

BQ26150 – Battery Pack Security & Authentication Device

One Page Overview

Product Description:

The bq26150 provides a method to authenticate battery packs, ensuring that only packs manufactured by authorized sub-contractors are used in the end application. The bq26150 uses a 96-bit unique device ID, device unique 16-bit seed, and a 16-bit device specific CRC to provide security. The device ID, CRC seed, and CRC polynomial coefficients are stored securely in each bq26150 device, allowing the host to authenticate each pack.

Key Parameters:

- Provides Battery Pack Authentication Through a Programmable CRC with 96-bit Unique Device ID
- 16 Bytes of User-Programmable Nonvolatile Memory
- 12.5 KV IEC ESD Protection on HDQ Input
- Internal Time-Base Eliminates External Crystal Oscillator
- Low Operating Power: <30 μ A

Nano-Evaluation Module Description:

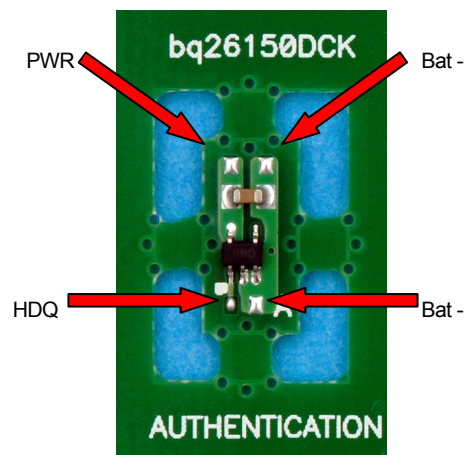
The bq26150 NanoEVM included within this kit can easily be broken out of the main NanoEVM PCB and have been made as small as possible to be soldered onto a customer's board for evaluation of the device in the system. It contains all the external components needed for correct operation. For full evaluation, please request a standard size EVM (bq26150EVM-001).

Nano-Evaluation Module Board Use:

Before you connect the Nano-EVM to a power supply, please check the picture below to ensure correct electrical connections.

Please note following important device limitations:

- Recommended Pull-Up Voltage on the HDQ line: between 2.5V and 5V
- Requires 5k Ω pull-up resistor on HDQ line



BQ26150 NanoEVM – (PR581)

The Nano EVM is not designed to test the full functionality of the device. For further product information including the board schematics, BOM and the link to the product folder, please visit the following web site: www.ti.com/analogportable

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