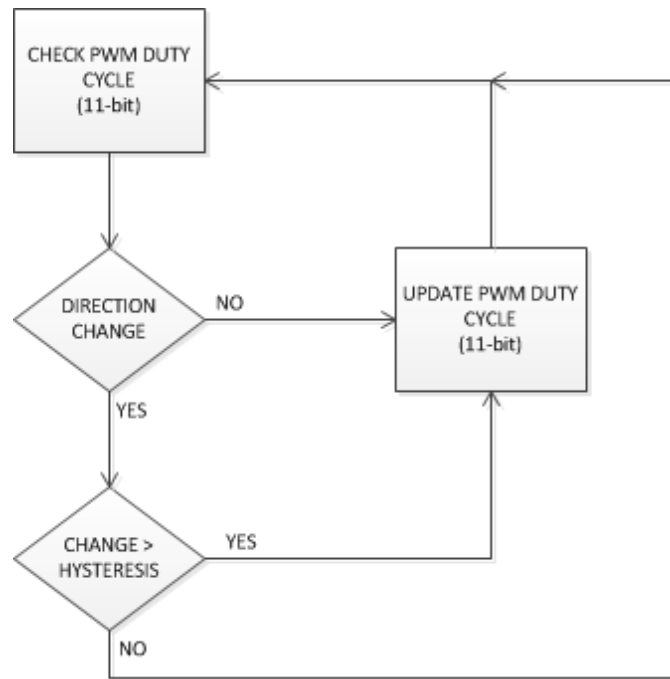# LM36922H PWM HYSTERESIS

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TEXAS INSTRUMENTS

Simplified PWM HYSTERESIS FSM

The LM36923 pwm hysteresis does not affect the sampling of the pwm input. It is used to determing when to update the pwm duty cycle in the event of a change in direction (i.e. ramp up to ramp down).

TEXAS INSTRUMENTS

PWM Hysteresis with PWM input duty cycle ramp up an down

The effects of pwm hysteresis on led current is illustrated using a pwm input with duty cycle modulated using an up/down ramp function.

HYST=001

No change in led current during ramp

HYST=010

Minor change in led current at ramp peaks

HYST=011

Step change due to hysteresis then follow ramp

HYST=100

Step change due to hysteresis then follow ramp

TEXAS INSTRUMENTS