

Subject : Step by Step to flash the BIOS file on ECM-QB by SF100

Document No: S12010

Date: 2012/07/17

Model Name. ECM-QB

AE :

Purpose :

You will know how to program BIOS file on ECM-QB in this document

Problem Description :

For some reason the BIOS may crash after BIOS modified or BIOS update. Since the BIOS program is stored in SPI flash memory chip and can't just be erased by clear CMOS only, re-program the BIOS file is necessary.

Test Environment :

- 1, Desktop computer with XP professional
- 2, DediProg SF100 in-Circuit-Programming Tools
(<http://www.dediprog.com/SPI-flash-in-circuit-programming/SF100>)



- 3, USB cable (part number: E1706200151R) in ECM-QB cable kit.



Procedure and Results:

- 1, in the desktop, install the driver and tool of SF100 in windows XP.

A, install driver

Plug SF100 to your desktop, the device will be detected automatically. Please point the driver to folder named "WinUSBDriver" in the DVDROM when it asks for device driver.



B, install software

Install the software named "SF5.3.2.09.msi" in the root folder of DVDROM. It will create four shortcuts on the desktop.

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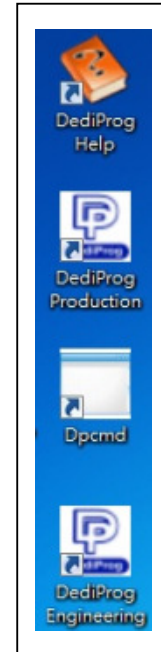
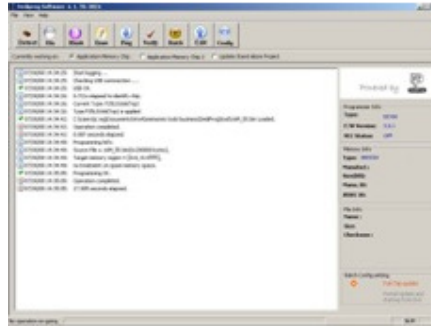
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2, connect ECM-QB to SF100.

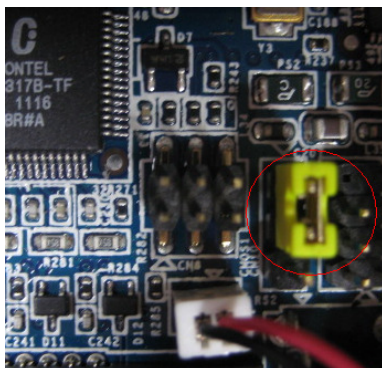
A, SF100 side

Cable pin1 should be plug to VCC(0-3.3V)



B, ECM-QB

In order to plug the cable (part number: E1706200151R) to ECM-QB, please remove the jumper on **CMOS1**



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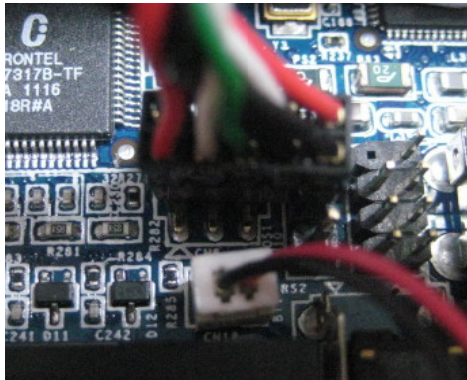
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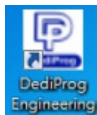
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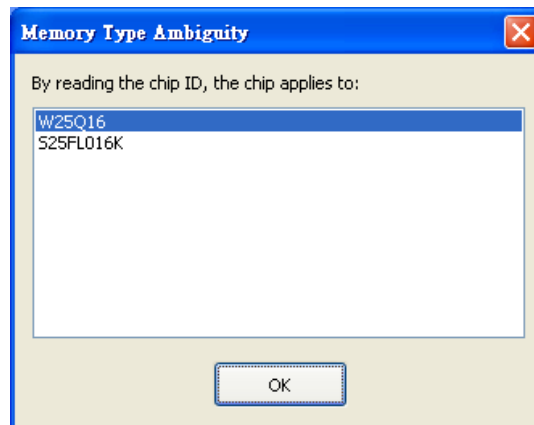
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Then plug the cable to SPI connector (CN8)



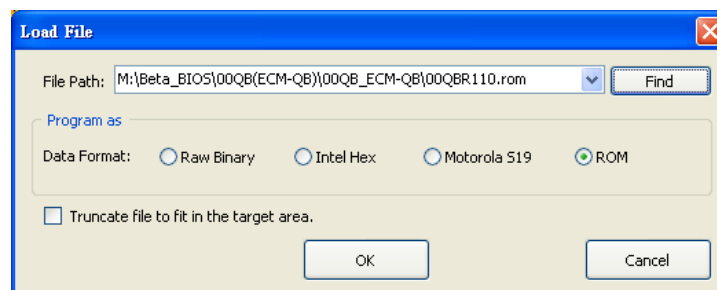
3, double click  to run the flash tool.

A, it detect Chipset ID automatically. Please choose “**W25Q16**”



B, press **Erase** to erase BIOS file in the flash chip

C, press **File** to location the BIOS file you want to program



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D, press **Prog** to program BIOS file to flash chip, it will show you message when it programs OK.

- 2012-Mar-30 17:52:50: Spare Memory Region: leave as being erased.
- 2012-Mar-30 17:52:50: Truncate-File-To-Fit-Memory Disabled.
- 2012-Mar-30 17:52:58: Programming OK.
- 2012-Mar-30 17:52:58: Operation completed.
- 2012-Mar-30 17:52:58: 7.843 seconds elapsed.

Conclusion :

After re-program the SPI Flash chip with latest BIOS file, please disconnect the program cable on the ECM-QB. And put the jumper back to **CMOS1** 1-2 closed.

Try to power on ECM-QB.

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