Technical Service Bulletin

To: Allied Service & Help Desk Personnel

From: Allied Electronics, Inc.

Date: May 25, 2021

Re: NeXGen Prime Cold Start via USB

Introduction:

In order to cold start NeXGen Prime you have a few options; the normal route would be to connect using DGS and cold start the device. However, if it's not possible to use the DGS utility, you can cold start NeXGen Prime with a USB Drive and the embedded UEFI Shell environment.

Note:

This process should be used only if it's not possible to cold start NeXGen Prime via DGS.

This process requires a monitor and keyboard to be connected to the NexGen Prime unit.

USB 2.0 and 3.0 drives are supported.

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Preparation:

The file **startup.nsh,** supplied by Allied Electronics, needs to be copied to the root folder of the USB Drive as is. Any other external data should be deleted from the USB.
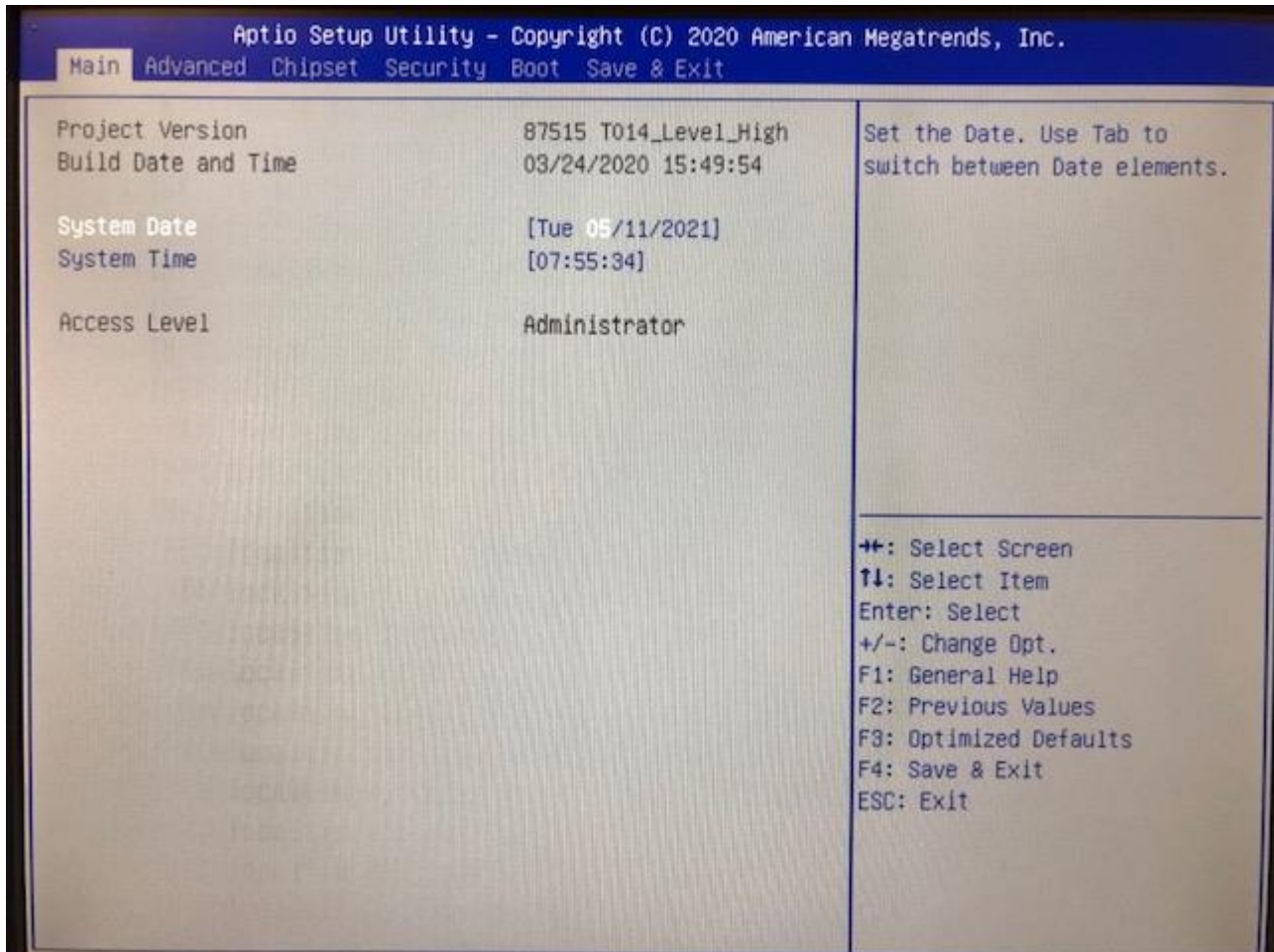
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Process:

