

# MA5887

## USB Fast Charging Controller

### Description

With Smartphone and Tab become the mainstream portable mobile devices, the demand for a universal charging (fast charging) to various mobile devices increase dramatically.

The MA5887 is a USB fast-charging controller which complies with USB Battery Charging Specification (BC) version 1.2, which allows charging device to draw a current similar to using the original wall-charger. Normally, a USB wall-charger provides unified charging mechanism by traditional USB current supply (0.5A) when charging devices through USB ports. With a USB enabled wall-charger

which complies with USB BC, it provides unified charging mechanism by more USB current supply (up to 1.5A) when charging devices through USB ports, so called "fast-charging" mechanism. In another word, MA5887 is a high performance solution for "fast-charging" mechanism and speed up charging time much.

MA5887 embedded automatic charger detection circuit which complies with USB Battery Charging Specification (BC) version 1.2, and Apple/Samsung Tab resistor mode. This feature implies MA5887 supports wide range of Smartphone/Tabs for fast charging and provides design flexibility for system manufactures.

The MA5887 is designed for all charger products with USB interface, which provides the package of SOT23-5 for single USB port support.

### Features

- Support USB Battery Charging Specification 1.2 (BC1.2 Charging Spec)
- Support Apple® Devices fast charging. (Selectable Apple® 1A / 2.4A mode)
- Support Samsung Galaxy Tab Devices Charging (2.1A mode)
- Support Chinese Telecommunications Industry Standard YD/T 1591-2009
- Automatic charging detection circuit for Apple, Samsung, and BC compliant devices
- Ultra low power consumption
- MCU base design for fast technical support
- Available in SOT23-5 package for MA5887 (single USB port)
- Available in SOT23-6 package for MA5889 (dual USB port)

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**Application:**

- ✓ USB universal wall-charger
- ✓ USB universal car-charger
- ✓ Travel adapter
- ✓ Power bank supply

**Package**

SOT23-5

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