PD Signature requirements v120

Info (not part of baseline)

While we have a "Connection check" section for the PSE, there are currently no requirements or guidelines on what a PD must do to be categorized as a single-, or dual-signature PD. Considering that a miscategorization will almost surely lead to non-operation, these requirements need to be added.

Insert new section 33.3.5, after 33.3.4 "PD valid and non-valid detection signatures" as follows:

33.3.5 PD Signature

A dual-signature PD shall present a valid detection signature on both:

- Mode A regardless of the voltage, within V_{valid} , and current, within I_{SC} , as defined in Table 33–8 applied to Mode B. and
- Mode B regardless of the voltage, within V_{valid}, and current, within I_{SC}, as defined in Table 33–8 applied to Mode A.

A single-signature PD shall not meet both of the above requirements.