

BIOS (Version: F3) Update Instruction for the Vig850G Motherboard PMPGG850- VIG850G

BIOS version: **F3**

Build date: **03/03/2017**

ME Firmware Version: **11.6.13.1212**

Release Notes:

New BIOS Version “F3” is being introduced to support 7th Gen Processor. New BIOS version require Management Engine Firmware update if the system is configured with ME firmware **11.0.x.xxxx** then ME firmware need to be updated to **11.6.13.1212** along with BIOS file. Figure 1 shows how to identify the ME firmware in BIOS. To check the ME firmware:

1. “Press key to enter setup”

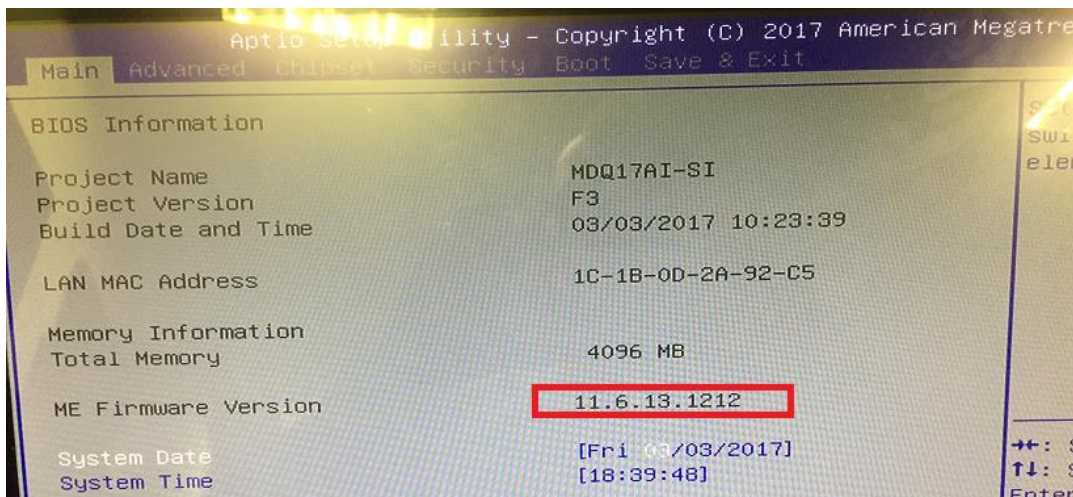


Figure 1 – ME Firmware details

Below lists methods of updating BIOS to the latest Viglen approved version. The number of options made available for any particular board may vary depending on BIOS Support, drive support and BIOS update file size. You only need to use one.

UPDATE ME firmware and BIOS file

- **UEFI Built-in EFI Shell** – Use this method to Update ME Firmware and BIOS
- **DOS-flash_BIOS_ME** – Update ME firmware and BIOS file.

UPDATE BIOS file only

- **DOS -flash_BIOS**– Update BIOS only, use this method if the board is configured with 11.6.13.1212

- Before initiating a BIOS update, be sure to read and precisely follow the instructions included in this document.
- If a BIOS update process is interrupted or the incorrect BIOS is flashed, your system may not function properly and can possibly damage the motherboard.
- Before updating the BIOS on the Viglen Desktop Board, manually record all BIOS settings that have been changed (from default) so they can be restored after completing the BIOS update

UEFI Built-in EFI Shell – Use this method to Update ME Firmware and BIOS

Before Updating the BIOS:

Before carrying out BIOS, update 'ME FW Image Re-Flash' need to be **enabled** in BIOS.

ME FW Image Re-Flash – 'Enabled'

To enable **ME FW Image Re-flash setting in BIOS** following steps need be carried out.

1. To Access the BIOS Setup utility, Press key to enter BIOS setup screen.



“Press key to enter setup, F12 Display Boot Menu”

2. Navigate to the the 'SAVE & EXIT' option.
3. Select '**FW Image Re-Flash**' and change the settings to '**Enabled**'
4. Press **F4** to Save and Exit.

