Input source selected by the control status register C1SR middle C1BG Bits and C1XR Register C1PS0 Joint control bits, in this section refer to the specific register description.

AC1P for AC1 Dedicated mode the positive terminal of the input channel.

ACXP Comparator 0/1 Common positive terminal input. LGT8FX8P Two internal analog comparator, ACXP A comparator connected to both the positive terminal of the multiplexer selector, to facilitate work implement two comparators.

DAO From within 8 Place DAC Output. DAC The reference source can be input from the system power supply, the internal reference or from an external reference. DAC Please refer to the configuration DAC The relevant sections.

C1BG	C1PS0	AC1 Positive input
0	0	AC1P
0	1	ACXP
1	0	DAO
1	1	Closing the positive terminal of the comparator input channel

Negative input may be selected 4 Different types of analog inputs:

1. External analog input AC1N As a AC1 Negative input
2. Comparators 0/1 Public negative input ACXN
3. ADC internal 1/5 As the voltage divider output AC1 The negative input
4. Internal differential amplifier output DFFO As a AC1 The negative input terminal of the comparator the negative input from the channel selected by the ADC Module ADCSRB Register CME11 / 10 Position control. When the negative terminal of the comparator input selector ADC Multiple internal voltage divider output, need ADC Module ADCSRC register

VDS Demultiplexed bits select input reference voltage source.

ACXN Comparator 0/1 Common negative input, comparator facilitate 0/1 The collaborative work;

DFFO Output from the differential amplifier inside. Optional differential amplifier x1 / x8 / x16 / x32 Gain control can be achieved in small signal detection and measurement.

CME11	CME10	AC1 Negative input
0	0	ACXN
0	1	AC1N
1	0	VDO
1	1	DFFO

The comparator output filter

Internal support hysteresis comparator output a controllable electrically. Users can C1XR Register C1HYSE Bit enables the hysteresis circuit. Hysteresis comparator circuit may eliminate the unstable state of the state change process, reaches the output filtering function.

Recommended when using a comparator, the hysteresis circuit is opened, to obtain a stable output of the comparator. As shown below, the hysteresis comparator circuit is located between the analog output and digital output. When the input voltage of the positive terminal of the comparator V_{IN+} more than the($V_{IN-}+V_{H+}$) , The comparator COUT Output is high; and when V_{IN+} Voltage is less than ($V_{IN-}-V_{H-}$) , The comparator output is low. A hysteresis circuit to avoid jitter when the comparator positive voltage close to the negative voltage terminal, the circuit itself is brought.

Comparator Hysteresis comparator output diagram: