Table 80–5—Sublayer delay constraints

Sublayer	Maximum (bit time)[a]	Maximum (pause_quanta)[b]	Maximum (ns)	Notes[c]
40G MAC, RS, and MAC Control	16 384	32	409.6	See 81.1.4.
40GBASE-R PCS	11 264	22	281.6	See 82.5.
40GBASE-R FEC	24 576	48	614.4	See 74.6.
40GBASE-R PMA	4 096	8	102.4	See 83.5.4.
40GBASE-T PHY	25 600	50	640	See 113.11
40GBASE-KR4 PMD	2 048	4	51.2	Includes delay of one direction through backplane medium. See 84.4.
40GBASE-CR4 PMD	4 096	8	102.4	Does not include delay of cable medium. See 85.4.
40GBASE-SR4 PMD	1 024	2	25.6	Includes 2 m of fiber. See 86.3.1.
40GBASE-FR PMD	1 024	2	25.6	Includes 2 m of fiber. See 89.3.1.
40GBASE-LR4 PMD	1 024	2	25.6	Includes 2 m of fiber. See 87.3.1.
40GBASE-ER4 PMD	1 024	2	25.6	Includes 2 m of fiber. See 87.3.1.
100G MAC, RS, and MAC Control	24 576	48	245.76	See 81.1.4.
100GBASE-R PCS	35 328	69	353.28	See 82.5.
100GBASE-R FEC	122 880	240	1228.8	See 74.6.
100GBASE-R RS-FEC	40 960	80	409.60	See 91.4.
100GBASE-R PMA	9 216	18	92.16	See 83.5.4.
100GBASE-KR4 PMD	2 048	4	20.48	Includes delay of one direction through backplane medium. See 93.4.
100GBASE-KP4 PMA/PMD	8 192	16	81.92	Includes delay of one direction through backplane medium. See 94.2.5.
100GBASE-CR4 PMD	2 048	4	20.48	Does not include delay of cable medium. See 92.4.
100GBASE-CR10 PMD	9 728	19	97.28	Does not include delay of cable medium. See 85.4.
100GBASE-SR4 PMD	2 048	4	20.48	Includes 2 m of fiber. See 95.3.1.
100GBASE-SR10 PMD	2 048	4	20.48	Includes 2 m of fiber. See 86.3.1.
100GBASE-LR4 PMD	2 048	4	20.48	Includes 2 m of fiber. See 88.3.1.
100GBASE-ER4 PMD	2 048	4	20.48	Includes 2 m of fiber. See 88.3.1.

[a] For 40GBASE-R, 1 bit time (BT) is equal to 25 ps and for 100GBASE-R, 1 bit time (BT) is equal to 10 ps. (See 1.4.160 for the definition of bit time.)

[b] For 40GBASE-R, 1 pause_quantum is equal to 12.8 ns and for 100GBASE-R, 1 pause_quantum is equal to 5.12 ns. (See 31B.2 for the definition of pause_quanta.)

[c] Should there be a discrepancy between this table and the delay requirements of the relevant sublayer clause, the sublayer clause prevails.