

General Description

SY6121 is an iPhone Lightning data line control IC with high speed, ultra-low power loss and high noise resistance, and supports charging and data transmission of Apple devices. It has high integration, few peripheral components, simple circuit, and high stability and compatibility. The original application solution can be applied to Micro USB & Lightning 2-in-1 data cable. The device and its external MOS remain within a safe range even if Micro USB uses QC or other quick charge protocols and thus generates high voltage higher than 9V.

SY6121 is available in a SOT23-6 package.

Applications

- ◆ Apple 8-pin Lightning cables, chargers or adapters
- ◆ Micro USB & Lightning 2-in-1 data cables
- ◆ iPhone power bank and Battery Pack

Features

- ◆ Ultra-low quiescent standby current (<2uA)
- ◆ Ultra-wide operating voltage range (1.5 V ~ 6.5 V)
- ◆ Short-circuit protection
- ◆ Charge: 0%-100%
- ◆ Complete data transmission process without disconnections or unsupported transmissions
- ◆ Compatibility with all current iOS versions
- ◆ Accessories support:
 - (1) Mobile phones (iPhone5, iPhone5S, iPhone5C, iPhone6, iPhone6 Plus, iPhone6S, iPhone6S Plus, iPhone7, iPhone7 Plus)
 - (2) Tablet PCs (iPad4, iPad Air, iPad Air2, iPad Air3, iPad Pro, iPad mini, iPad mini2, iPad mini3, iPad mini4, etc.)
 - (3) Players (iPod touch 5, iPod touch 6, iPod Nano 7, etc.)

Typical Application Circuit

