Application Report
June 2012

Going to Production with the bq34z100

Writing the DFI at Production

System designers must ensure that there is access to the I^2C lines of the bq34z100 and battery power access at the time of writing the DFI in production. It is expected that the OEMs add the Write DFI step within their final complete system test that verifies the product to be functional for release to market. The flowchart in Figure 1 shows the steps that must be followed to write the DFI created with bqEVSW. System test developers can use the flowchart to call I^2C commands with their test setup and program all the flash of the bq34z100 embedded in the application system.

The last step of the bq34z100 configuration at production is to give the RESET (0x0041), IT ENABLE (0x0021), and SEALED (0x0020) commands. These commands are given by writing the corresponding two-byte data value into the CONTROL register (command 0x00/0x01) using I^2C.

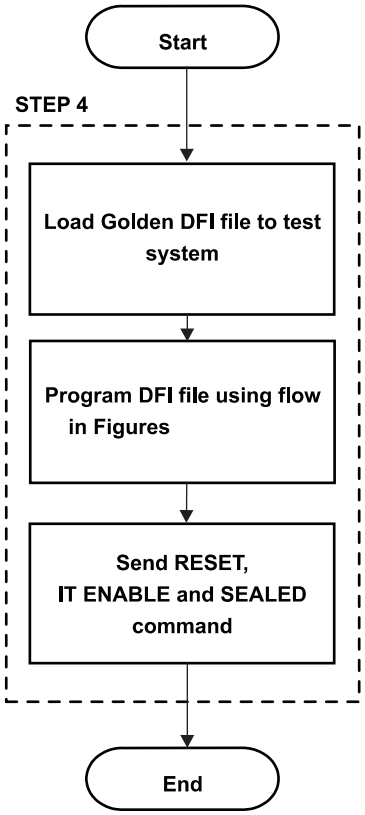

Figure 1. bq34z100 Production Flow

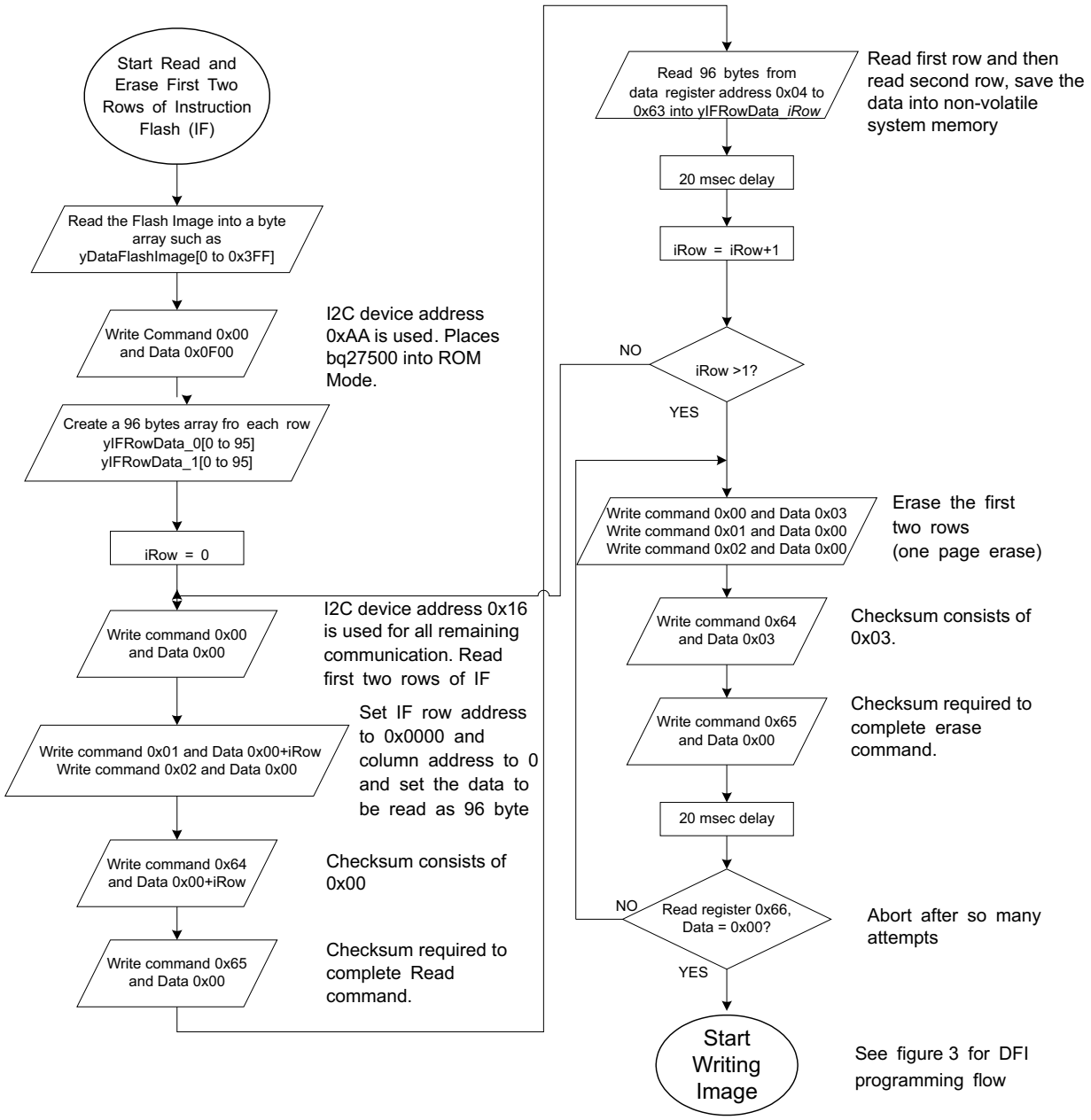

Figure 2. Instruction Flash First Two Row Record and Erase Flow

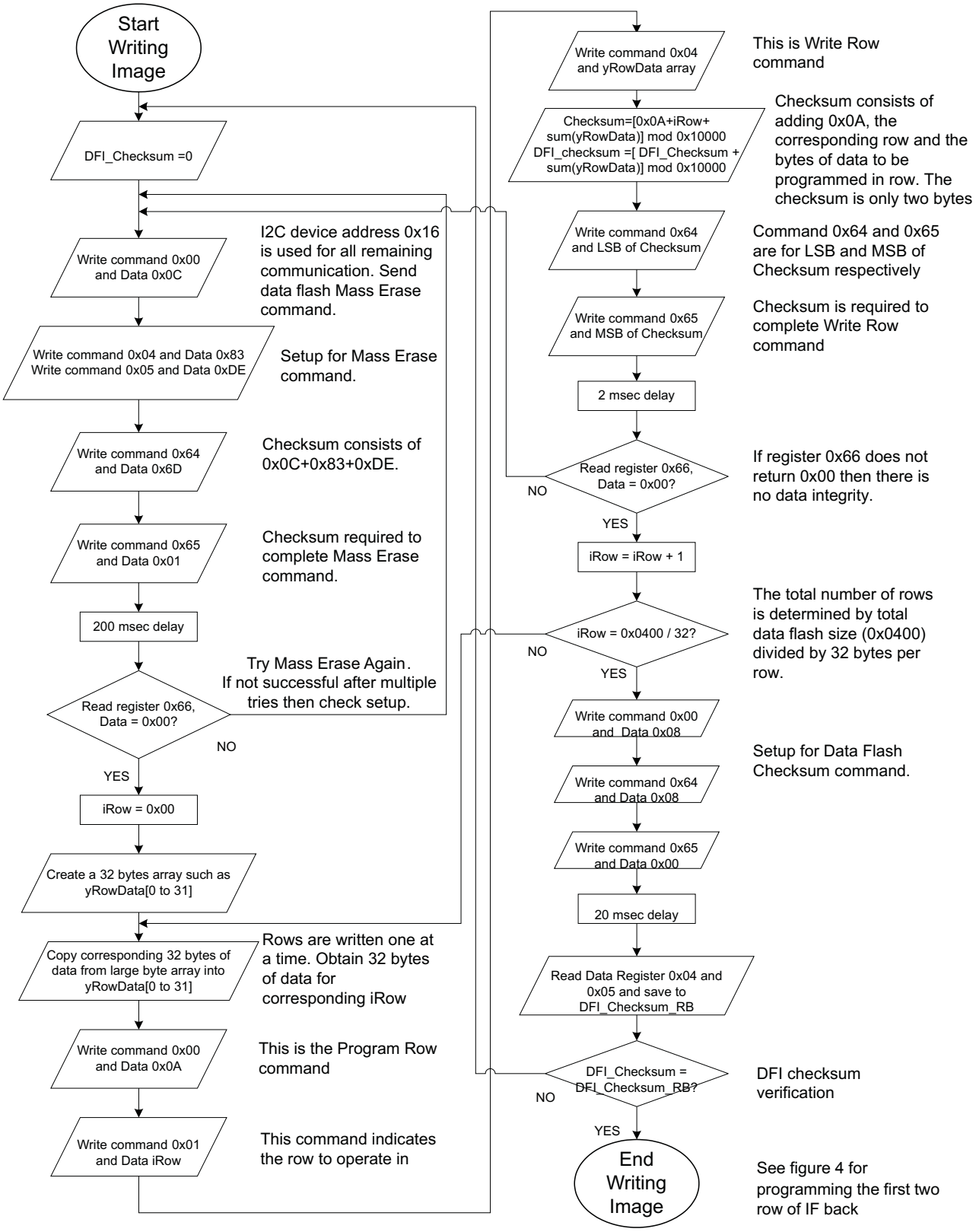

Figure 3. DFI Write Flow

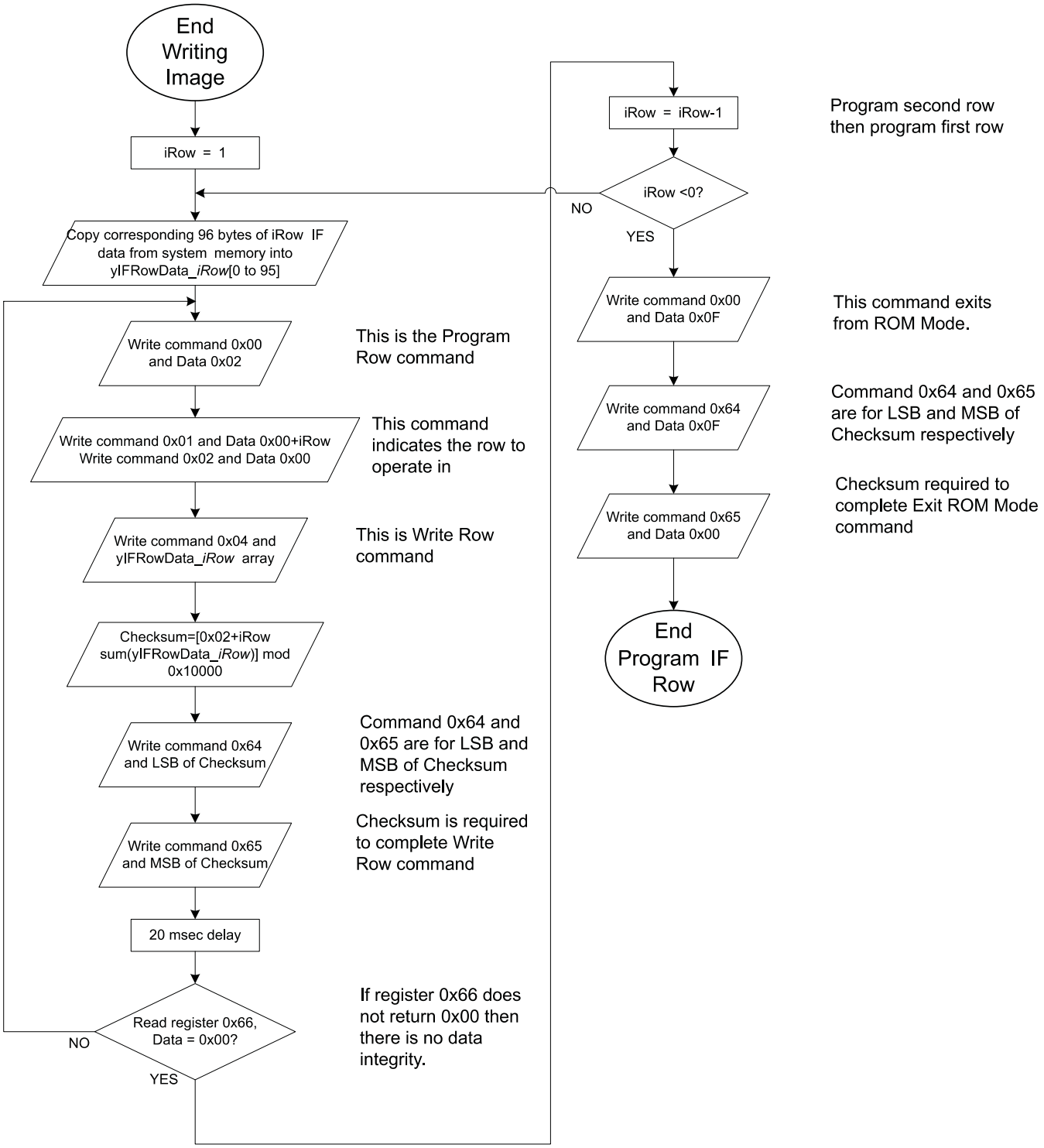

Figure 4. Instruction Flash First Two Row Reprogram Flow

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