Mask Set Errata for Mask 0N59H / 0P79C

This report applies to mask 0N59H / 0P79C for these products:

- MC9S12VR64
- MC9S12VR48

Table 1. Errata and Information Summary

Erratum ID	Erratum Title
ERR008245	HSDRV: Over current protection assert level out of spec
ERR008346	SCI: RXEDGIF interrupt miss while enter STOP

Table 2. Revision History

Revision	Changes
August 12, 2015	Initial revision
March 11 2021	No changes to errata with this revision

ERR008245: HSDRV: Over current protection assert level out of spec

Description: The high-side driver (HSDRV) over current (OC) feature is designed to protect the HSDRV against short circuit through current due to external board or wire-harness defects.

The specified minimum OC trigger assert level is 100mA.

For some parts the OC trigger assert level lies in the range from 90mA to 100mA, due to process distribution.

The HSDRV is specified for nominal operation at up to 50mA. However switching capacitive loads may cause transient current >90mA, which could trigger an OC event, thereby switching off the HSDRV.

Workaround: Ensure board design with minimal high-side driver capacitance to avoid an overshoot and/or use the OC masking feature to mask the OC event whilst switching.

ERR008346: SCI: RXEDGIF interrupt miss while enter STOP

Description: If an active edge (falling if RXPOL=0, rising if RXPOL=1) on the RXD input occurs shortly after the execution of the STOP instruction the RXEDGIF is not asserted and the CPU is not woken up. The time window in during which the edge is missed starts about 10 bus cycles after the STOP instruction and is 2-3 bus cycles wide.

Workaround: (1) If more than one edge with a minimum distance of 4 bus cycles occur, the 2nd edge will wake up the CPU. This is the case for instance in a LIN bus system. “The Wake Up Signal consists of a dominant pulse minimum 250 microseconds and maximum 5 milliseconds in length, and it may be sent by any LIN node.”

(2) Use the API to enforce a periodic wake up and check the level of the LIN input.

(3) Reduce the likelihood of occurrence by increasing the bus frequency.

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