1. Turn off the NeXGen Prime device. Connect a monitor and keyboard. Insert the USB Drive with the copied file into the available USB port.

2. Turn on the device while holding the Esc key on your keyboard. The monitor will show the Main tab of the "Aptio Setup Utility".
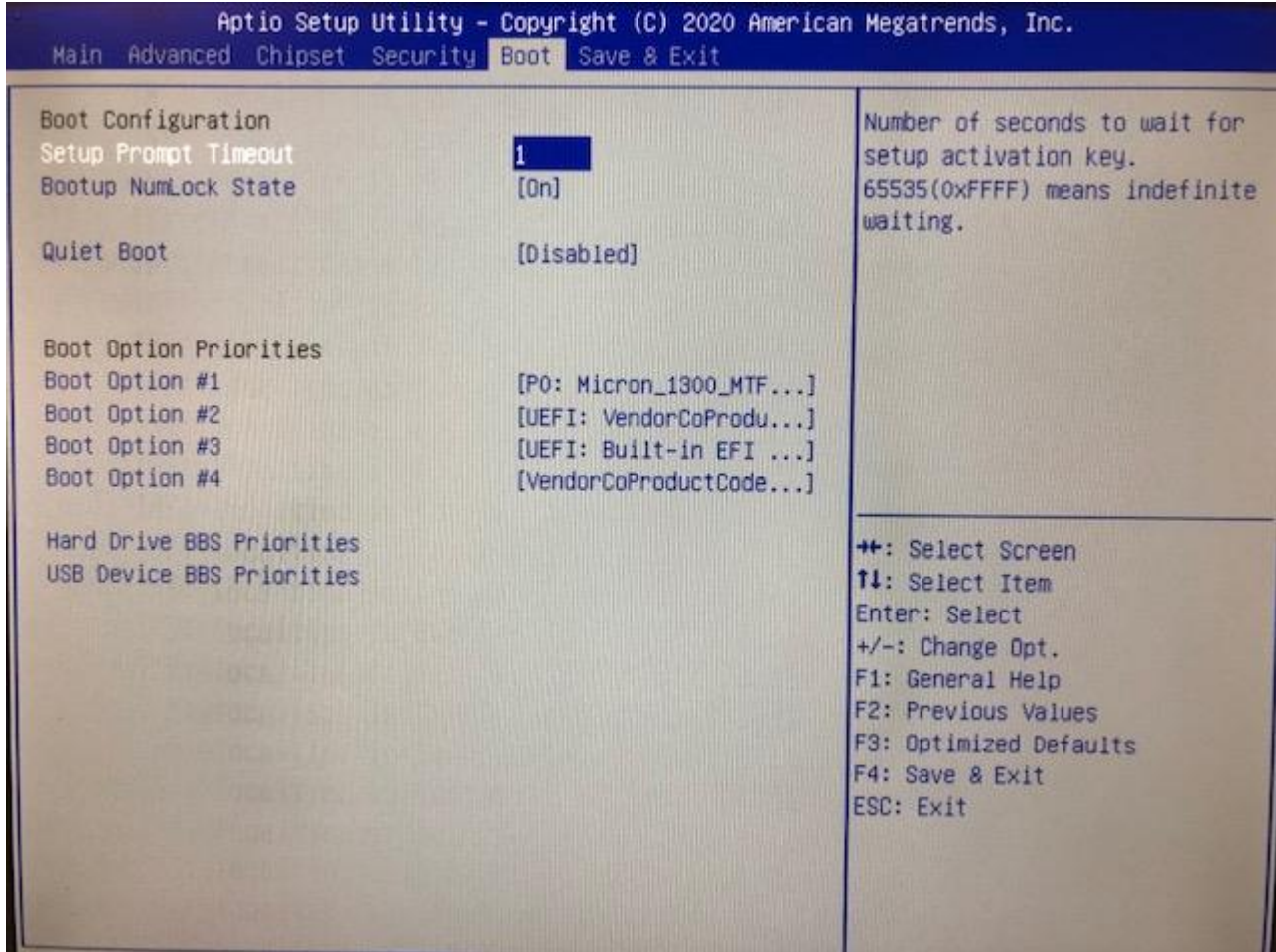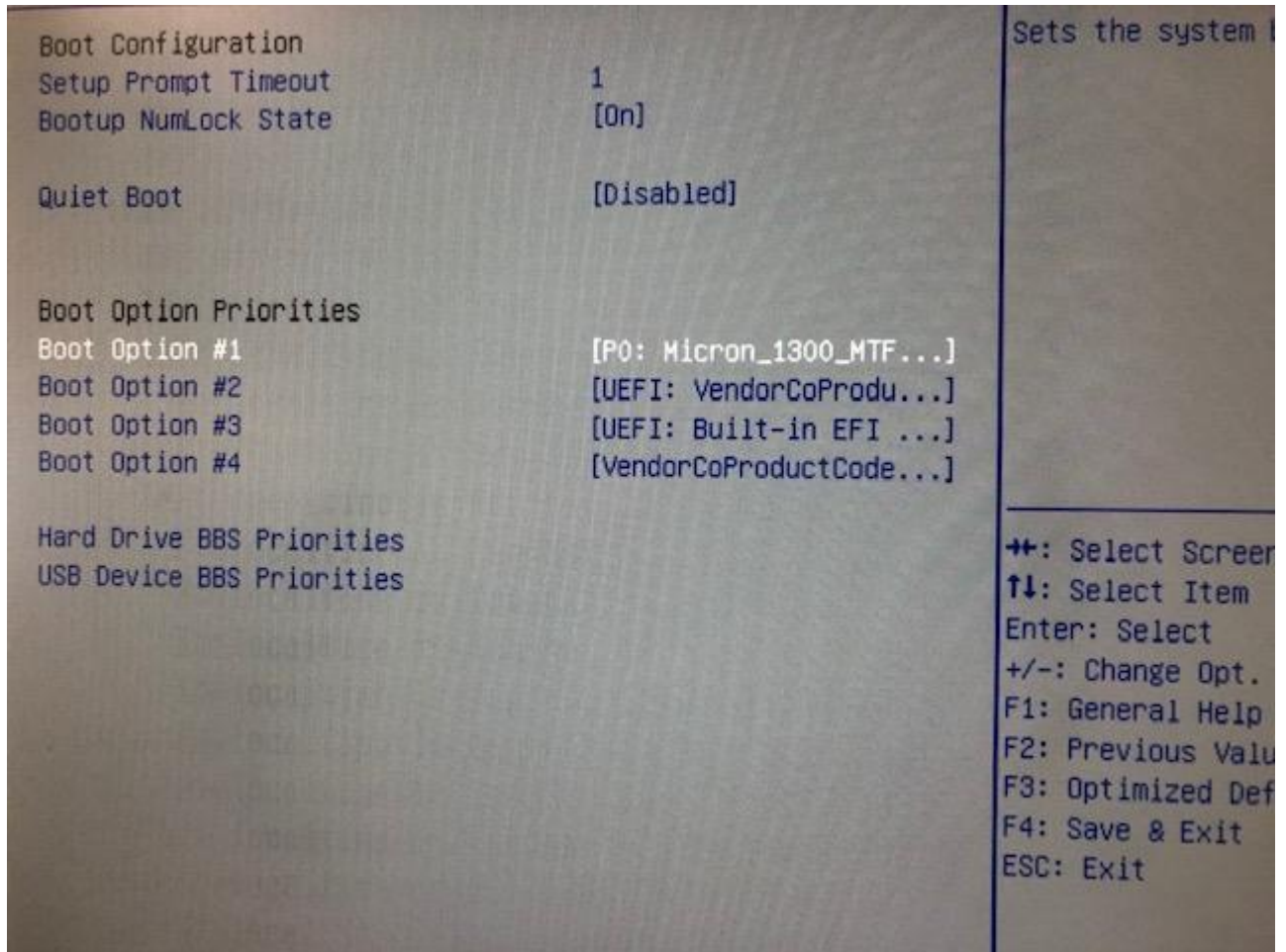
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3. Use the Right Arrow key to navigate to the Boot tab.


```
         Aptio Setup Utility - Copyright (C) 2020 American Megatrends, Inc.
    Main  Advanced  Chipset  Security  Boot  Save & Exit

    Boot Configuration                                      Number of seconds to wait for
    Setup Prompt Timeout            1                       setup activation key.
    Bootup NumLock State            [On]                    65535(0xFFFF) means indefinite
                                                            waiting.
    Quiet Boot                      [Disabled]


    Boot Option Priorities
    Boot Option #1                  [P0: Micron_1300_MTF...]
    Boot Option #2                  [UEFI: VendorCoProdu...]
    Boot Option #3                  [UEFI: Built-in EFI ...]
    Boot Option #4                  [VendorCoProductCode...]

    Hard Drive BBS Priorities                               →←: Select Screen
    USB Device BBS Priorities                               ↑↓: Select Item
                                                            Enter: Select
                                                            +/-: Change Opt.
                                                            F1: General Help
                                                            F2: Previous Values
                                                            F3: Optimized Defaults
                                                            F4: Save & Exit
                                                            ESC: Exit
```

