

comments

Cl 33 SC 2.3 P23 L 20 # 183
 Diab, Wael Broadcom
 Comment Type TR Comment Status D sd
 As defined, the same PSE cannot perform all the state machines listed in the figures simultaneously.
SuggestedRemedy
 Either:
 - Retain the original motivation for the state diagrams, which was to describe the high level behaviour as seen externally, by leaving the classification state as do_classification with the details defined in subsequent sections
 OR
 - Change the text to reflect the different combinations. Specifically, insert a copy of the table from diab_2_1007.pdf to precede this section and go through the various combinations and state diagrams that have to be implemented
 Proposed Response Response Status O

Cl 33 SC 2.3.3 P24 L 15 # 226
 Law, David 3Com
 Comment Type TR Comment Status D sd
 Table 33-5, item 5 IInrush defines three different parameters:
 [1] The minimum current the PSE shall supply (IInrush min). This is the minimum point at which the PSE can current limit and ensures a PD that is in excess of 180uF will be supplied with a minimum 400mA - the maximum a PD is allowed to draw (see 33-12, item 3, IInrush max)
 [2] The maximum current the PSE is permitted to supply (IInrush max). This is the maximum value at which the PSE is permitted to supply and therefore is the maximum point at which a PSE must current limit when connected to a PD that is less than 180uF and therefore does not current limit.
 [3] The range in between which a threshold has to be selected to define the threshold at which the timer ILIM runs (see Figure 33-7, I > IInrush). If this condition exists for more than 50 to 75ms the power has to be removed.
 It is therefore permissible to set the current limit at 410mA as it is between the ranges set by [1] and [2] above yet set the TLIM threshold at 420mA. TLIM would therefore never trigger. In a sensible implementation one threshold will be selected and when current limiting TLIM will be running but there is nothing that requires this.
 In addition subclause 33.2.3.3 defines constants but IInrush is a range, the constant in the IInrush threshold selected from that range.
SuggestedRemedy
 [1] Change 'IInrush' to 'IInrush_threshold' in figure 33-7 and subclause 33.2.3.3.
 [2] Change 'Current during inrush period of startup (see Table 33-5)' to read 'Startup inrush current limit (see Table 33-5)'.
 Proposed Response Response Status O

comments

CI 33 SC 2.3.4 P24 L19 # 96
 Darshan, Yair Microsemi Corporation

Comment Type TR Comment Status D sd

Draft 1.0:

We had allowed the PSE to turn power off if Vport is out of operating range per 33.2.8.1. Therefore the state diagram in figures 33-6 and 33-7a should reflect is as well.

The way to do it is to create new variable which will be optional. When the conditions of this variable are met, the PSE will remove power at any $t < TLIM_MIN$.

SuggestedRemedy

Remedy steps:

1) Add new variable option_vport_lim to 33.2.3.4. It will be an optional variable:

"option_vport_lim
 This variable is indicating If PSE port voltage is out of operating range during normal operating mode.

Values:
 False: Vport is within the Vport normal operating range as defined by table 33-5.
 True: Vport is above or below normal Vport operating range as defined by table 33-5."

2) Change state diagram (figure 33-6 and 33-7a) per the attached drawing by changing the inputs to ERROR_DELAY_SHORT state coming from POWER_ON state, from:
 tlim_timer_done

to:
 $Tlim_timer_done + !tlim_timer_done * option_vport_lim * power_applied$)

Effect on legacy equipment: None since the variable is optional.

Proposed Response Response Status W

state diagram bucket

CI 33 SC 2.3.4 P24 L20 # 184
 Diab, Wael Broadcom

Comment Type TR Comment Status D sd

Please remove the dll_comm_established from this state machine. This should be taken care of by the classification sections. The physical layer classification simply have to initiate the ednvironment for the DLL to start. Behaviour once the DLL starts can then be defined in the DLL machine.

SuggestedRemedy

Please remove the dll_comm_established from this state machine. The functionality associated with this can be addressed by the classification sections as we did in 802.3-2005.

Proposed Response Response Status W

state diagram bucket

CI 33 SC 2.3.4 P25 L30 # 238
 Stanford, Clay Linear Technology

Comment Type T Comment Status D sd

Variable pse_available_power needs to be expanded to cover both Type 1 and Type 2 PSEs.

Follow style of page 27, line 35, creating pse_available_power2.

