mr_training_enable

Boolean variable used by system management to enable or disable the 10GBASE-KR start-up protocol. It is set to TRUE when the start-up protocol is enabled and set to FALSE when the start-up protocol is disabled.

new_coeff

Integer variable containing the result of increment/decrement operations on the coefficient value

new_marker

Boolean variable set to TRUE when a new candidate frame marker is available for testing and FALSE when the TEST_MARKER state is entered. A new frame marker is available for testing when the training frame lock process has accumulated one frame marker (4 octets) from a candidate frame start position.

frame_offset

Boolean variable set to TRUE after receiving one full training frame (548 octets) from the current frame start position. . The boolean variable is set to FALSE when the GET_NEW_MARKER state is entered. The current frame start position is indicated by a transition into the GET_NEW_MARKER state when the boolean variable is set to FALSE.

remote_rx_ready

Boolean variable set to FALSE upon entry into the SEND_TRAINING state. The value of remote_rx_ready shall not be set to TRUE until no fewer than three consecutive training frames have been received with the receiver ready bit asserted.

reset

Boolean variable that controls the resetting of the PMA/PMD. It is set to TRUE whenever a reset is necessary including when reset is initiated from the MDIO, during power on, and when the MDIO has put the PMA/PMD into low-power mode.

rx_trained

Boolean variable set to TRUE when the remote transmit and local receive equalizers have been optimized and normal data transmission may commence and set to FALSE otherwise.

signal_detect

Boolean variable set to TRUE when the training process is complete and set to FALSE otherwise. The value of signal_detect is reported to the PMA sublayer via the PMD_SIGNAL.indication primitive.

slip_done

Boolean variable set to TRUE when the SLIP requested by the Frame Lock State Diagram has been completed indicating that the next candidate frame sync position can be tested.

training

Boolean variable set to TRUE to indicate that the 10GBASE-KR start-up protocol is in progress and set to FALSE when training has completed.

training_failure

Boolean variable set to TRUE when the training state machine has timed out due to expiration of the max_wait_timer while in the SEND_TRAINING, TRAIN_LOCAL, TRAIN_REMOTE states and set to FALSE otherwise.

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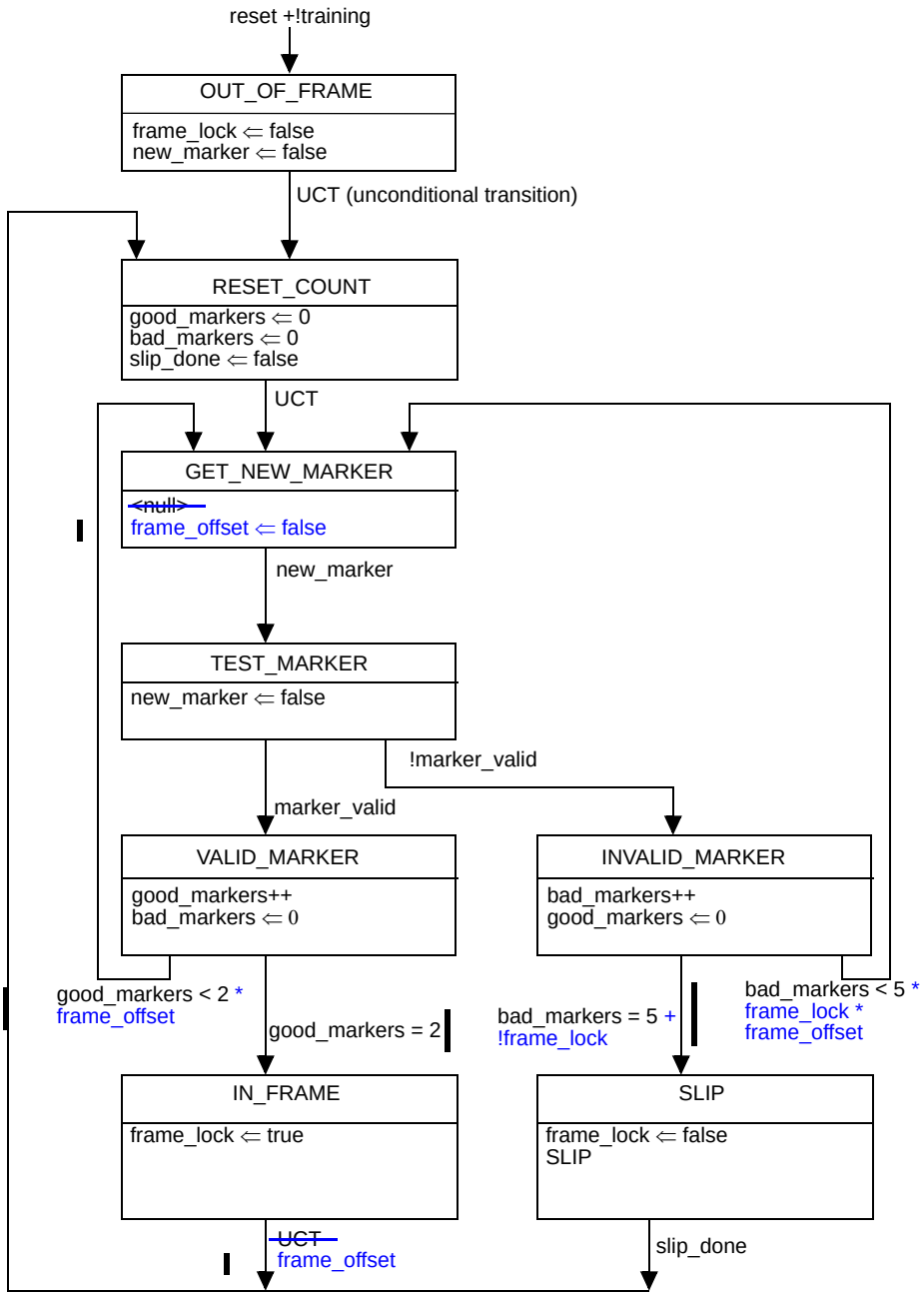

Figure 72–4—Frame lock state diagram