

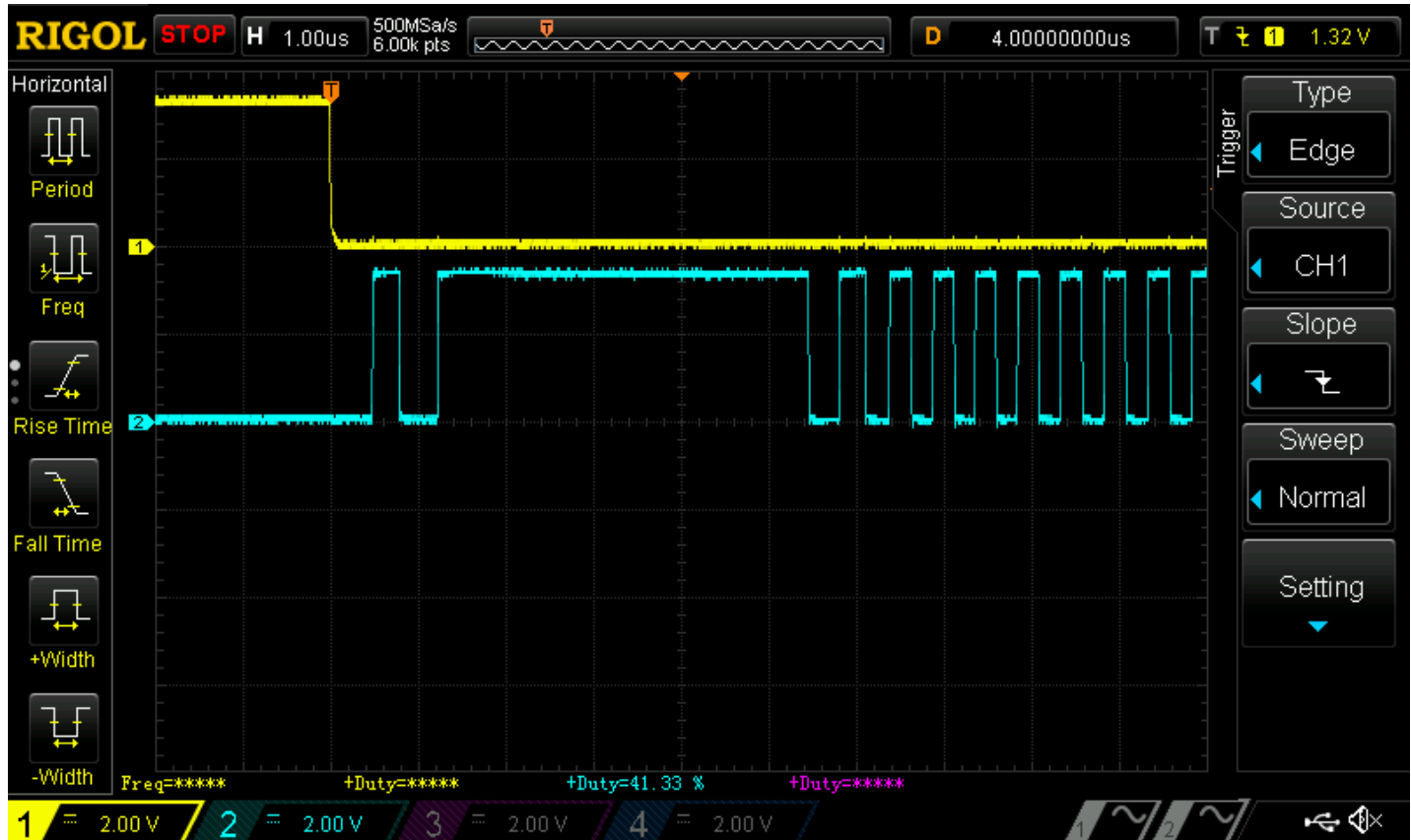


Errata disclaimer: This Errata applies to SLG46580V revision XC.

ISSUE 1: Long 2 MHz OSC Settling Time Functional Block Affected: OSC, Counter, Delay

Description:

2MHz OSC has an additional ~ 9 cycles settling period. Higher VDD shows longer settling time.



Channel 1 – OSC Power Down; Channel 2 –OSC output

Such behavior will lead to substantial error in period calculations if the delay time is relatively small.

