Annex 114A

(informative)

BCH codeword examples

This annex provides example BCH codewords produced by the physical header BCH encoder and the payload BCH encoder defined in Clause 114. This annex presents data in a tabular form to facilitate reading of data. The contents of the tables are transmitted from left to right within each row starting from the top row and ending at the bottom row. The tables contain hexadecimal representations of the data. For the hexadecimal representation, the most significant bit of each hex symbol is transmitted first.

114A.1 Output of the BCH(896, 720) encoder

Table 114A–1 contains an example output codeword of the systematic BCH(896, 720) encoder defined in 114.2.3.3. Because it is a systematic code, the first 720 bits are literally copied from the input that was produced by the physical header binary scrambler from the PHD plus CRC16 (see 114.2.3). The last 176 bits are the parity calculated by the BCH encoder.

Table 114A–1—BCH(896, 720) codeword

Input information bits [0:719]			
9549d35f83a4d1cf	412fdaa42887c2b6	48eb825ddbc85982	c54aca778e4ce5fe
15e5075d669edb29	3401304a04590d13	48b2c48692705900	f9488399864faada
197e0569471711bf	d7ce20b4df928911	8360cecc335c56d4	6139
Parity bits [720:895]			
81d34d0b2544af02	374d3fa97bbeb49e	db4e0dea80f7	

114A.2 Output of the BCH(1976, 1668) encoder

Table 114A–2 contains an example output codeword of the systematic BCH(1976, 1668) encoder defined in 114.2.4.3.2.

The BCH codeword in Table 114A–2 corresponds to the first MLCC codeword transmitted in a Transmit Block when a 1000BASE-H based PHY is configured in test mode 1 (see 114.5.1). Because it is a systematic code, the first 1668 bits of the BCH codeword correspond to the input information bits that are transferred from the payload data binary scrambler (114.2.4.2) to the BCH encoder by the MLCC demultiplexer (see 114.2.4.3.1). The last 308 bits are the parity calculated by the BCH encoder.

Table 114A–2—BCH(1976, 1668) codeword

Input information bits [0:1667]			
ef195e8cf2d1db57	6af0c3edeff2a098	0f7de28fa05bbfd9	d87ec8f498c0360a
f6c8b62e0ca0fef7	01b84630e35735bf	cbb886c03f65460e	a23733dd9831a186
41ed6962b4351338	24acd3040ed21d2b	8253abb0c27b31f6	8999be52622aeec7
5fec0b2dc42e9a5b	6292c00fb0e2871d	377dffe020980bc9	ee06e438f1caa337
74fd58ae5c74aee1	3a060fcf15738db1	bb7b49234d884509	0e93a60f503c33ee
02ade8b4fa112019	d48582b78148b898	14abee89cb6816f4	05cd0e611523ebc9
a529246463083af3	9e432b7ba29f89f1	f	
Parity bits [1668:1975]			
47e674016ad23eca	0b1ef6e7f5029901	0087d563401a9440	b5c74236b2dce6a4
d103d1ad3d4c3			