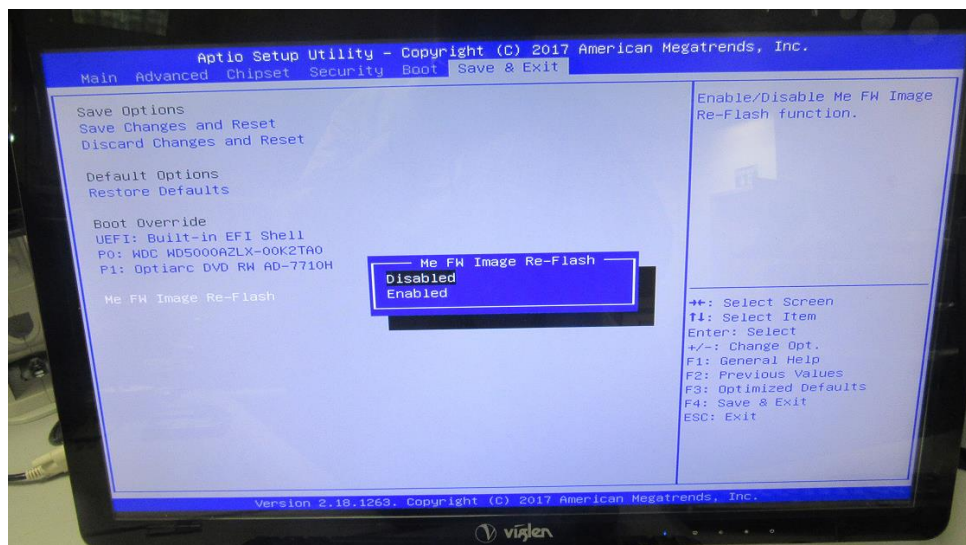


Figure 2 – ME FW Image RE-Flash setting.

UEFI Built-in EFI Shell

1. Save zipped file (DOS_BIOS_Viglen_F3.zip) a temporary directory.
2. Extract the necessary files.
3. Copy the contents of the file to an external USB key.
4. Boot the target PC with the device connected or inserted.
5. Press key to Enter BIOS setup
6. Select '**Save & Exit**'
7. Navigate to the settings '**ME FW Image RE-Flash**'
8. Change the settings to '**Enabled**'
9. Press F4 to Save and Exit, system will reboot.
10. On POST screen Press F12 for Boot menu
11. Select UEFI: Built-in EFI Shell and press enter.