Workaround:

- Enable Fast Start-up option. Fast Start-up means forcing bias ready at the power-up instead of automatic enabling at OSC event. The standby current consumption difference between Fast start-up disabled and enabled is only an additional 300 nA.
- Use the “Force power on” OSC power control option to make the OSC operate at all times. However, this will cause increased constant current consumption.



ISSUE 2: Possible Glitch on ACMP Output

Functional Block Affected: ACMP

Description:

After power-up, if LDO is enabled earlier than ACMP, its output may generate a glitch.

VDD = 5.0 V, ACMP IN+ > IN-, One of LDOs enabled



Because BG_OK is already released by LDO, there is no gating signal. Depending on the ACMP VREF condition & the positive input value, it is possible for the ACMP to have a glitch. Subsequently, the other ACMP will not have an issue unless the customer repeats LDO enable first and ACMP later during power stable.

Workaround:

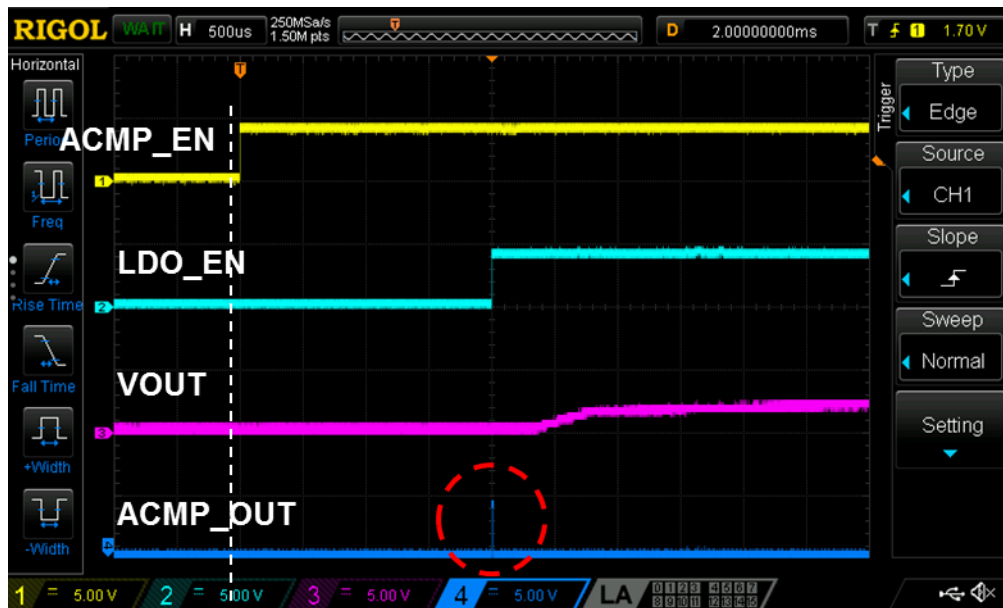
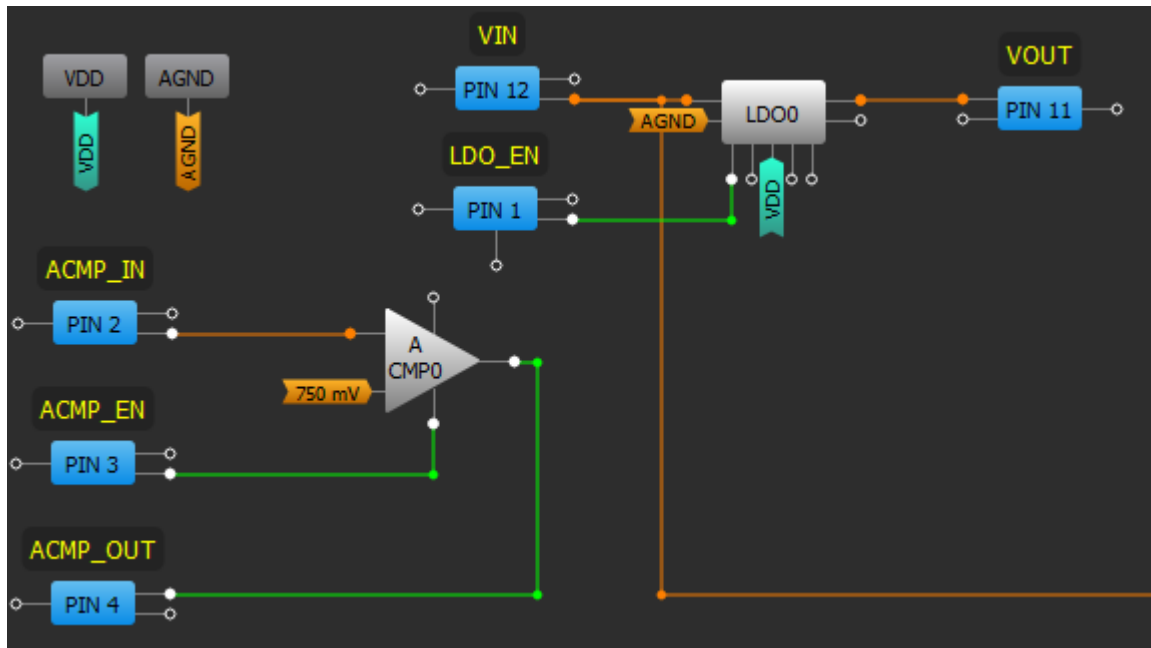
- Use both edge delay on the output to filter out the glitch.

