IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Updated Text for DCM | | | | |
| Date: 2016-10-23 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jianhan Liu | Mediatek |  |  | jianhan.liu@mediatek.com |
| Tianyu Wu |  |  | tianyu.wu@mediatek.com |
| Gary Anwyl |  |  | gary.anwyl@mediatek.com |
| Hongyuan Zhang | Marvell |  |  | hongyuan@marvell.com |
| Yan Zhang |  |  | yzhang@marvell.com |
| Ron Porat | Broadcom |  |  | ron.porat@broadcom.com |
| Sriram Venkateswaran |  |  | sriram.venkateswaran@broadcom.com |
| Youhan Kim | Qualcomm |  |  | youhank@qca.qualcomm.com |
| Bin Tian |  |  | btian@qti.qualcomm.com |
| Qinghua Li | Intel |  |  | qinghua.li@intel.com |

Abstract

This submission proposes update for the DCM related texts.

Revisions:

* Rev 0: Initial version of the document.
* Rev1: Correct typos in LDPC tone mapping equation

**Section 26.3.5 Transmitter block diagram (D0.5)**

Discussion: The DCM tone mapper is already done at the constellation mapping block.

Remove the block “DCM Tone Mapper” from the following figures.

**Figure 26-12**

**Figure 26-13**

**Figure 26-14**

**Figure 26-15**

**Figure 26-16**

**Figure 26-17**

**Section 26.3.11.9 Constellation mapping, page 270, line 46-47 (D0.5)**

Discussion: The formula is rewrite based on the unified definition of *N*SD.

Modify the line 46-47 as follows:

When DCM is employed, bit sequences are mapped to a pair symbols  where is in the range of  and is in the range of  in order to exploit frequency diversity for a , and  and is in the range of  dor a RU of .

**Section 26.3.11.11 LDPC tone mapper, page 272, line 31 to page 273, line 10 (D0.5)**

Discussion: The formula is rewrite based on the unified definition of *N*SD.

Modify the page 272, line 31 to page 273, line 10 as follows:



Where

*NSD i*s the number of data tones in the *r*-th RU for DCM=1,



For RU of less or equal to 996 tones,  is



For RU of tones,  is

