

Clarification of 802.3cy Draft 1.2 Comments

Contribution to IEEE 802.3cy

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Introduction

- This presentation provides more detailed description and clarification of comments on the 802.3cy Draft 1.2
- The table to the right shows how various values the following tables were calculated

Variable	Value
Symbol rate [GHz]	14.0625
Symbol time [ps]	71.11111111
Bits per frame	9360
Symbols per frame	4680
Time per frame [ns]	332.80
QR cycle frames	96
lpi_refresh_rx_timer [QR-periods]	50
lpi_refresh_rx_timer [samples]	22464000
lpi_refresh_rx_timer [ms]	1.597440
WAKE Frames	16
T_s [us]	5.3248
Quiet Frames	95
T_q [us]	31.616
Refresh frames	1
T_r [us]	0.3328
Sleep [frames]	16
Alert [frames]	4
Wake [frames]	16
fast wake Quiet-Alert [frames]	8
slow wake Quiet-Alert [frames]	96
Case 1: w_sys_tx [frames]	40
Case 2: w_sys_tx [frames]	24
Case 3: w_sys_tx [frames]	128
Case 4: w_sys_tx [frames]	112
w_sys_rx [frames]	20
Case 1: w_sys_tx [us]	13.3120
Case 2: w_sys_tx [us]	7.98720
Case 3: w_sys_tx [us]	42.59840
Case 4: w_sys_tx [us]	37.27360
w_sys_rx [us]	6.656

Proposed Text Changes

Proposed Updates Table 78-2

Table 78–2—Summary of the key EEE parameters for supported PHYs or interfaces

PHY or interface type	T_s (μ s)		T_q (μ s)		T_r (μ s)	
	Min	Max	Min	Max	Min	Max
...						
25GBASE-T1	5.3248	5.3248	31.616	31.616	0.3328	0.3328
...						
50GBASE-T2						
...						
100GBASE-T4						
...						

Proposed Updates Table 78-3

Table 78–3—Summary of the LPI timing parameters for supported PHYs or interfaces

PHY or interface type	Case	$T_{w_sys_tx}$ (min) (μs)	T_{w_phy} (min) (μs)	$T_{phy_shrink_tx}$ (max) (μs)	$T_{phy_shrink_rx}$ (max) (μs)	$T_{w_sys_rx}$ (min) (μs)
...						
25GBASE-T1	Case-1	13.3120	13.3120	TBD	0	6.656
	Case-2	7.98720	7.98720	TBD	0	6.656
	Case-3	42.59840	42.59840	TBD	0	6.656
	Case-4	37.27360	37.27360	TBD	0	6.656
...						

Proposed Updates Table 165-3

Table 165–3—LPI wake time

lpi_wake_time	<i>lpi_tx_wake_time when wake starts before sleep signal is complete</i>		<i>lpi_tx_wake_time when wake starts after sleep signal is complete</i>	
(frames)	(frames)	(μs)	(frames)	(μs)
16	40	13.312	24	7.9872



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