4. Use the Down Arrow key to navigate to the Boot Option #1.

```
Boot Configuration                                              Sets the system
Setup Prompt Timeout                1
Bootup NumLock State                [On]

Quiet Boot                          [Disabled]


Boot Option Priorities
Boot Option #1                      [P0: Micron_1300_MTF...]
Boot Option #2                      [UEFI: VendorCoProdu...]
Boot Option #3                      [UEFI: Built-in EFI ...]
Boot Option #4                      [VendorCoProductCode...]

Hard Drive BBS Priorities
USB Device BBS Priorities                                       ++: Select Screen
                                                                ↑↓: Select Item
                                                                Enter: Select
                                                                +/-: Change Opt.
                                                                F1: General Help
                                                                F2: Previous Valu
                                                                F3: Optimized Def
                                                                F4: Save & Exit
                                                                ESC: Exit
```
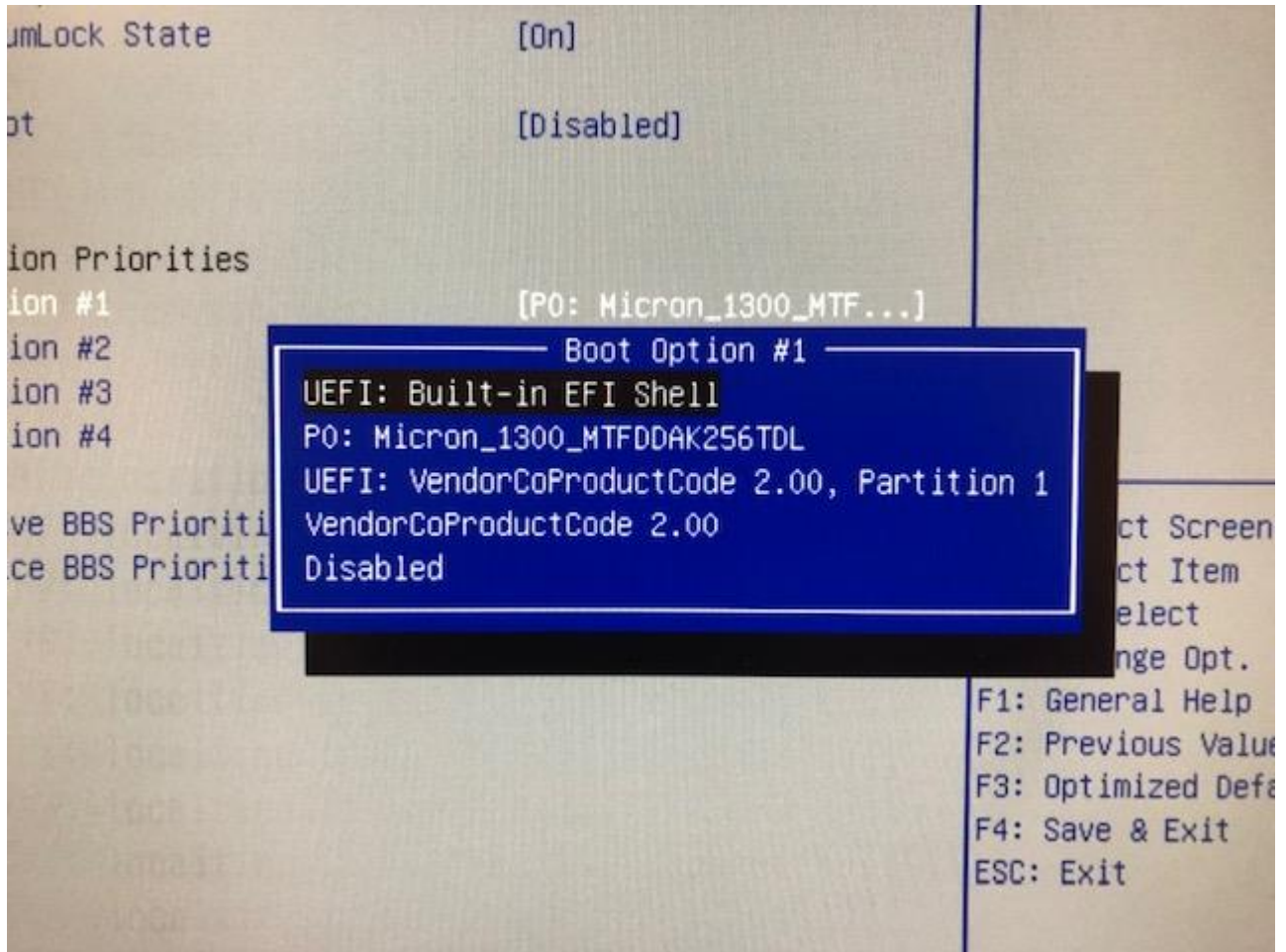
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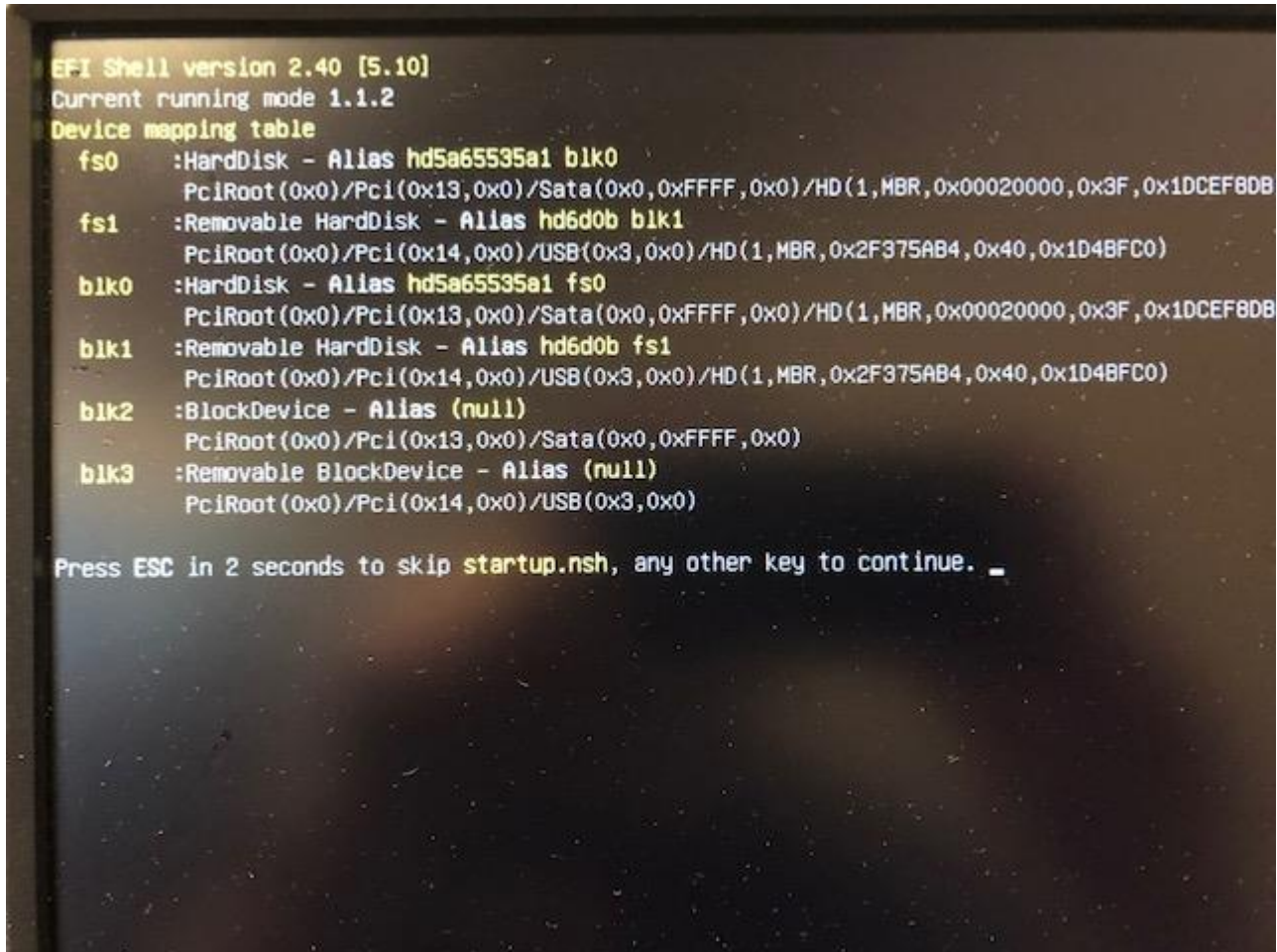P.O. Box 624 • 1414 Radcliffe Street Suite 120 • Bristol, PA 19007 • 215.785.6200 • FAX 215.785.0230
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5. Press Enter. Select "UEFI: Built-in EFI Shell" option and press Enter once again.

