

## Description

SY5701 has the characteristics of small size, low  $R_{ON}$ , ultra-low power, quick-start load switch and output current up to 1A.

SY5701 has an on-impedance of  $60m\Omega$  and operates between 1.1V and 5.5V. When the EN pin level is greater than 1V, the chip can work normally, so SY5701 supports 1.2V I/O control applications. There is an intelligent pull-down resistance inside the EN pin. When the EN level is low, the  $500k\Omega$  ground resistance is used inside to ensure the EN pin status. When the EN pin is high, the pull-down resistance is disconnected to ensure low power.

SY5701 has start speed control which suppresses surge current for quick start. The output turn-on time is 100us in typical applications. SY5701 package is DFN1\*1-4 and FOCSP-4.

## Applications

- ◆ Smartphones, mobile phones
- ◆ Smartwatches
- ◆ Headsets
- ◆ Electronic cigarette
- ◆ Smart bracelets

## Features

- ◆ Input voltage range: 1.1V-5.5V
- ◆ Low Ron resistance
  - $R_{ON}=55m\Omega$  at  $V_{IN}=5.5V$
  - $R_{ON}=60m\Omega$  at  $V_{IN}=5V$
  - $R_{ON}=75m\Omega$  at  $V_{IN}=3.3V$
  - $R_{ON}=80m\Omega$  at  $V_{IN}=2.5V$
  - $R_{ON}=135m\Omega$  at  $V_{IN}=1.8V$
  - $R_{ON}=270m\Omega$  at  $V_{IN}=1.2V$
  - $R_{ON}=350m\Omega$  at  $V_{IN}=1.1V$
- ◆ Maximum output current: 1A
- ◆ IQ: 15nA/ SD: 10nA
- ◆ 100us turn-on speed
- ◆ Quick output discharge (QOD)
- ◆ Soft-start to prevent surge currents
- ◆ Intelligent pull-down resistor in the EN pin
- ◆ Package: FOCSP-4-0.76mm\*0.76mm and DFN-1x1-4L

## Typical Application Circuit

