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| 8802-3/802.3 REVISION REQUEST 1122 |
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DATE: 17th Dec, 2003
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REQUESTED REVISION:
STANDARD: IEEE Std. 802.3-2002
CLAUSE NUMBER: 28C.7
CLAUSE TITLE: Message Code #6--PHY identifier tag code

PROPOSED REVISION TEXT:

See attached draft.

RATIONALE FOR REVISION:

The current wording is insufficient to unambiguously implement this feature. Specific problems include:

- 1) Bit-specification wording is very hard to follow; a figure is needed.
- 2) The bit ordering within-byte ordering is different from the IEEE/RAC usage, and should therefore be very clearly illustrated.

IMPACT ON EXISTING NETWORKS:

Unknown. If networks have been implemented based on different assumptions of this text, incompatibilities could possible exist. However, given minimal use of this feature, problems are expected to be rare if this is fixed now.

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| Please attach supporting material, if any |
| Submit to:- Bob Grow, Chair IEEE 802.3 |
| E-Mail: Bob.Grow@intel.com |

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| +----- For official 802.3 use -----+ |
REV REQ NUMBER: 1122	
DATE RECEIVED: 17th Dec, 2003	
EDITORIAL/~~TECHNICAL~~	
~~ACCEPTED~~/DENIED	
BALLOT REQ'D YES/~~NO~~	
COMMENTS: 29-Sep-04 Ver: D2.0 Status: F	

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| For information about this Revision Request see - |
| http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1122 |

Clarification of OUI usage

This contribution provides replacement text for 28C.7 of IEEE Std 802.3-2002. The intent is not to change the specification, but to clearly document how bits within the current definition are utilized. The author is not advocating a particular technical alternative, but is advocating that the assumed alternative be well documented.

The intent is to clarify the intent and thereby to assist the on-going use of these subclauses by appropriate organizations.

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28C.7 Message code #6—PHY identifier tag code

Editors' Notes: To be removed prior to final publication.

Previous text (as background):

The PHY ID tag code message shall consist of a single message code of 0000 0000 0110 followed by four user codes defined as follows. The first user code shall contain the most significant 11 bits of the PHY ID (2.15:5) with the most significant bit in bit 10 of the user code. The second user code shall contain bits 2.4:0 to 3.15:10 of the PHY ID with the most significant bit in bit 10 of the user code. The third user code shall contain bits 3.9:0 of the PHY ID with the most significant bit in bit 10 of the user code. Bit 0 in the third user code shall contain a user-defined user code value that is specific to the PHY ID transmitted. The fourth and final user code shall contain a user-defined user code value that is specific to the PHY ID transmitted.

Problems:

- 1) Bit-specification wording is very hard to follow; a figure is needed.
- 2) The bit ordering within-byte ordering is different from the IEEE/RAC usage, and should therefore be very clearly illustrated.

Proposed solution (follows).

The PHY ID tag code message shall consist of a single shall consist of a single message code of 0000 0000 0110₂ followed by four user codes. For example, assume that a manufacturer's IEEE-assigned OUI value is AC-DE-48, the manufacturer's model number is 101100₂, manufacturer's revision number is 0111₂, and the PHY-dependent information is 000011111100₂. The message codes generated from these values are encoded into four message codes, as specified in Figure 28.1. For clarity, the position of the global broadcast *g* is illustrated.

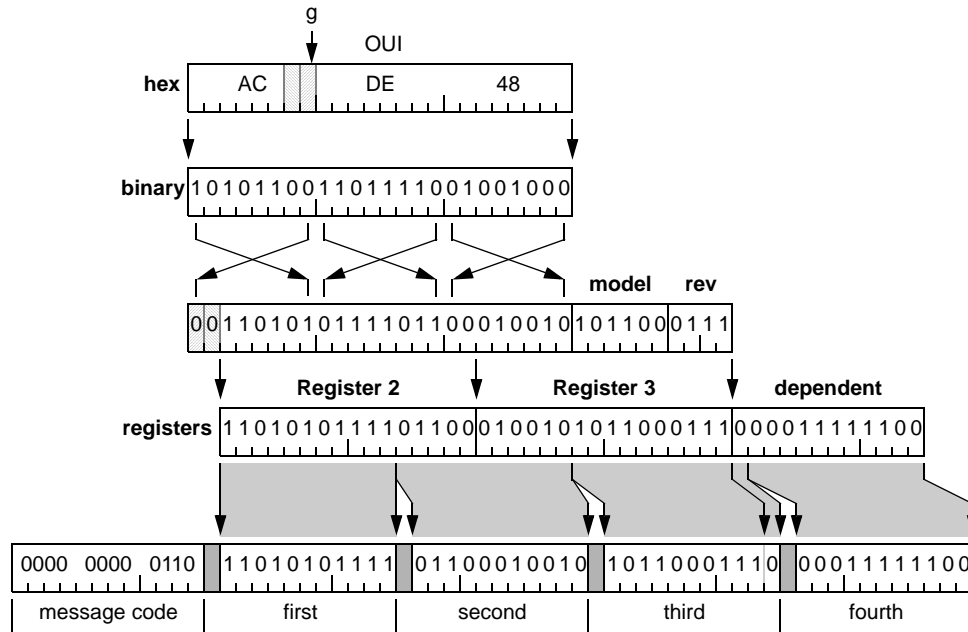


Figure 28.1—Message code #6 sequence