6. Press the F4 key and press "Yes" to confirm.

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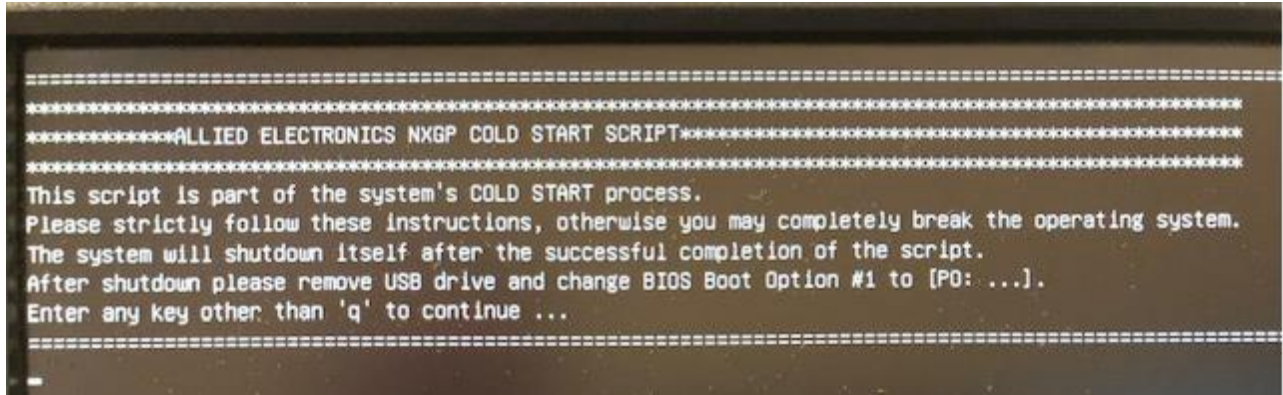P.O. Box 624 • 1414 Radcliffe Street Suite 120 • Bristol, PA 19007 • 215.785.6200 • FAX 215.785.0230
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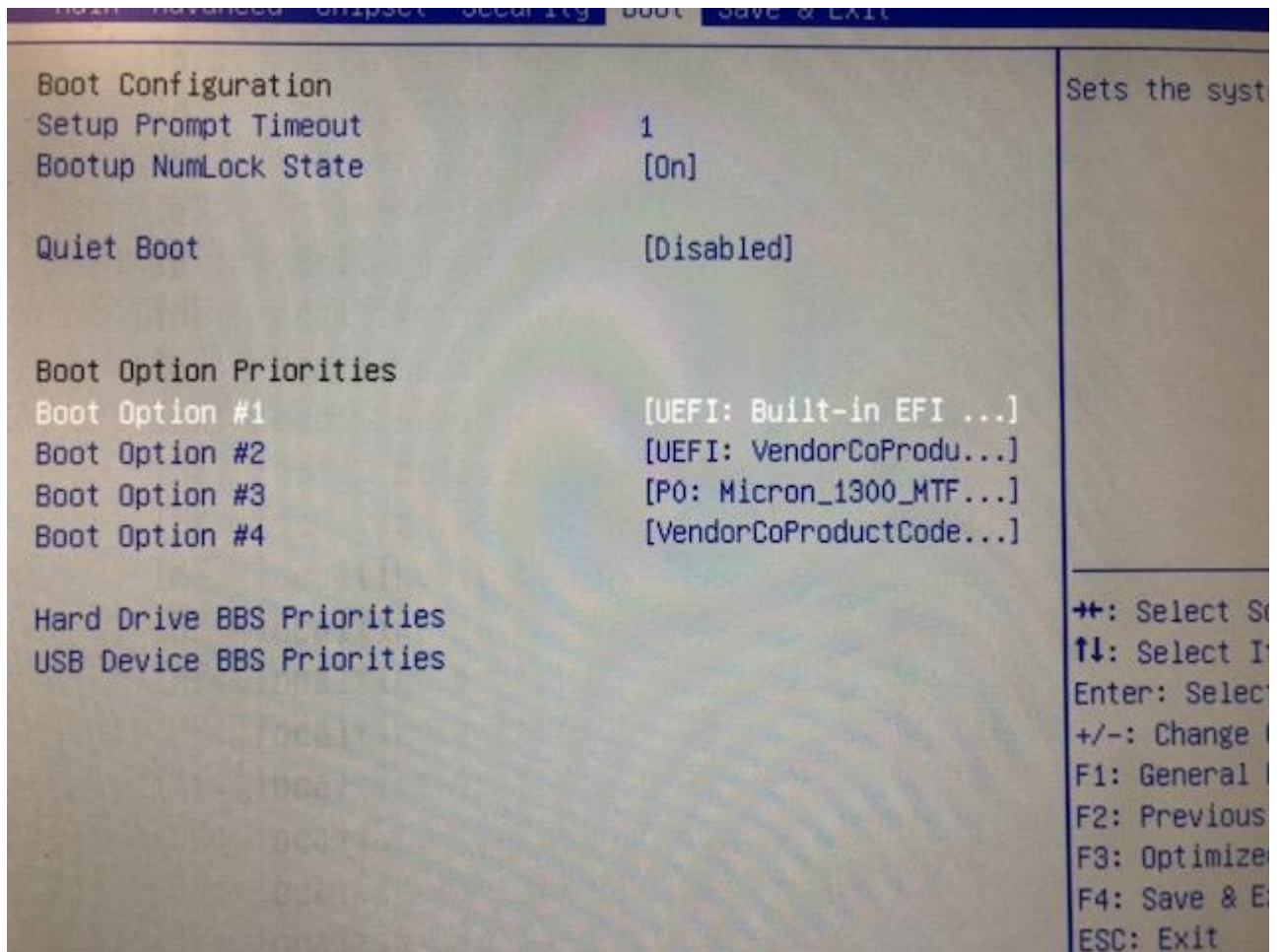
7. You will be navigated to the EFI Shell prompt. You can press any key other than ESC or just wait when the script will be started automatically.

```
EFI Shell version 2.40 [5.10]
Current running mode 1.1.2
Device mapping table
  fs0    :HardDisk - Alias hd5a65535a1 blk0
         PciRoot(0x0)/Pci(0x13,0x0)/Sata(0x0,0xFFFF,0x0)/HD(1,MBR,0x00020000,0x3F,0x1DCEF8DB
  fs1    :Removable HardDisk - Alias hd6d0b blk1
         PciRoot(0x0)/Pci(0x14,0x0)/USB(0x3,0x0)/HD(1,MBR,0x2F375AB4,0x40,0x1D4BFC0)
  blk0   :HardDisk - Alias hd5a65535a1 fs0
         PciRoot(0x0)/Pci(0x13,0x0)/Sata(0x0,0xFFFF,0x0)/HD(1,MBR,0x00020000,0x3F,0x1DCEF8DB
  blk1   :Removable HardDisk - Alias hd6d0b fs1
         PciRoot(0x0)/Pci(0x14,0x0)/USB(0x3,0x0)/HD(1,MBR,0x2F375AB4,0x40,0x1D4BFC0)
  blk2   :BlockDevice - Alias (null)
         PciRoot(0x0)/Pci(0x13,0x0)/Sata(0x0,0xFFFF,0x0)
  blk3   :Removable BlockDevice - Alias (null)
         PciRoot(0x0)/Pci(0x14,0x0)/USB(0x3,0x0)

Press ESC in 2 seconds to skip startup.nsh, any other key to continue. _
```

8. Please read and follow the instructions on the script prompt screen.

    Enter any key other than 'q'. The system will shut down itself after the successful completion of the script.

    If any error occurs you may need to turn off the system manually, but first contact Allied support and provide the error description from the screen.


```
=================================================================================
*********************************************************************************
***************ALLIED ELECTRONICS NXGP COLD START SCRIPT*************************
*********************************************************************************
This script is part of the system's COLD START process.
Please strictly follow these instructions, otherwise you may completely break the operating system.
The system will shutdown itself after the successful completion of the script.
After shutdown please remove USB drive and change BIOS Boot Option #1 to [PO: ...].
Enter any key other than 'q' to continue ...
=================================================================================
```

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9. After the system automatically shuts down (from the first step), remove the USB drive from the NeXGen Prime.

10. Turn on the device while holding the Esc key on your keyboard. The monitor will show the Main tab of "Aptio Setup Utility".

11. Use the Right Arrow key to navigate to the Boot tab.

12. Use the Down Arrow key to navigate to the Boot Option #1.

13. Press Enter. Select the "PO: …" option and press Enter once again.

14. Press the F4 key and press "Yes" to confirm.

15. From this step, the system will boot into normal operation mode and automatically Cold Start.