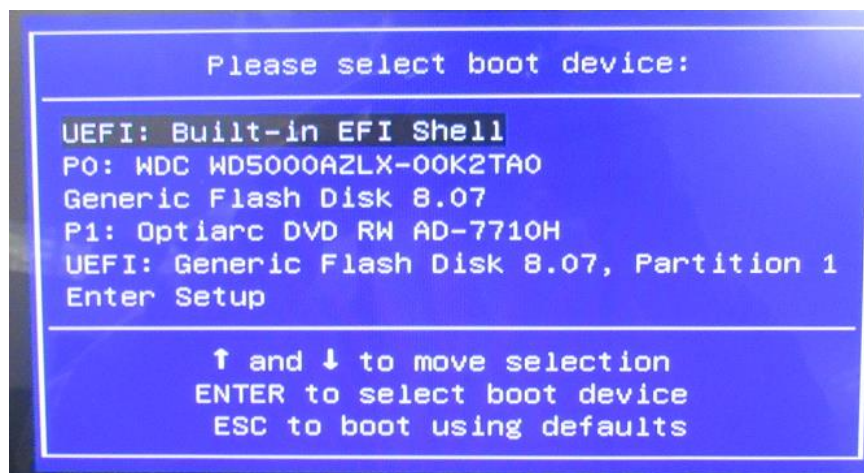
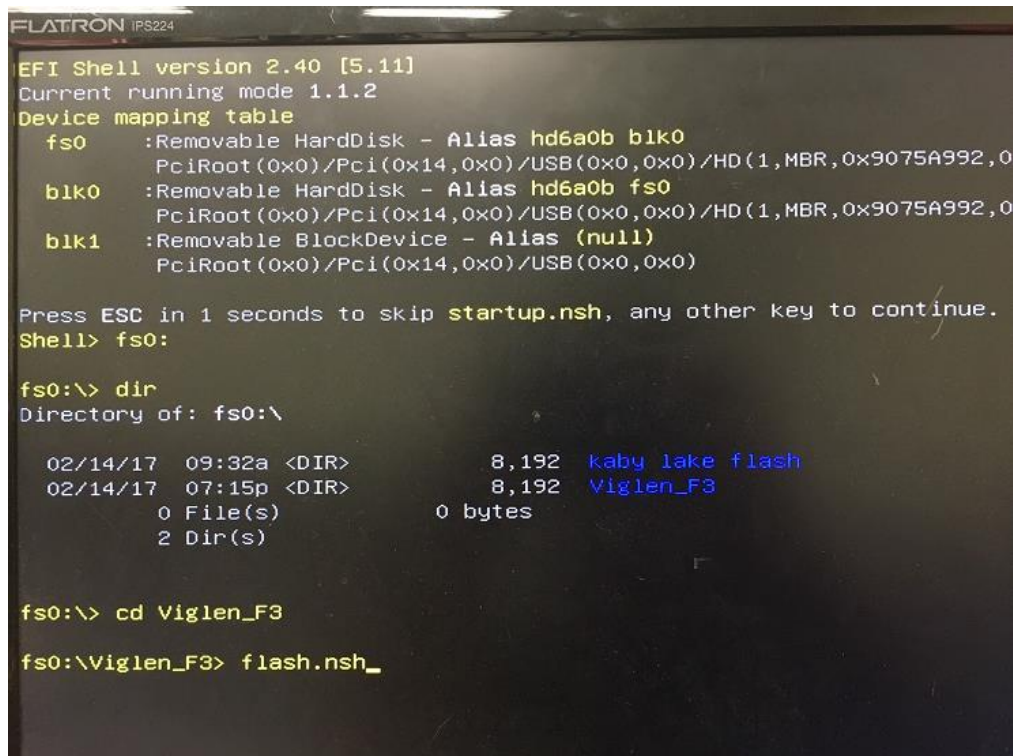


Figure 3 - Boot menu

12. Type `flash.nsh` to flash BIOS and ME firmware.



```
FLATRON IPS224
EFI Shell version 2.40 [5.11]
Current running mode 1.1.2
Device mapping table
fs0      :Removable HardDisk - Alias hd6a0b blk0
         :PciRoot(0x0)/Pci(0x14,0x0)/USB(0x0,0x0)/HD(1,MBR,0x9075A992,0
blk0     :Removable HardDisk - Alias hd6a0b fs0
         :PciRoot(0x0)/Pci(0x14,0x0)/USB(0x0,0x0)/HD(1,MBR,0x9075A992,0
blk1     :Removable BlockDevice - Alias (null)
         :PciRoot(0x0)/Pci(0x14,0x0)/USB(0x0,0x0)

Press ESC in 1 seconds to skip startup.nsh, any other key to continue.
Shell> fs0:

fs0:\> dir
Directory of: fs0:\

    02/14/17  09:32a <DIR>           8,192  kaby lake flash
    02/14/17  07:15p <DIR>           8,192  Viglen_F3
            0 File(s)              0 bytes
            2 Dir(s)

fs0:\> cd Viglen_F3

fs0:\Viglen_F3> flash.nsh_
```

Figure 4 – Updating BIOS and ME.

BIOS flash update process will start. Please do not switch the system off!!

IMPORTANT!!!!

During the update process **DO NOT** shut down the PC or interrupt the process, this could cause damage to the motherboard.

DOS-flash_BIOS_ME - Update ME firmware and BIOS file.

