The way to identify between old chip and new chip is as follows, using bqStudio:

1.       Go to Advanced Comm I2C screen in bqStudio

2.       Put the part in ROM mode by sending 0x00 0F to register 0x00.

3.       Switch the communication to SMBus and restart bqStudio, and select a part like bq40z50 which uses SMBus.

4.       Go to Advanced Comm SMB screen and Read Word 0xD.

5.       If the read result is 0x9100 then it is 9002A1 (old), if the read result is 9101 then it is 9002A2 (new)