SolidPC Braswell Beta BIOS Update V38

(BIOS Flashing via EFI Shell from USB flash device)

To complete this task you will need:

A. Fat32 USB storage device with at least 11MB of free space
B. File: *SolidRun_SolidPC_Braswell_Beta_BIOSV38.zip* (from here or here)
C. USB keyboard
D. Display Port or HDMI compatible monitor + cable
E. SolidRun SolidPC + SOM
F. SolidRun SolidPC power supply

Instructions:

1. On a separate computer - Extract the contents of *SolidRun_SolidPC_Braswell_Beta_BIOSV38.zip* to the root directory of a USB storage device with sufficient free space
2. Connect the USB storage device to the SolidPC
3. Connect a USB keyboard
4. Connect SolidPC to power adaptor
5. Power up the SolidPC and immediately start pressing (multiple times) the Del key in order to enter the BIOS Setup
6. Once the BIOS GUI is visible please use the keyboard arrow keys to highlight the **Save & Exit** tab
7. Within the Save & Exit tab please use the keyboard arrow keys to highlight **Boot Override** option which corresponds to your USB Storage device. (this will exit the BIOS and boot from your USB storage device)
8. The SolidPC should boot **EFI Shell**:
    I. You should see a yellow colored command prompt Shell:
        - We need to find the application: **AfuEfix64.efl**. Depending on how many storage devices your SolidPC has, this application could be in 1 of 3 places:
            - fs0/EFI/Boot/
            - fs1/EFI/Boot/
            - fs2/EFI/Boot/
            - We will start searching in fs0
    II. Please type: ***fs0:*** and then hit Enter ⏎

- (0 is the number zero, not the letter O)
- The command prompt should change to fs0:\>

III. Please type: ***Dir*** and then hit Enter ⏎
- The dir command allows you to see the available files and directories within the current directory.

IV. If you see an entry **<DIR>** **EFI** then please type: ***cd efi*** and then hit Enter ⏎
If you do not see an entry **<DIR>** **EFI** then please skip to step #VII

V. Please type: ***cd boot*** and then hit Enter ⏎

VI. Please type: ***Dir*** and then hit Enter ⏎
- Look for **AfuEfix64.efl** in the directory contents. If it is located here then this is the correct storage device, and skip to step #XIV

VII. Please type: fs1: and then hit Enter ⏎
- The command prompt should change to fs1:\>

VIII. Please type: ***cd efi*** and then hit Enter ⏎

IX. Please type: ***cd boot*** and then hit Enter ⏎

X. Please type: ***Dir*** and then hit Enter ⏎
- Look for **AfuEfix64.efl** in the directory contents. If it is located here then this is the correct storage device, and skip to step #XIV

XI. Please type: fs2: and then hit Enter ⏎
- The command prompt should change to fs2:\>

XII. Please type: ***cd efi*** and then hit Enter ⏎

XIII. Please type: ***cd boot*** and then hit Enter ⏎

XIV. Please type the following command:
- ***AfuEfix64.efi SolidPCbraswell_BetaV38.bin /b /p /n***

XV. Please verify that all stages are marked as **DONE**
- Reading Flash……..Done
- ME Data Size Checking…..Done
- FFS Checksums……...Done
- Erasing Boot Block……...Done
- Updating Boot Block……...Done
- Verifying Boot Block……...Done
- Erasing Main Block……..…Done
- Updating Main Block…...Done
- Verifying Main Block……Done
- Erasing NVRAM Block…….Done
- Updating NVRAM Block…Done
- Verifying NVRAM Block….Done
- And the prompt should return to fs#:\EFI\Boot>

XVI. **VERY IMPORTANT**: If any of the above items is not marked as **Done** you must repeat the command from step #X. If you do not heed this warning, you will brick your SolidPC.

Configuring the new BIOS for Legacy/UEFI

OS Settings List:

- Windows 8+ UEFI: BOM Config = Default, CSM Video = UEFI (or CSM disabled entirely)
- Windows 8+ Legacy: BOM Config = Default, CSM Video = Legacy
- Windows 7 UEFI **or** Legacy: BOM Config = Legacy System, CSM Video = Legacy
- Linux: BOM Config = Yocto Linux

1. Plug in your USB storage device with Legacy OS ISO
2. Power up the SolidPC and immediately start pressing (multiple times) the Del key in order to enter the BIOS Setup
3. Once the BIOS GUI is visible please press right arrow on the keyboard to highlight the **Advanced** tab
4. Within the Advanced tab please press the down arrow until **Miscellaneous is** highlighted
5. Press Enter
6. Within the Miscellaneous sub menu please press the down arrow until **BOM Config** is highlighted:
7. Press Enter
8. Using the up/down arrow keys please select the appropriate setting from the list below:
    - Windows 8+ UEFI: BOM Config = Default
    - Windows 8+ Legacy: BOM Config = Default
    - Windows 7 UEFI **or** Legacy: BOM Config = Legacy System
    - Linux: BOM Config = Yocto Linux
9. Press Enter to confirm the selection
10. Press ESC to exit the Miscellaneous sub menu and return to the Advanced tab
11. Within the Advanced tab please press the down arrow until **CSM Support is** highlighted
12. Press Enter
13. Within the CSM Support settings page please change the following values as appropriate:
    - Setting the Boot Option Filter: **Legacy or UEFI** will let the BIOS boot either
    - Windows 8+ UEFI: CSM Video = UEFI (or CSM disabled entirely)
    - Windows 8+ Legacy: CSM Video = Legacy
    - Windows 7 UEFI **or** Legacy: CSM Video = Legacy
14. Using the up/down arrow keys please select the value to be adjusted
15. Press Enter to confirm the selection
16. Press Esc to exit the CSM Support settings page
17. Use the keyboard arrow keys to highlight the **Save & Exit** tab
18. Use the keyboard arrow keys to highlight the **Save & Exit** option and then hit Enter ⏎