

**IEEE Std 802.3™-2012**(Revision of  
IEEE Std 802.3-2008)

# Errata to IEEE Standard for Ethernet

Sponsor

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*Page 145: Table 59-12, “Hexadecimal” is missing in the heading row, third column and in Note b. The correction to the table is shown as follows:*

**Table 59–12—Common portion of frame-based test pattern**

Field	Number of octets	Hexadecimal	8B/10B encoded binary <sup>a</sup>	
			Starting disparity +	Starting disparity–
SPD (/S/)	1	N/A <sup>b</sup>	N/A <sup>c</sup>	110110 1000
Remainder of preamble	6	55	N/A <sup>c</sup>	101010 0101
SFD	1	D5	N/A <sup>c</sup>	101010 0110
Destination address	6	User defined	User defined	User defined
Source address	6	User defined	User defined	User defined
Length/Type	2	User defined	User defined	User defined
First portion of MAC client data	32	User defined	User defined	User defined
Second portion of MAC client data	456	See Table 59–13 or Table 59–14	See Table 59–13 or Table 59–14	See Table 59–13 or Table 59–14
Frame check sequence <sup>d</sup>	4	As required by frame	As required by frame	As required by frame
EPD (/T/R/) <sup>e</sup>	2	N/A <sup>b</sup>	010001 0111 000101 0111	101110 1000 111010 1000
Idle (/I1/ or /I2/) <sup>e</sup>	2	N/A <sup>b</sup>	110000 0101 101001 0110	001111 1010 100100 0101
Idle (/I2/) <sup>e</sup>	10	N/A <sup>b</sup>	N/A <sup>f</sup>	001111 1010 100100 0101

<sup>a</sup>The binary bits are transmitted left most bit first.

<sup>b</sup>The SPD, EPD, and Idle code-groups are generated by the PCS and their hexadecimal octet values have no meaning without relation to the signals transmitted across the GMII.

<sup>c</sup>Except when operating in a half-duplex mode, it is not possible to transmit an SPD with a positive starting disparity. The first code-group that could begin with a positive running disparity would be the second octet of the destination address.

<sup>d</sup>The frame check sequence may be calculated using the method described in 3.2.9.

<sup>e</sup>The first row precedes the second row.

<sup>f</sup>The first idle code-group following the frame will be an /I1/ if the running disparity is positive and an /I2/ if the running disparity is negative. All subsequent idle code-groups will be /I2/.

*Page 146 and Page 148: “Hexadecimal” is missing from the heading row, second column in Table 59-13 and Table 59-14. The correction to the tables are shown as follows:*

**Table 59–13—Payload for random pattern test frame**

Number of octets	Hexadecimal	8B/10B encoded binary	
		Starting disparity +	Starting disparity –
Repeat 19 times for 228 bytes	BE	100001 1010	011110 1010
	D7	111010 0110	000101 0110
	23	110001 1001	110001 1001
	47	000111 0101	111000 0101
	6B	110100 0011	110100 1100
	8F	101000 1101	010111 0010
	B3	110010 1010	110010 1010
	14	001011 0100	001011 1011
	5E	011110 0101	100001 0101
	FB	001001 1110	110110 0001
	35	101010 1001	101010 1001
	59	100110 0101	100110 0101
Transmit once for 12 bytes	BC	001110 1010	001110 1010
	D7	000101 0110	111010 0110
	23	110001 1001	110001 1001
	47	111000 0101	000111 0101
	6B	110100 1100	110100 0011
	8F	010111 0010	101000 1101
	B3	110010 1010	110010 1010
	14	001011 1011	001011 0100
	5E	100001 0101	011110 0101
	FB	110110 0001	001001 1110
	35	101010 1001	101010 1001
	59	100110 0101	100110 0101
Repeat 18 times for 216 bytes	BE	011110 1010	100001 1010
	D7	000101 0110	111010 0110
	23	110001 1001	110001 1001
	47	111000 0101	000111 0101
	6B	110100 1100	110100 0011
	8F	010111 0010	101000 1101
	B3	110010 1010	110010 1010
	14	001011 1011	001011 0100
	5E	100001 0101	011110 0101
	FB	110110 0001	001001 1110
	35	101010 1001	101010 1001
	59	100110 0101	100110 0101

