

## UPOR-3303-130

### 0.13 $\mu$ m 3.3V/1.2V Power On Reset Circuit (Type III)

#### Features

- ◆ No external components required
- ◆ With accurate power-good ( $V_{TH}$ ) and power-fail ( $V_{TL}$ ) detection
- ◆ Active-low reset signal (RSN)
- ◆ Manual reset input (RSNI)
- ◆ Detect both 3.3V and 1.2V supply
- ◆ Low quiescent current (Typical < 1 $\mu$ A) after re-setting
- ◆ Competed cell size

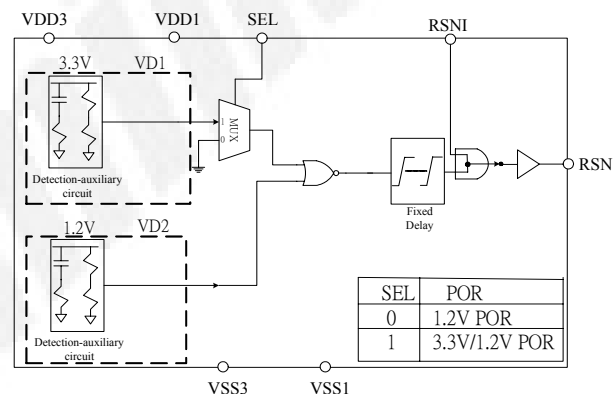
#### Applications

- Microprocessor reset
- Digital circuit reset

#### Overview

UPOR-3303-130 is a power-on-reset (POR) circuit designed for microprocessor( $\mu$ P) and other logic systems to monitor the 3.3V and 1.2V supply voltage or just 1.2V supply only. The POR circuit detects the power-good and power-fail conditions of the supply voltage and then issues a reset signal (RSN) to reset the digital core circuits after a fixed delay.

#### Block Diagram



### Global Unichip Corp.

TEL: +886-3-5646600      <http://www.globalunichip.com>  
 FAX: +886-3-5646000      e-mail: [info@globalunichip.com](mailto:info@globalunichip.com)  
 No. 10, Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu City 300, Taiwan

## **Description**

The UPOR-3303-130 is a 3.3V/1.2VPOR circuit featuring a level-trigger reset signal (RSN) after a delay time when both 3.3V and 1.2V supply voltage higher than the high threshold voltage. In addition, another optional input pin (RSNI) with an internal pull-up resistor topology is reserved for external reset sources. The UPOR-3303-130 is fabricated in TSMC 1P6M 0.13 $\mu$ m 3.3V/1.2V salicide CMOS logic process. The test chip of UPOR-3303-130 is available in a 48-lead LQFP package. Also an evaluation board is available with the test chip.

## **Deliverables**

- Comprehensive document set
- Hard macro
- Synopsys™ synthesis model
- Verilog model
- TLF model
- LEF model
- Test chip
- Evaluation board

### ***Global Unichip Corp.***

TEL: +886-3-5646600      <http://www.globalunichip.com>

FAX: +886-3-5646000      e-mail: [info@globalunichip.com](mailto:info@globalunichip.com)

No. 10, Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu City 300, Taiwan