1. Save zipped file (DOS_BIOS_Viglen_F3.zip) a temporary directory.
2. Extract the necessary files.
3. Copy the contents of the file to a bootable DOS USB formatted using FAT32/16 on a single partition.
5. Boot the target PC with the device connected or inserted.
- 6. *Enable ME FW Image Re-Flash in BIOS setup***
5. Select <F12> during POST to display the Boot Menu and select your bootable DOS device.
6. At the DOS prompt Type 'flash_BIOS_ME.bat' to launch the BIOS updates process.
7. System will reboot when update process is completed.
8. Enter the BIOS Setup and Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the "Restore Defaults" option under the Exit menu.

IMPORTANT!!!!

During the update process DO NOT shut down the PC or interrupt the process, this could cause damage to the motherboard.

DOS -flash_BIOS- Update BIOS only, use this method if the board is configured with 11.6.13.1212

1. Save zipped file (DOS_BIOS_Viglen_F3.zip) a temporary directory.
2. Extract the necessary files.
3. Copy the contents of the file to a bootable DOS USB formatted using FAT32/16 on a single partition.
4. Boot the target PC with the device connected or inserted.
5. Select <F12> during POST to display the Boot Menu and select your bootable DOS device.
6. At the DOS prompt Type 'flash_BIOS.bat' to launch the BIOS updates process.
7. System will reboot when update process is completed.
8. Enter the BIOS Setup and Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the "Restore Defaults" option under the Exit menu.

IMPORTANT!!!!!!

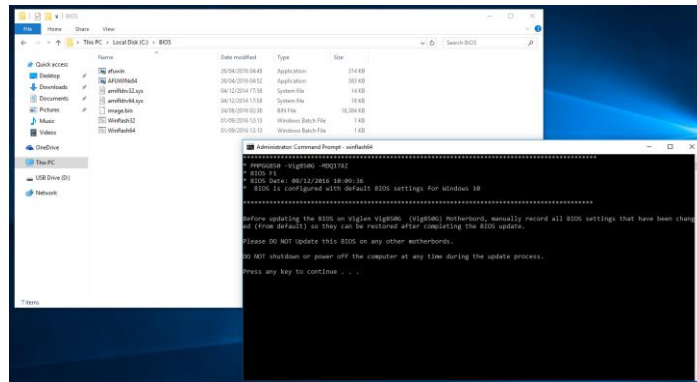
During the update process DO NOT shut down the PC or interrupt the process, this could cause damage to the motherboard.

Windows\WinPE BIOS Update

1. Save the BIOS update file to a temporary directory.
2. Extract necessary files.
3. Open Command Prompt
 - a. Type 'CMD' under Search.
 - b. Run Command Prompt as Administrator
4. In command prompt navigate to the extracted BIOS folder. (i.e. **Windows_WinPE_F3_Win7** or **_Win10**)
5. At the prompt, depending on a 32bit or 64bit operating system, type **Winflash32** for 32bit or **Winflash64** for 64bit to launch the BIOS update process.

Note: If you require ME, firmware and BIOS update then type flash_BIOS_ME.bat. Please ensure to Enable 'ME FW Image Re-Flash' in BIOS setup.

During BIOS update process, when prompted, press any key to continue the process.



6. BIOS update process will continue.

CAUTION!!! DO NOT POWER DOWN YOUR SYSTEM before the update is completed.

7. Once BIOS update is completed, the system will auto restart.
8. During system re-boot, load BIOS setup menu by pressing the < Del > key.
9. Load Default BIOS settings by browsing to the save and exit menu and select restore defaults
10. Press to save changes and reset.

Latest BIOS files and Utility are available from Viglen FTP site:

<http://download.viglen.co.uk/files/Motherboards/Vig850G/>

Additional information:

For BIOS, Drivers and Documentation enquiries please contact Viglen Technical Support Department at technical-support@xma.co.uk.

Remember to include your PC serial number in all correspondence.