

comments

CI 33 SC 2.8.5 P27 L7 # 110
Darshan, Yair Microsemi Corporation

Comment Type **TR** Comment Status **X** *inrush*

Draft 0.9:
There is no definition of the requirements for ILIM between 0V to 10V.
The proposal below was part of maintenance request 1162.

SuggestedRemedy

Change 33.2.8.5 item e from:

e) During startup, for PI voltages between 10V and 30V, the minimum IINRUSH requirement is 60mA.
See Figures 33C.4, 33C.6.

To:

e) During startup, for PI voltages between 10V and 30V, the minimum IINRUSH requirement is 60mA. During startup, for PI voltages between 0V and 10V, the max IINRUSH requirement is as specified by Table 33-5, item 10.
See Figures 33C.4, 33C.6 and 33C.6.1.

Proposed Response Response Status **O**

CI 33 SC 3.5 P42 L24 # 191
Schindler, Fred Cisco Systems

Comment Type **TR** Comment Status **X** *inrush*

The peak operating current specified in this section is P_{port_max}/V_{port} . It is not clear that P_{port_max} is the power the PD is classified to because the I_{port_max} of table item 4 contradicts this. For example, a class 3 PD can draw 6.49 W and with a 36 V input will draw $6.49/36 = 180$ mA. The value in item 4 states 210 mA.

Also see a related comment on this same parameter. It is also not clear which I_{port} is being referenced-table 33-12 has items 4 and 5 with the same name.

SuggestedRemedy

The task force needs to review these values and state what ensures interoperability.

Proposed Response Response Status **O**

CI 33 SC 3.5.3 P43 L39 # 68
Patoka, Martin TI

Comment Type **T** Comment Status **X** *inrush*

In order to have the inrush current agree with the V_{port} specification, the PD should not startup at voltages less than V_{port_min} . Otherwise inrush current may be drawh at voltages in the detection and classification ranges. Figure 33C-1 and startup dv/dt 33C.1.8, as well as many other figures imply that the PD does not draw current at less than 33V. Since 33.2.8.5 does not require the PSE to provide ANY current at 0V out, figure 33C-1 can best be described as a test of the foldback characteristic. That is, a capacitor at 0V applied to the PSE output may never charge - and is not required to do so. Requiring PSEs to supply inrush current into a short is potentially a burdensome cost adder to the PSE. This then leads to the ability to allow the PSE a fast turn-off into a short.

SuggestedRemedy

Add the following sentence:

"PDs shall not draw inrush current at voltages less than V_{port_min} ."

Proposed Response Response Status **O**