

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

Send any inquiries to <http://www.renesas.com/inquiry>.

HITACHI MICROCOMPUTER TECHNICAL UPDATE

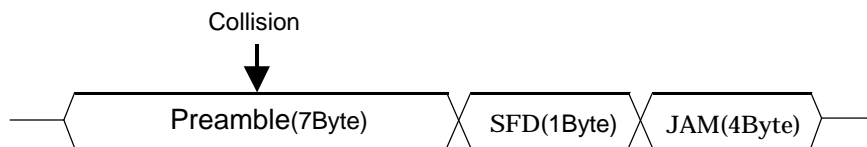
DATE	20 April 2001	No.	TN-SH7-318A/E
THEME	SH7615 notice on use of internal Ethernet controller.		
CLASSIFICATION	<input type="checkbox"/> Spec change <input checked="" type="checkbox"/> Limitation on Use <input type="checkbox"/> Supplement of Documents		
PRODUCT NAME	HD6417615ARF	Lot No.etc.	ALL
REFERENCE DOCUMENTS	SH7615 Hardware manual	Effective Date	
		Permanent	

There is a case that SH7615 does not conform to the IEEE802.3u standard regarding the following case.

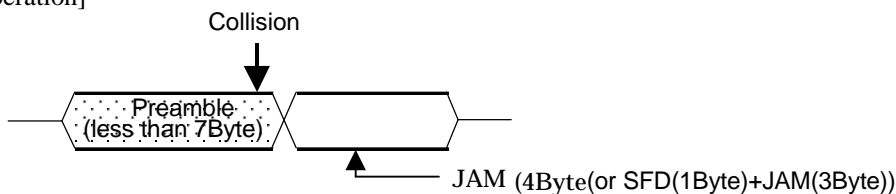
<Phenomenon>

In the case that collision occurs during preamble, based on the IEEE802.3u, SH7615 has to continue to transmit preamble(7Byte), SFD(1Byte), JAM(4Byte) before it terminates the transmission. But SH7615 stops transmitting preamble on the way and transmits 4Byte JAM(or 1Byte SFD + 3Byte JAM) sequentially before it terminates the transmission and gets into the state of waiting retransmission.

[IEEE802.3u operation]



[SH7615 operation]



<Influence on system>

It is possible that the other transmitting station in the collision mistakes its transmitting data to be transmitted correctly on MAC layer. In this case, upper layer protocol generally recovers the error by re-transmitting to complete the correct data transmission, though the efficiency of transmission could be down.