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DEVICE ERRATA February 9, 1999 MC68LC302 INTEGRATED MULTIPROTOCOL PROCESSOR DEVICES

This document covers the MC68LC302 Mask 2J29A. Errata listed in italics and which have change bars are new since the last published errata.

1. Very Short Frames in Synchronous Protocols

If a 68LC302 SCC is used in a synchronous protocol mode (HDLC, BISYNC, or Transparent), AND the transmit frame is stored in just one data buffer, AND the transmit frame is only 1 or 2 bytes in total length (i.e. 1 or 2 bytes stored in the data buffer) AND more than one 68LC302 SCC is operating simultaneously, it is possible after some amount of time (minutes, hours, or days) for a frame to be reported as being transmitted successfully (i.e. the Tx BD shows that it has been transmitted without errors), but in reality, the frame was not transmitted over the TXD pin.

Workarounds:

- 1. In the case of transmitting a two byte frame, simply split the frame into 2 one-byte buffers. This will eliminate the problem, and will not affect serial performance.
- 2. Do nothing. Since the problem occurs very rarely, wait for the missing frame to be detected by the higher layers of the software, and a retransmission requested.



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