Asy_clk

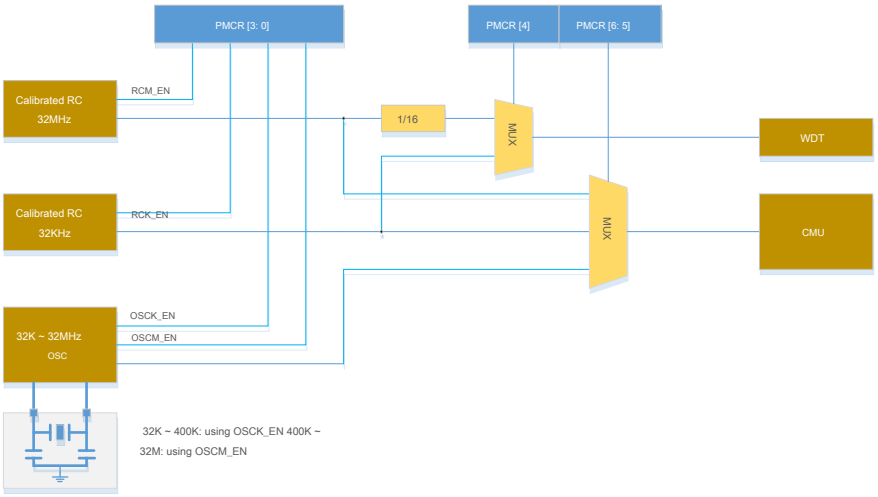
Asynchronous timer clock. Timer / counters can be used as an external clock or crystal oscillator (32.768K) drive. This independent clock mode, the system can handle the sleep mode, the timer keeps running.

WDT_clk

Internal watchdog timer clock source, may be configured to select the internal 32KHz LFRC Oscillator, or from within 32MHz HFRC of 16 Divider (2MHz). After the system, watchdog default clock source 32KHz LFRC Oscillator.

Clock source selection

LGT8FX8P stand by 4 Input clock sources, the user can PMCR Register achieve clock source can be controlled, and to complete the handover of the master clock. Here is PMCR FIG control structure:



LGT8FX8P internal OSC The oscillator can operate at high frequency and low frequency modes, the user needs to control the actual size of the interior of the external oscillator OSC Oscillator operates in the correct mode. The same internal RC Oscillator is also divided into two kinds of high and low frequencies. PMCR Lowest register 4 Four bits for controlling the clock source. Control relationship is as follows:

PMCR	Of the clock source
PMCR [0]	32MHz RC Enable control, 1 Enable, 0 shut down
PMCR [1]	32KHz RC Enable control, 1 Enable, 0 shut down
PMCR [2]	400K ~ 32MHz OSC Mode is enabled, 1 Enable, 0 shut down
PMCR [3]	32K ~ 400K OSC Mode is enabled, 1 Enable, 0 shut down

LGT8FX8P After the power system, is used by default 32MHz RC As the system clock source, clock source core at 8 Divider (4MHz) . Users can set PMCR And a system register prescaler register (CLKPR) Change the default configuration.

If the user needs to change the primary clock source configured, ensure that the clock before switching after switching the clock source in a stable operation state. It is necessary prior to switching the master clock source, by PMCR [3: 0] Enabling the desired clock source, and to wait until after a stable clock switching.

When the user switches to an external master clock oscillator, although the user is enabled external crystal, but does not rule configuration errors or due to failure of the crystal oscillator can not cause vibrating. If the switching to the external crystal at this point, the system will stop working after the handover. Therefore, in view of the reliability of the system, it is recommended to open the watchdog timer to prevent such problems from the perspective of software design.