

IEEE Standards Interpretation for IEEE Std 802.11b™-1999 Supplement to IEEE Standard for Information technology— Telecommunications and information exchange between systems— Local and metropolitan area networks—Specific requirements—Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Higher-Speed Physical Layer Extension in the 2.4 GHz Band

Copyright © 2008 by the Institute of Electrical and Electronics Engineers, Inc. 3 Park Avenue New York, New York 10016-5997 USA All Rights Reserved.

This is an interpretation of IEEE Std 802.11b-1999.

Interpretations are issued to explain and clarify the intent of a standard and do not constitute an alteration to the original standard. In addition, interpretations are not intended to supply consulting information. Permission is hereby granted to download and print one copy of this document. Individuals seeking permission to reproduce and/or distribute this document in its entirety or portions of this document must contact the IEEE Standards Department for the appropriate license. Use of the information contained in this document is at your own risk.

IEEE Standards Department Copyrights and Permissions 445 Hoes Lane, Piscataway, New Jersey 08855-1331, USA

November 2008

Interpretation Request #1

2-03/04 **Topic:** Reinitializing the IEEE 802.11 b scrambler for header and psdu fields **Relevant Clauses:** 15.2.3, 15.2.4 **Classification:** unambiguous

Regarding scrambling in IEEE 802.11b. For each packet the requestor has 3 fields (plcp header, plcp preamble and psdu). While scrambling plcp preamble we (the requestor) are initializing with particular seed based on preamble. What about header and psdu fields? Do we have to reinitialize the scrambler state or not?

Interpretation Response #1

IEEE STD 802.11b-1999 (reaffirmed 2003) clearly states the requirements for scrambling in subclauses 15.2.3 and 15.2.4. Since the standard is clear on this matter, no interpretation is required.

Interpretation Request #2

2-03/04 **Topic:** Reinitializing the 802.11b scrambler for header and psdu fields **Relevant Clauses:** 15.2.3, 15.2.4 **Classification:** unambiguous

I have doubt regarding scrambling in 802.11b. For each packet we have 3 fields (plcp header, plcp preamble and psdu). while scrambling plcp preamble we are initializing with

particular seed based on preamble. What about header and psdu fields. We have to be reinitialize the scrambler state or not?

Interpretation Response #2

IEEE STD 802.11b-1999 (reaffirmed 2003) clearly states the requirements for scrambling in clauses 15.2.3 and 15.2.4. Since the standard is clear on this matter, no interpretation is required.