

# Microprocessor Reset IC

## Features

- Power-On Reset Generator With Fixed Delay Time of 200ms
- Manual Reset Input
- Push-Pull  $\overline{\text{RESET}}$  and RESET Output
- Supply Voltage Supervision Range 2.5V, 3V, 3.3V, 5V
- Supply Current of 10 $\mu$ A at  $V_{CC}=3.3V$
- SOT-23-5 Package

## Applications

- Critical  $\mu$ P and  $\mu$ C Power Monitoring
- Industrial Equipment
- Programmable Controls
- Automotive Systems
- Portable/Battery-Powered Equipment
- Intelligent Instruments
- Wireless Communications Systems
- Notebook/Desktop Computers

## General Description

The G663 provide circuits initialization and timing supervision, primarily for DSP and processor-based systems. During power-on,  $\overline{\text{RESET}}$  (RESET) is asserted when supply voltage  $V_{CC}$  becomes higher than 1.1 V. Thereafter, the supply voltage supervisor monitors  $V_{CC}$  and keeps  $\overline{\text{RESET}}$  (RESET) active as long as  $V_{CC}$  remains below the threshold voltage  $V_{IT+}$ <sup>(1)</sup>.

An internal timer delays the return of the output to the inactive state to ensure proper system reset. The delay time,  $t_d$ , starts after  $V_{CC}$  has risen above the threshold voltage  $V_{IT+}$ . When the supply voltage drops below the threshold voltage  $V_{IT-}$ <sup>(2)</sup>, the outputs becomes active again. No external components are required. All the devices have a fixed-sense threshold voltage  $V_{IT-}$  set by an internal voltage divider.

The G663 incorporate a manual reset input  $\overline{\text{MR}}$ . A low level at  $\overline{\text{MR}}$  causes  $\overline{\text{RESET}}$  (RESET) to become active. The product spectrum is designed for supply voltages of 2.5V, 3V, 3.3V, and 5V. The circuits are available in a SOT-23-5 package.

Note:

- (1)  $V_{IT+}$  means the reset voltage of  $V_{CC}$  from low to high  
 (2)  $V_{IT-}$  means the reset voltage of  $V_{CC}$  from high to low.

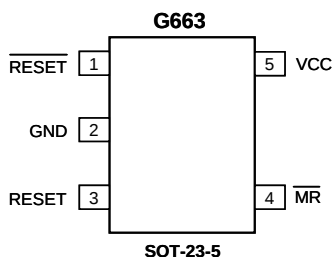
## Ordering Information

| ORDER NUMBER | RESET THRESHOLD (V) | MARKING | OUTPUT TYPE                                 | TEMP. RANGE   | PACKAGE (Green) |
|--------------|---------------------|---------|---------------------------------------------|---------------|-----------------|
| G663-225T11U | 2.25                | 663Ax   | Push-Pull $\overline{\text{RESET}}$ & RESET | -40°C ~ +85°C | SOT-23-5        |
| G663-263T11U | 2.63                | 663Bx   | Push-Pull $\overline{\text{RESET}}$ & RESET | -40°C ~ +85°C | SOT-23-5        |
| G663-293T11U | 2.93                | 663Cx   | Push-Pull $\overline{\text{RESET}}$ & RESET | -40°C ~ +85°C | SOT-23-5        |
| G663-455T11U | 4.55                | 663Dx   | Push-Pull $\overline{\text{RESET}}$ & RESET | -40°C ~ +85°C | SOT-23-5        |

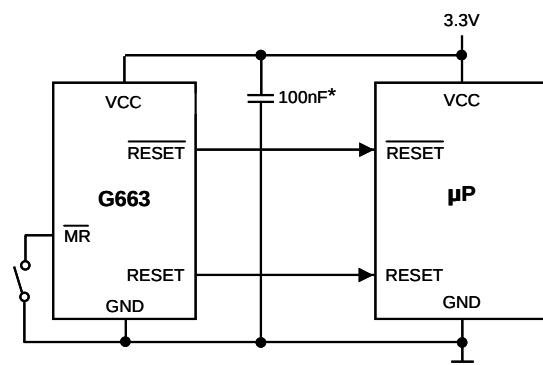
Note: T1: SOT-23-5

1: Bonding Code  
 U: Tape & Reel

## Pin Configuration



## Typical Application Circuit



\* The bypass capacitor should be mounted as close as possible to  $V_{CC}$ .

ICC may increased at high  $T_A$ . Therefore, can not connect Resistors to  $V_{CC}$  to prevent  $I_{CC}$  abnormal behavior at high  $T_A$ .