bq27520-G2 to bq27520-G3 CHANGE LIST

Battery Management

ABSTRACT

This document describes the change made from bq27520-G2 to bq27520-G3. The latest ordering information and data sheet is available on the TI Web site.

NOTE
bq27520-G2 uses FW version 3.11 and the bq27520-G3 uses FW version 3.24

1. INTRODUCTION

bq27520-G3 firmware version 3.24 has been released to enable several feature additions and performance improvements. The following new orderable part numbers have been released which ship pre-programmed with this new version of firmware:

- bq27520YZFR-G3
- bq27520YZFT-G3

The latest version of the evaluation software is required to be able to read and write all the data flash configuration locations. The necessary evaluation software and the corresponding v3.24 SENC file can be downloaded from the [bq27520-G3 product folder](#) on ti.com. Existing bq27520 (including EVMs) can be upgraded to the latest firmware version by following the instructions in application note [SLUA453A](#).

Note: If a golden image created for another version of bq27520 is loaded into an IC running firmware version 3.24, the IC will become non-functional and must be replaced. Ensure all instructions in SLUA453A are followed if upgrading ICs or converting a production line to bq27520-G3. The best practice is to generate a new golden image (DFI file) for bq27520-G3.

2. CHANGE DETAILS

Table 1. Change Details

CHANGE	bq27520-G2	bq27520-G3	Comments
Add capability for host to manually write Temperature to gauge.	Support external thermistor or internal sensor function.	Support external thermistor, internal sensor or host temperature write function. Added *WRTEMP* bit to *Operation Configuration B* register in dataflash.	New feature
Make gauging simulations more robust.	*StateOfCharge()* computations can cause gauge watchdog reset during worst case stress conditions.	Update *StateOfCharge()* computations to prevent gauge watchdog reset during worst case stress conditions.	Improvement

IMPORTANT NOTICE