ISSUE 3: Possible Glitch on ACMP Output

Functional Block Affected: ACMP

Description:

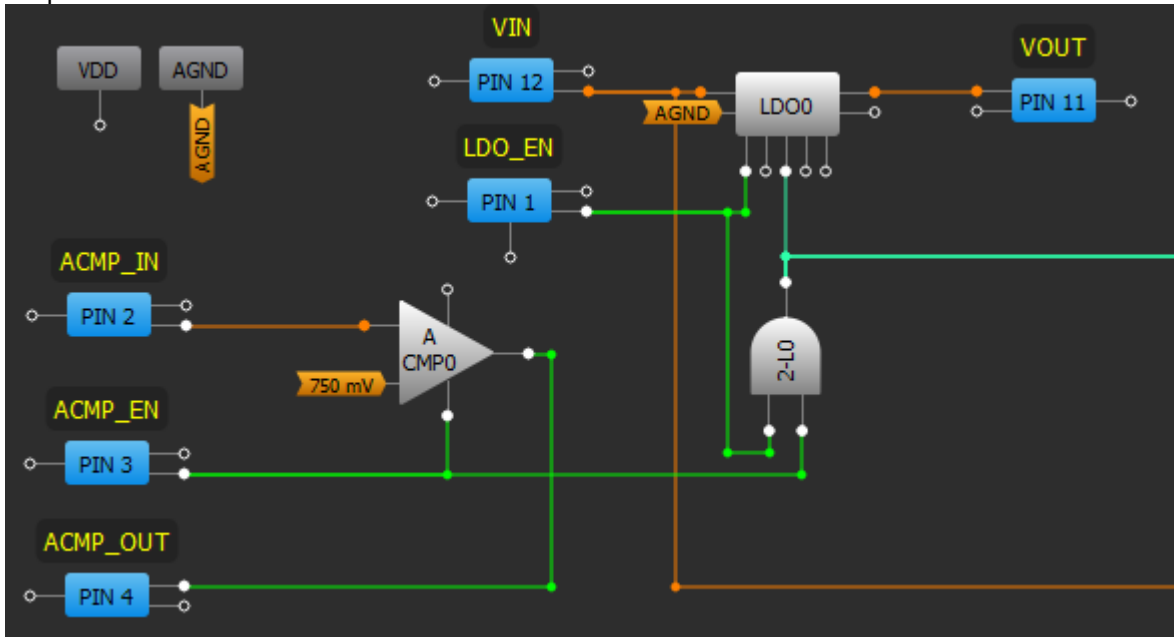
If an LDO's Low Power Mode is selected (for example tied to VDD) a glitch may appear on the ACMP's output after the first LDO is enabled. When the first LDO is turned on, the Low Power Mode switch causes a drop in the internal bandgap voltage that is used to derive the ACMP reference voltages.





Workaround:

- Use both edge delay on the output to filter out the glitch.
- Use some logic to avoid turning on Low Power Mode before enabling LDO and powering up the ACMP. Example is shown below.





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