

Dual signature state diagram parity to single signature state diagram comment.

NOTE: this comment is against State Diagrams that aren't in the D3.0 document. Looking at the published standard, this comment is against Figure 145-15 on document page 144, 145 and Figure 145-16 on document page 148, 149.

Start of comment:

The single signature PSE state diagram (Figure 145-13) on page 139 allows the path from CLASSIFICATION to CLASS_PROBE to CLASS_RESET and to CLASS_EV1_LCE. This path allows a PSE to perform a class probe, perform a class reset and then immediately perform multi-event classification (without having to perform detection/CC).

Moving to the dual signature PSE state diagrams (we will talk only about the PRI diagram 145-15 since the SEC diagram is identical), at the top of page 144 we see the path is CLASSIFICATION_PRI to CLASS_PROBE_PRI. contrasting the SS SD, there are two paths out of CLASS_PROBE_PRI, and either allows the PSE to perform a class reset and then move to multi-event classification. One arc travels to CLASS_RESET_PRI, to CLASS_EV1_LCE_4PID_PRI, then to MARK_EV_LAST_PRI. Only one event is allowed in this case. If the PSE needs to perform multi-event classification, it must use the other arc back to IDLE_PRI which requires a new detection and CC. There is no technical justification to force the two PSEs 'flavors' to behave differently in this case. My comment will modify the dual signature state diagrams to allow multi-event classification immediately after a class probe.

Proposed Change:

See the attachment, where the changes are marked up.

the modification is shown against Figure 145-15, the same change will need made to Figure 145-16.

textual explanation:

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delete the IDLE_PRI arc from CLASS_PROBE_PRI.

delete "*" (pse_avail_pwr_pri < 4)" from the arc to CLASS_RESET_PRI. [the only arc from CLASS_PROBE_PRI is to CLASS_RESET_PRI]

add an empty label arc into CLASS_EV1_LCE_PRI.

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add " * (pse_avail_pwr_pri < 4)" to the arc from CLASS_RESET_PRI to CLASS_EV1_LCE_4PID_PRI

add a new arc out to CLASS_RESET_PRI to CLASS_EV1_LCE_PRI with the exit condition:

"tclass_reset_timer_pri_done * (pse_avail_pwr_pri ≥ 4)"

perform same changes to Figure 145-16 on page 148, 149.

