bits).

We would like to find out if there is another way to solve this problem, ideally to make any Mux/Demux (ie 1 / 4, 1 / 8, etc) accept multiple single bit select inputs as opposed to being forced into using a BUS on the select inputs.

