

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 μ A at $V_{CC}=3.3V$
- SOT-23-5 Package

Applications

- Critical μ P and μ 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 $V_{IT+}^{(1)}$.

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 $V_{IT-}^{(2)}$, 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

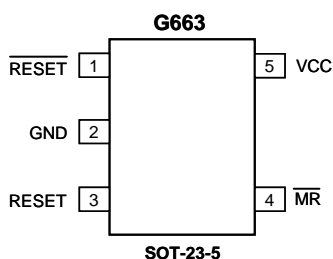
| ORDER NUMBER | RESET THRESHOLD (V) | MARKING | OUTPUT TYPE | TEMP. RANGE | PACKAGE (Green) |
|--------------|---------------------|---------|---|---------------|-----------------|
| G663-225T11U | 2.25 | 663Ax | Push-Pull $\overline{\text{RESET}}$ & RESET | -40°C ~ +85°C | SOT-23-5 |
| G663-263T11U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

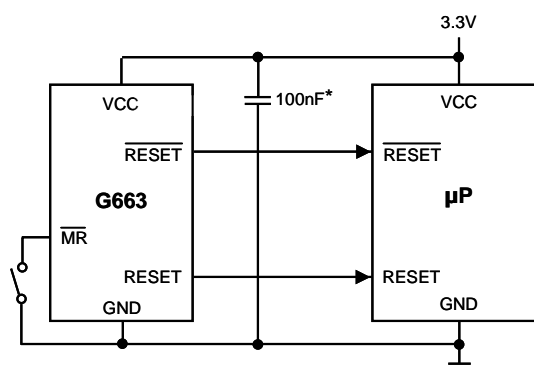
1: Bonding Code

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 .