Mask Set Errata for Mask 2N96F

Introduction

This report applies to mask 2N96F for these products:

- KINETIS_L

Errata ID	Errata Title
6070	I2C: Repeat start cannot be generated if the I2Cx_F[MULT] field is set to a non-zero value
5472	SMC: Mode transition VLPR->VLLS0(POR disabled)->RUN, will cause POR & LVD.
6060	TSI: Out of Range interrupt shows incorrect behavior with some configurations.

e6070: I2C: Repeat start cannot be generated if the I2Cx_F[MULT] field is set to a non-zero value

Errata type: Errata
Description: If the I2Cx_F[MULT] field is written with a non-zero value, then a repeat start cannot be generated

Workaround: There are two possible workarounds:

1) Configure I2Cx_F[MULT] to zero if a repeat start has to be generated.

2) Temporarily set I2Cx_F [MULT] to zero immediately before setting the Repeat START bit in the I2C C1 register (I2Cx_C1[RSTA]=1) and restore the I2Cx_F [MULT] field to the original value after the repeated start has occurred

e5472: SMC: Mode transition VLPR->VLLS0(POR disabled)->RUN, will cause POR & LVD.

Errata type: Errata
Description: The Mode transition of VLPR into VLLS0 (POR disabled) then Exit, with LLWU event, back to to RUN mode will cause a POR and LVD reset instead of the expected WAKEUP exit.

Workaround: The recommendation is to transition from VLPR to RUN before entering VLLS0 with POR disabled mode.

e6060: TSI: Out of Range interrupt shows incorrect behavior with some configurations.

Errata type: Errata

Description: Out of Range interrupt does not work correctly in the following cases:

1)When using LPTMR as the trigger source and using LPO clock source, only when counter values of TSI scan are less than 7000.

2)When using LPTMR as the trigger source and the clock source is external oscillator(32.768khz), if the prescaler value and number of scan setup is less than 12.

Workaround: Use one of the following two methods for out of range interrupt:

1)If using LPTMR with LPO as the trigger source, ensure that the counter value reaches above 10,000 counts by fine-tuning the EXTCHRG, REFCHRG, NSCN and PS registers.

2)If using LPTMR with external oscillator as the trigger source, ensure that the NSCN and PS setup gives a value of higher than 12 scans. The number of scans formula is: (NSCN +1)*(2^PS).

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