

# Analog IP

## 32kHz Xtal Oscillator

### Overview

This IP is Xtal Oscillator for 32kHz clock generation.

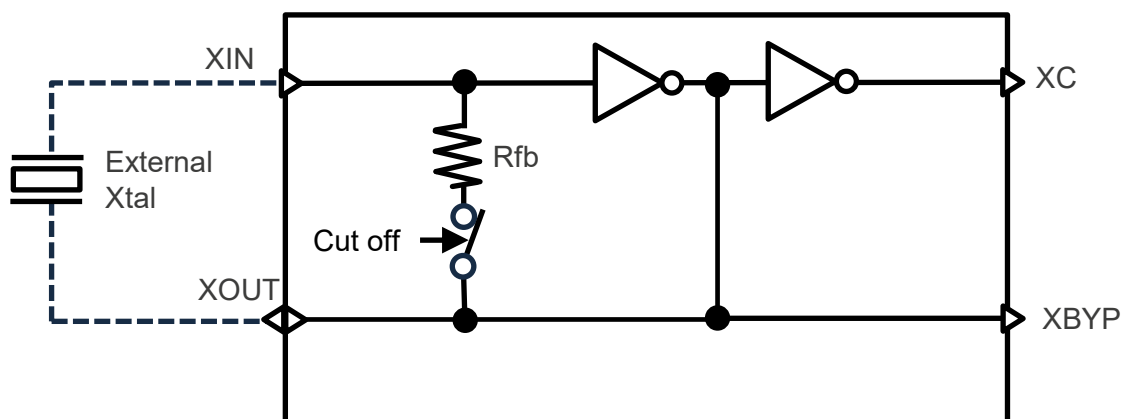
### Technology

Process: TSMC T22ULP

### Features

- 32.768kHz, clock generation with crystal resonator
- External clock input mode(XOUT→XBYP) is supported
- Not include the clock noise filter
- Power-down mode is supported
- Include the feedback resistor(Rfb)
- Rfb can be cut off.
- Not include the dumping resistor(Rd) and the internal cap
- Supply Voltage
  - Analog: 1.60 - 1.98 [V]
- $C_L$  of the external Xtal: 4 - 12.5[pF]

### Block diagram



CTPD-24-142  
R06PF0058EJ0101