**Table 59–14—Payload for jitter test frame**

Field	Hexadecimal	8B/10B encoded binary	
		Starting disparity +	Starting disparity –
Low Transition Density, Repeat 96 times for 192 bytes	7E	100001 1100	011110 0011
	7E	011110 0011	100001 1100
Phase Jump, Repeat one time for 8 bytes	F4	001011 0001	001011 0111
	EB	110100 1110	110100 1000
	F4	001011 0001	001011 0111
	EB	110100 1110	110100 1000
	F4	001011 0001	001011 0111
	EB	110100 1110	110100 1000
	F4	001011 0001	001011 0111
	AB	110100 1010	110100 1010
High Transition Density, Repeat 20 times for 20 bytes	B5	101010 1010	101010 1010
Phase Jump, Repeat 4 times for 8 bytes	EB	110100 1110	110100 1000
	F4	001011 0001	001011 0111
Low Transition Density, Repeat 96 times for 192 bytes	7E	011110 0011	100001 1100
	7E	100001 1100	011110 0011
Phase Jump, Repeat one time for 8 bytes	F4	001011 0111	001011 0001
	EB	110100 1000	110100 1110
	F4	001011 0111	001011 0001
	EB	110100 1000	110100 1110
	F4	001011 0111	001011 0001
	EB	110100 1000	110100 1110
	F4	001011 0111	001011 0001
	AB	110100 1010	110100 1010
High Transition Density, Repeat 20 times for 20 bytes	B5	101010 1010	101010 1010
Phase Jump, Repeat 4 times for 8 bytes	EB	110100 1000	110100 1110
	F4	001011 0111	001011 0001

**Page 220:** “Hexadecimal” is missing from the text at the bottom of Figure 61-15. The correction to the figure is shown as follows:

All octets other than D<sub>x</sub> are written in hexadecimal notation.

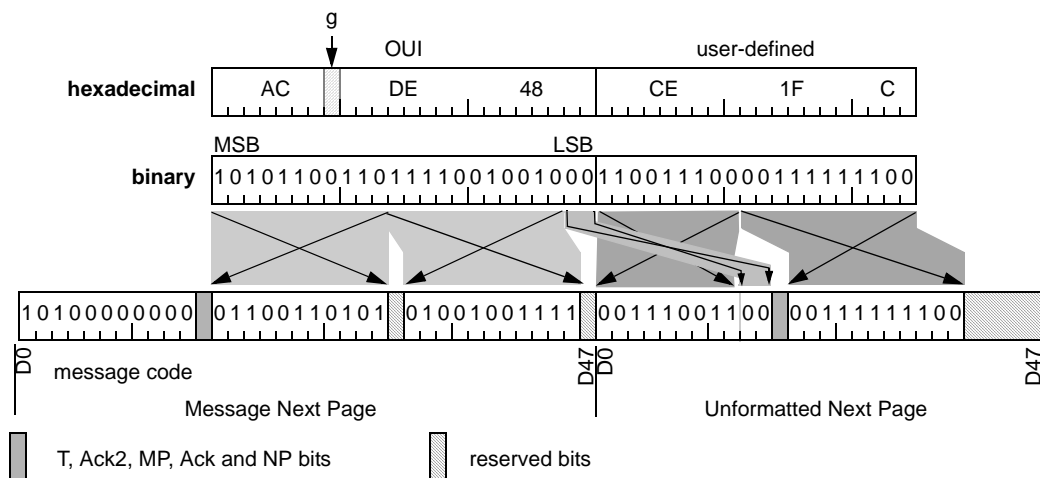
**Page 468:** “Hexadecimal” is missing from the first sentence of paragraph two in 72.6.2. The correction to the text is shown as follows:

If the optional Energy-Efficient Ethernet (EEE) capability is supported (see Clause 78) then when tx\_mode is set to ALERT, the PMD will transmit a repeating 16-bit pattern, hexadecimal 0xFF00.

**Page 471:** *The first sentence of the paragraph in 72.6.10.2.1 should be corrected to read as follows:*

Frames are delimited by the 32-bit pattern, hexadecimal 0xFFFF0000 (ones transmitted first), as expressed in 10.3.125 GBd symbols.

**Page 822:** *“Hexadecimal” is missing from the top left of Figure 73A-1. The correction to the text is shown as follows:*



**Figure 73A-1—Message code 5 sequence**

**Page 825:** *“Hexadecimal” is missing from the third sentence of paragraph two in Annex 74A. The correction to the text is shown as follows:*

Note that there is both binary representation and hexadecimal symbol representation in the table; in case of the hex symbol, the most significant bit of each hex symbol is sent first.

**Page 839:** *“Hexadecimal” is missing from the second sentence of paragraph two in 76A.2. The correction to the text is shown as follows:*

The 64 bit payload portion of the 66 bit block is described as a series of hexadecimal octets—the left-most octet of each payload portion is transmitted first.

**Page 840:** *“Hexadecimal” is missing from Note a of Table 76A-1. The correction to Note a is shown as follows:*

<sup>a</sup>64 bit payload values are shown in hexadecimal notation.

***Page 843: “Hexadecimal” is missing from Note a of Table 76A-4. The correction to Note a is shown as follows:***

<sup>a</sup>Dn octet values are shown in hexadecimal notation.

***Page 843: “Hexadecimal” is missing from Note a of Table 76A-5. The correction to Note a is shown as follows:***

<sup>a</sup>Pn values are shown in hexadecimal notation.

***Page 844: “Hexadecimal” is missing from the second sentence of paragraph two in 76A.8. The correction to the text is shown as follows:***

The 64 bit payload portion of the 66 bit block is described as a series of hexadecimal octets—the left-most octet of each payload portion is transmitted first.