Battery Authentication ICs Provide Device Security

Intersil introduced flexible battery authentication ICs for cell phones. The ISL9206 and ISL9206A incorporate the company's FlexiHash+ engine. It provides high levels of security using a basic challenge/response scheme based on 32-bit challenge code and 8-bit response code. The engine employs two sets of 32-bit secrets for generating authentication code to offer tens of billions of potential configurations for users. And with 16x8 one-time programmable (OTP) ROM, the devices can store a total of three sets of these 32-bit secrets. Programmable memory adds the ability to store up to 48 bits of ID code and/or pack information. The result is a secure and flexible battery/device authentication that makes hacking prohibitively difficult due to the exhaustive key search that would be needed to break a code. The ISL9206/06A each have an operating voltage range from 2.6V to 4.8V and can be powered directly from a one-cell li-Ion/li-Polymer or a three-cell series NiMH battery pack. The devices can also be powered by the XSD bus when the bus pull-up voltage is 3.3V or higher. They connect to the cell terminals of a battery pack and include an on-chip voltage regulation circuit, POR and a non-crystal based oscillator for bus timing reference. Both new authentication ICs also include a clone prevention feature offering safety and revenue protection suitable for protection against after-market replacements. As an added feature, the ISL9206 incorporates multi-pass authentication that can be used to maximize security. Both devices are also suitable for a variety of printer cartridges.

Intersil
888-468-3774, www.intersil.com [1]

Source URL (retrieved on *09/22/2014 - 2:14am*):
http://www.ecnmag.com/product-releases/2008/03/battery-authentication-ics-provide-device-security?qt-recent_content=0

Links:
[1] http://www.intersil.com/