SuggestedRemedy

Add new variable pse_availablepower2

pse_available_power2
 This variable indicates the highest power PD Class that could be supported. The value is determined in an implementation-specific manner.
 Values: 0: Class 1
 1: Class 2
 2: Class 0, Class 3
 3: Class 4

SHOULD BE:

Proposed Response Response Status W

state diagram bucket

comments

Cl 33 SC 2.3.4 P25 L 45 # 239
 Stanford, Clay Linear Technology
 Comment Type T Comment Status D sd
 I think variable pse_skips_event3 can be deleted.
 SuggestedRemedy
 Delete pse_skips_event3 variable and description.
 Proposed Response Response Status W
 state diagram bucket

Cl 33 SC 2.3.7 P30 L 1 # 241
 Stanford, Clay Linear Technology
 Comment Type T Comment Status D sd
 I submit redlines the the state diagrams.
 SuggestedRemedy
 Implement redlines.
 Proposed Response Response Status W
 state diagram bucket
 comment editor did not receive redlines drawings.

Cl 33 SC 3.2.3 P52 L 12 # 251
 Stanford, Clay Linear Technology
 Comment Type T Comment Status D sd
 An entry was lost in the state diagram by error. It was in the .af spec.
 SuggestedRemedy
 Add to REQUESTING_POWER BLOCK
 present_pd_siganture <= TRUE
 Proposed Response Response Status O

This block is a holder for Figure 33-12a. Concievably this block could be deleted and replaced with 33-12a in which place your requested text would not exist.

Cl 33 SC 3.2.3 P52 L 15 # 200
 Diab, Wael Broadcom
 Comment Type TR Comment Status D sd
 Is there a priority issue with the exit conditions out of the REQUESTING_POWER state? Specifically, what happens if both exit conditions are asserted simultaneously?
 SuggestedRemedy
 There are 2 variables that govern the exit conditions in this state. This has 4 combinations. Please either draw in all 4 arrows OR show what happens if both variables are asserted
 Proposed Response Response Status O

for sure the state diagrams still need work. Which one takes priority?

Cl 33 SC 3.2.3 P53 L 4 # 252
 Stanford, Clay Linear Technology
 Comment Type T Comment Status D sd
 See Clay's redlines regarding state diagram.
 SuggestedRemedy
 Update state diagram.
 Proposed Response Response Status O

awaiting redline drawings.

comments

CI 33 SC 33.2.3.7 P29 L 16 # 225
 Law, David 3Com

Comment Type TR Comment Status D sd

Need to define that 'I' used in Figure 33-7 is in fact Iport. This is confirmed in subclause 33.2.8.6 that states that 'If IPort in Table 33-5 exceeds ICUT for longer than Tovld.

SuggestedRemedy

Either:

Add the following to subclause 33.2.3.4:

I
 A variable indicating the value of the current being sourced from the PI (IPort).

Or:

Add the following to subclause 33.2.3.4:

IPort
 Output current (see 33.2.8.6)

Change I to read IPort is all instances in Figure 33-7.

Add a definition of IPort to 33.2.8.6.

Proposed Response Response Status O

CI 33 SC 33-7 P29 L 20 # 109
 Darshan, Yair Microsemi Corporation

Comment Type T Comment Status D sd

Draft 1:
 1. Figur 33-7 specifying the behavior of startup mode in addition to overload, short and MPS.
 2. The behavior of short and startup are different in many aspects while it was similar in terms of ILIM and TLIM for type 1 legacy PSE.
 Now we have to separate the behavioral state diagram to reflect current changes in type 1 and type 2 PSE.
 We have to specify Tinrush, linrush for startup and ILIM/TLIM for short circuit.
 I believe that this differentiation will help to make clearer standards.

SuggestedRemedy

Steps:

1. Replace figure 33-7 with the attached modification.
 Changes are: Startup and short circuit behavior has separate drawing and the same behavior of the old drawing.
 1.1 Add to 33.2.3.5:
 "tinrush_timer
 A timer used to monitor the duration of the inrush condition, See Tinrush in 33-5."
2. Update table 33-5 accordingly.
 Add item 5a to table 33-5: Tinrush min=50msec, Tinrush_max=75msec (as was before with TLIM). Add to its "additional information" column "see 33.2.8.5"
3. In 33.2.8.5 add:
 "a) for minimum of Tinrush. (The deletion of it was an error. we decided that startup in type 2 is similar to legacy PSE!).

Proposed Response Response Status O

attached figure is "Updated figure 33-7.pdf"

CI 33 SC Figure 33-7a P30 L 54 # 186
 Diab, Wael Broadcom

Comment Type TR Comment Status D sd

Figure 33-7a is really not necessary. I think that Figure 33-6 is a behavioral machine. Meaning that the details of classification can be described in the relevant physical classification section (one event or two event) followed by DLL if appropriate.

SuggestedRemedy

Please delete Figure 33-7a and retain do_classification.

Proposed Response Response Status O