

802.3bz EEE Parameters

30 June 2015



Jim Graba

Broadcom Corporation
jgraba@broadcom.com

- All EEE times use the same number of 10G symbol times with the exception of the Refresh length

EEE Entity	Lengths (Data frames)			Notes
	10G	5G	2.5G	
Refresh	4	8	8	Keep Clause 55 times, See next page
Quiet	124	248	248	Subservient to the Refresh length
Sleep	9	12	12	40GBASE-T, in D0.1 clause 126.3.5.1
Alert	3.5	7	7	Cl. 55. In D0.1 clause 126.4.2.2.1
Wake	9	18	18	Cl. 55. In D0.1 clause 126.3.2.2.20
SI. TX/RX Train. Sync	1	2	2	Cl. 55. In D0.1 clause 126.3.5.1

Refresh length

- 40G's Refresh length (6) is longer than 10G's Refresh length (4) in order to Accommodate an effectively longer echo
- The effective echo lengths are shorter in 2.5G/5G so 8 data frames are sufficient
- Setting Refresh = 12 data frames isn't harmful but can't be justified

Data Rate (Gb/s)	Max Cable Length (m)	Round trip reflection (ns)	Round trip reflection (symbols)	1024 symbol Refresh coverage (%)
40	30	300	960	94
10	100	1000	800	78
5	100	1000	400	39
2.5	240	2400	480	47