Overview
The MC13883 is a monolithic integration of a Lithium Ion battery charger with CEA-936 carkit interfacing support and a USB On-the-Go (OTG) transceiver.

Applications
> Cellular handsets for GSM, CDMA, TDMA, iDEN or 3G networks
> PDAs, palmtop computers
> Two-way radios
> Compressed audio players, such as MP3 players
> Digital cameras or camcorders
> Portable DVD players
> Intelligent toys
> Other audio products needing to interface with the CEA-936 carkit support
> Other portable handheld devices

Key Benefits
> Consolidates charger and USB transceiver interfaces for component reduction and area savings
> CEA-936 carkit support; allows cost-effective product compatibility with the new interface standard
> CEA-936 carkit capable for communication, audio port multiplexing, and battery charging through a shared mini-USB interface
> Modular feature set facilitates ease of system integration
> The MC13883 IC is a protocol independent drop-in replacement that can supplement existing lineups for part/cost reduction in support of the emerging CEA-936 carkit standard
Key Features

> Lithium ion battery charging through a USB connector
> Multiple charger modes and configurations supported
> Overvoltage protection for shielding products from faulty (high-voltage) charging sources
> Trickle pre-charge of deeply discharged batteries
> Reverse path capability allows power to be sourced to the VBUS pin from the battery; can be used to support phone-powered devices through the USB connector
> Charge indicator LED driver
> USB 2.0 OTG transceiver with regulated supplies, ID detection and interrupt generation
> Communication and audio control follows the protocol defined by CEA-936 carkit specification
> Serial peripheral interface (SPI) and inter-integrated circuit (I2C) support for flexible processor interfacing and system integration
> 40-pin QFN package; 6 mm x 6 mm

Learn More: For more information about Freescale products, please visit www.freescale.com/wireless.