

Analog comparator 0 (AC0)

- 10mV Comparison of Accuracy
- Factory offset calibration
- stand by 3 An outer sheet analog input channel
- stand by ADC Multiplexed inputs (ADMUX)
- Support internal differential amplifier input (DFFO)
- Internal support 8 Place DAC Input (DAO)
- Programmable digital filter output control

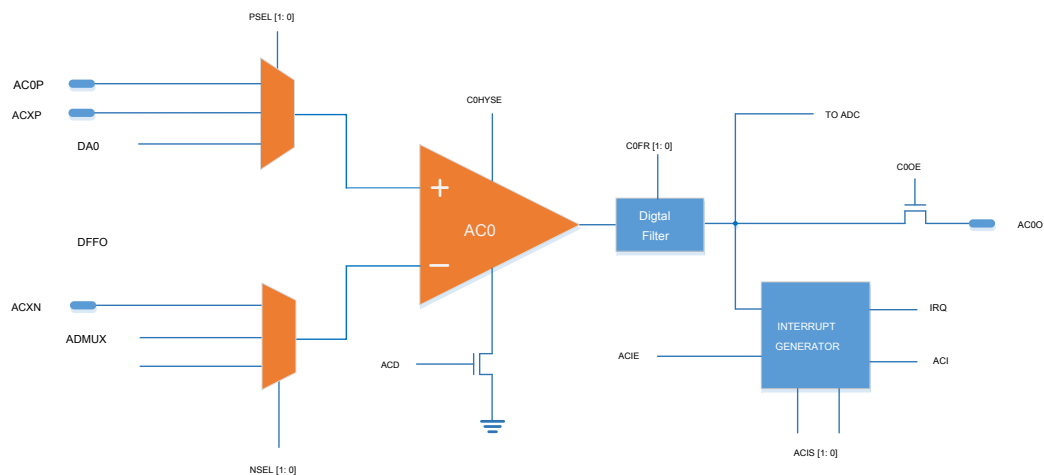
Overview

Analog comparator input terminal of the comparator comparing positive and the negative level, when a positive voltage higher than the negative terminal voltage, the analog output of the comparator ACO It is set. when ACO When the level changes, the edge of a signal can be used to trigger an interrupt. output signal ACO It may also be used to trigger the timer counter 1 Input capture and timer generated PWM Output control.

LGT8FX8P Integrated analog comparator AC0 , Includes an analog multiplexer input selector, a comparator positive and negative terminal of the input source can be selected reference source generated from the various internal or externally from the port. Analog comparator offset calibration support itself, you can ensure the consistency of the comparator work. Comparator supports an optional hardware hysteresis for improving the stability of the comparator output. While the output of the comparator integrates a hardware digital filter can be programmed, depending on the application requirements, select the appropriate filter settings to get a more stable comparison output.

The comparator output states can be read directly by a register, an interrupt request can be generated to achieve a more efficient real-time event capture function. The comparator outputs may be directly output to the outside IO port.

Operational amplifier / analog comparator 0 FIG structure as shown below.



Analog comparator 0 Functional Schematic

Analog input of the comparator

Two input terminals of analog comparator optional support multiple input sources. The positive terminal of the three-way input Optional:

1. Independent external analog input AC0P
2. Analog comparator 0/1 A common analog input ACXP
3. internal 8 Place DAC Output DAO