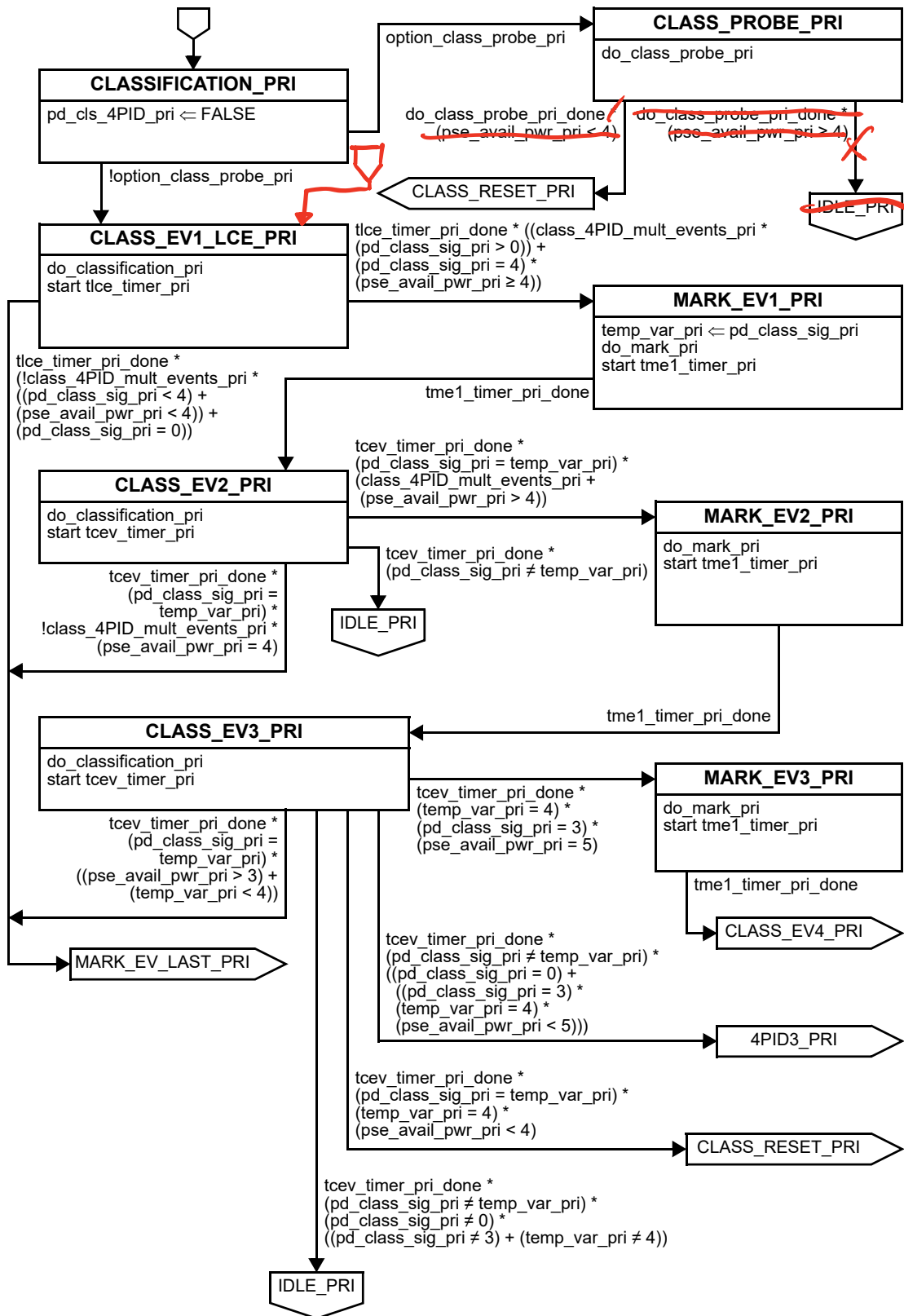


Figure 145–15—Primary Alternative dual-signature semi-independent PSE state diagram (continued)

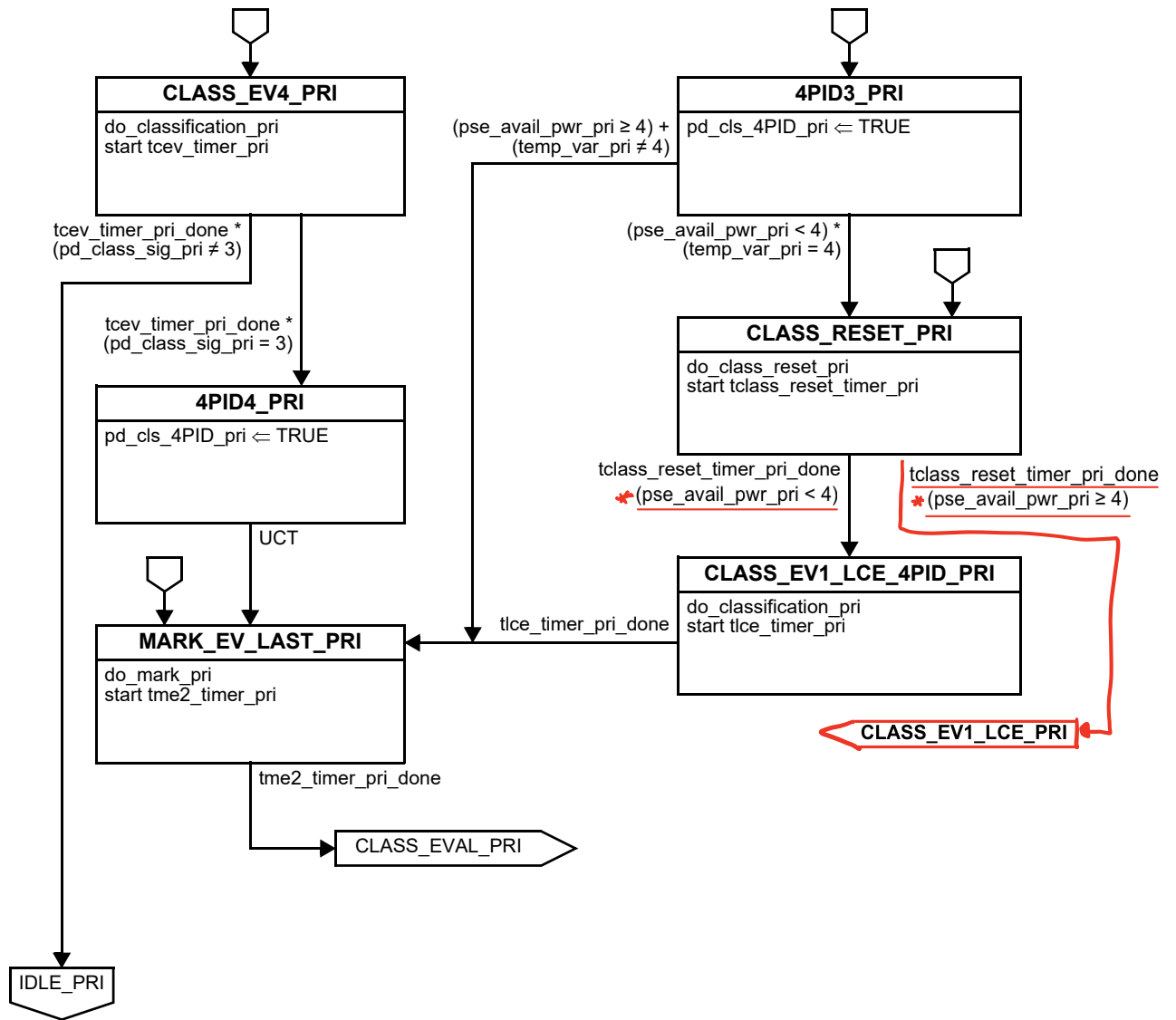


Figure 145–15—Primary Alternative dual-signature semi-independent PSE state diagram (continued)