



Timing diagram showing the input and output signals for a barrel shifter. The input bus `/barrel_shifter_tb/a` has values [10010111, 0, 1, 1, 0, 1, 1, 0]. The control bus `/barrel_shifter_tb/s` has values [110, 1, 1, 0]. The direction bus `/barrel_shifter_tb/dir` has value 1. The output bus `/barrel_shifter_tb/y` has values [11011010, 10010111, 11110010, 10111100, 00101111, 01101011, 10101101, 10110110]. The status bus `/barrel_shifter_tb/st` has values [St0, St1, St0, St1, St1, St0, St1, St0].