

bit shall be set to a zero.	11
	12
45.2.3.13 BASE-R and 40GBASE<u>MultiGBASE</u>-T PCS status 1 register (Register 3.32)	13
	14
45.2.3.13.1 BASE-R and 40GBASE<u>MultiGBASE</u>-T receive link status (3.32.12)	15
	16
<i>Change the last sentence of 45.2.3.13.1 (as modified by IEEE Std 802.3by-2016, IEEE Std 802.3bq-2016, and IEEE Std 802.3bz-2016) as follows:</i>	17
	18
	19
This bit is a reflection of the PCS_status variable defined in 49.2.14.1 for 10/25GBASE-R in 126.3.7.1 for	20

Table 119–5—MDIO/PCS status variable mapping

MDIO status variable	PCS register name	Register/ bit number	PCS status variable
BASE-R and 10GBASE <u>MultiGBASE</u> -T receive link status	BASE-R and 10GBASE <u>MultiGBASE</u> -T PCS status 1 register	3.32.12	PCS_status
Lane <i>x</i> aligned	Multi-lane BASE-R PCS alignment status 3 and 4 registers	3.52.7:0 3.53.7:0	am_lock< <i>x</i> >

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Bit sequence A is a 32768-bit sequence composed of three sections of the PRBS31 binary sequence (see 120.5.11.1.1) according to Table 120–2.

~~Each section of PRBS31 is generated as if produced by the shift register implementation~~

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Table 120–2—SSPRQ bit sequence A

Pattern	Seed	Length
PRBS31	0x00000002	10924 bits
	0x34013FF7	10922 bits
	0x0CCCCCCC	10922 bits

Each section of PRBS31 is generated as if produced by the shift register implementation shown in Figure 49-9 and the seed is a 31-bit hexadecimal value used to preset S30 through S0 (S30 is set to the MSB and S0 is set to the LSB) prior to the generation of the PRBS31 sequence for the indicated length of bits.

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SNR_{ISI} is defined by Equation (120D–8) computed from p_{max} and $ISI_{cursors}$ after these have been re-calculated with the continuous time filter described in 93A.1.4.3 using the parameters in ~~Table 120D–7~~ [Table 120D–8](#) applied and optimized for maximum SNR_{ISI} . The SNR_{ISI} specification shall be met for all transmit equalization settings.

$$ISI_{cursors} = [p(t_p + M \times (N_b + 1)), p(t_p + M \times (N_b + 2)), \dots, p(t_p + M \times (N_p - D_p - 1))] \quad (120D-7)$$

$$SNR_{ISI} = 20 \log_{10} \left(\frac{P_{max}}{\sqrt{\sum (ISI_{cursors}^2)}} \right) \quad (120D-8)$$

$ISI_{cursors}$ are computed from the linear fit pulse response, $p(k)$ in accordance with 120D.3.1.3, using Equation (120D–7), where t_p is the index of the linear fit pulse where $p(t_p)$ equals p_{max} .

Note: M and N_p are defined in 85.8.3.3.5, and N_b is found in ~~Table 120D–7~~ [Table 120D–8](#).

120D.3.1.8 Even-odd Jitter

Item	Feature	Subclause	Value/Comment	Status	Support
TC10	Transmit equalization	120D.3.1.5	Each successive step results in a monotonic change	M	Yes []
TC11	Transmitter Output residual ISI	120D.3.1	Meets Table 120D–1 constraints	M	Yes []
TC12	Signal-to-noise-and-distortion ratio	120D.3.1	Meets Table 120D–1 constraints	M	Yes []

120D.5.4.2 Receiver

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