

Comment #84 in D2.1. **clause 79, page 223 lines 6-18.**

**TDL for comment #248 from D2.0 regarding missing variables and bits bits for dual-signature PDs Comment:**

This comment is also addressed in TDL for comment #214

**Comment**

**The DLL dual-signature state machine needs** to know if PD is single-signature or dual-signature. The PSE knows this information through physical layer tests however PD doesn't know it and it is not known from the TLVs data as well.

**Suggested Remedy**

1. Add the following to Type 3 and Type 4 constant list:

`single_or_dual`

This value is generate by a Type 3 PD that indicates if the PD is single-signature PD or dual-signature-PD.

Values:

single: A single-signature PD configuration is connected to the PI.

dual: A dual-signature PD configuration is connected to the PI.

2. Add the following variables to the variable list in 33.5.3.3

`pd_dll_single_or_dual`

A control variable output by PD power control state diagram, defined in Figure 33-49, that indicates if the PD is single-signature PD or dual-signature PD. Type 3 and Type 4 PD state diagrams do not use this variable.

Values:

single: A single-signature PD configuration is connected to the PI.

dual: A dual-signature PD configuration is connected to the PI.

Baseline ends here

## Annex A

The following solution was checked as well:

To check if bits 0 and 1 in Table 79–5b—System setup value field can be used and is sufficient to identify if PD is single or dual-signature:

Analysis:

We need the information if the PD is dual-signature or single-signature.

If we use PD Load bit, it has the information of dual-signature isolated load (PD Load=1). In this case the power allocation will be per the assigned class per pairset.

If the PD Load=0 it is a single signature PD or dual-signature PD when load are not electrically isolated. In this case in both PDs there is a single load which means that (a) the PSE can't know if the PSE total port power should be the sum of both pairsets power per one of the pairset class (single-signature) or (b) to supply for each pairset the power per pairset class which is different than (a). As a result this option can't be work.

