ABSTRACT

A device includes a port connected to a link including one or more lanes to support communication between the device and another device; and a controller that controls the link based on a link training and status state machine (LTSSM). The port may receive two received sequences, each defined as a training sequence, through the link in a recovery state included in the LTSSM. The training sequence may include a first symbol, including a lane number or a special symbol, and a second symbol including a loopback bit. The controller may transition from the recovery state to a loopback state included in the LTSSM, based on the first symbol including the lane number and the loopback bit being set to an active logic state, for both of the two received sequences.

FIG. 10