

PICARRO

UPGRADE INSTRUCTIONS

Picarro Software for Windows 10 Field Upgrade



Before you begin:

Read the whole procedure to make sure you understand it and have all necessary materials and tools available.

This procedure is intended for Picarro G2xxx and L2xxx instruments running Windows 7. It installs the standard software configuration on the instrument. If the instrument is missing an operational mode after this upgrade, please contact Picarro Support for assistance.

If you are using a LEAP/PAL/CTC Autosampler (L2xxx systems only) then you cannot upgrade to Windows 10. This Autosampler is not compatible with Windows 10

The upgrade process exists of replacing the existing hard drive or solid-state drive with the new SSD that has Window 10 configured for the instrument’s computer. Transfer unique configuration files from the old HDD/SSD to the new drive running Windows 10. Then run an instrument software installer that has software and configuration files that are compatible with Windows 10.

Picarro has used three computers. They are the MI-910, MI-945 and MI-970; each has different Windows 10 configurations, and therefore images. The latest computer, the MI-970 uses UEFI boot mode, while the other two use BIOS boot mode.

Pre-requisites:

- a) Instrument is currently running Windows 7
- b) Instrument is currently running Picarro host SW version 1.5.x.x or 1.6.x.x
- c) You are in possession of the Windows 10 upgrade that matches your motherboard. Use the motherboard identification sheet (Appendix F) to determine your motherboard version.

Motherboard	Windows 7 to Windows 10 upgrade kit
MI910	S3058 - Windows 10 upgrade kit for MI910
MI945	S3059 - Windows 10 upgrade kit for MI945
MI970	S3060 - Windows 10 upgrade kit for MI970

- d) You are NOT using a LEAP/PAL/CTC autosampler. LEAP/PAL/CTC autosamplers are not compatible with Windows 10.

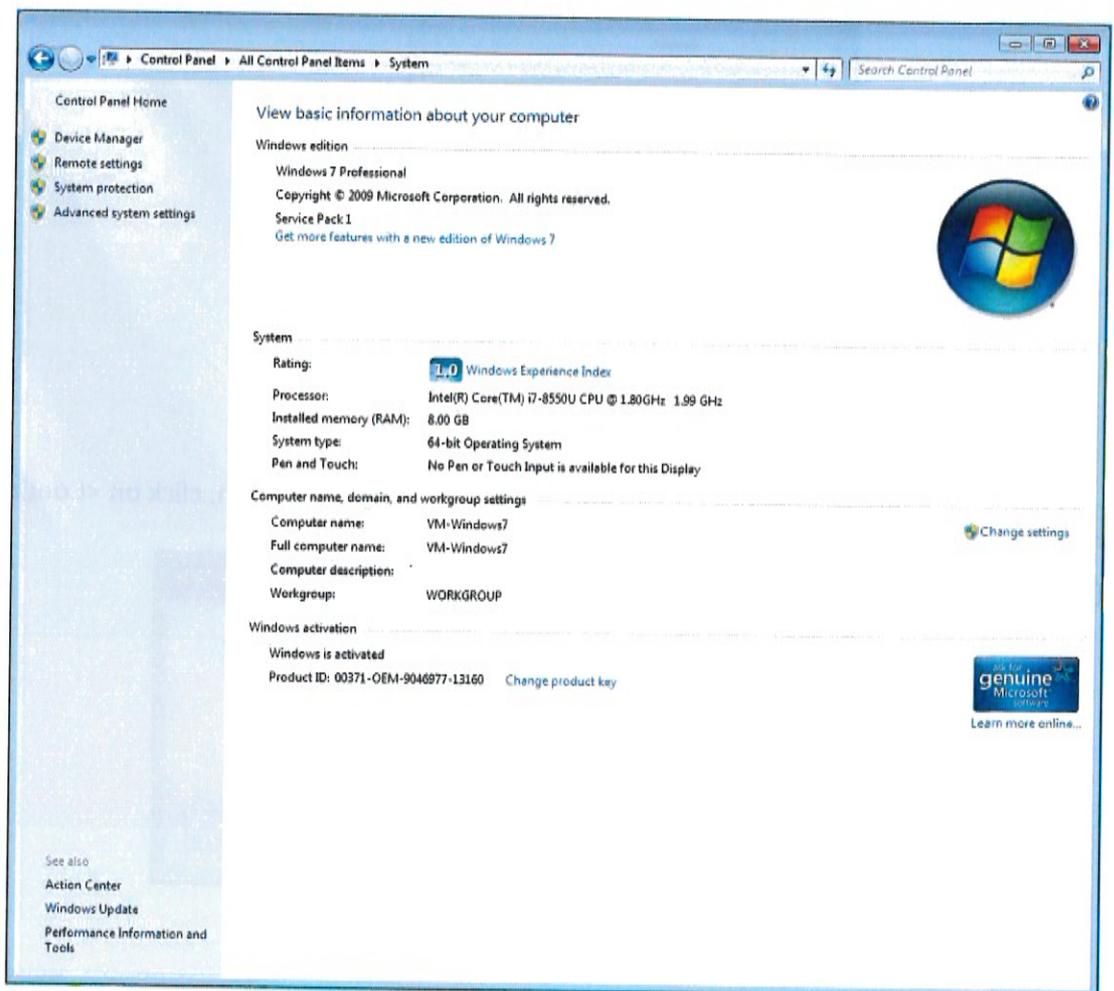
If one of the pre-requisites is not met, please contact Picarro Support for assistance.

You can contact Picarro Support by sending an e-mail to support@picarro.com or calling the hotline +31 85 888 1650 (Europe) or +1 408 962 3991 (US)

Instructions:

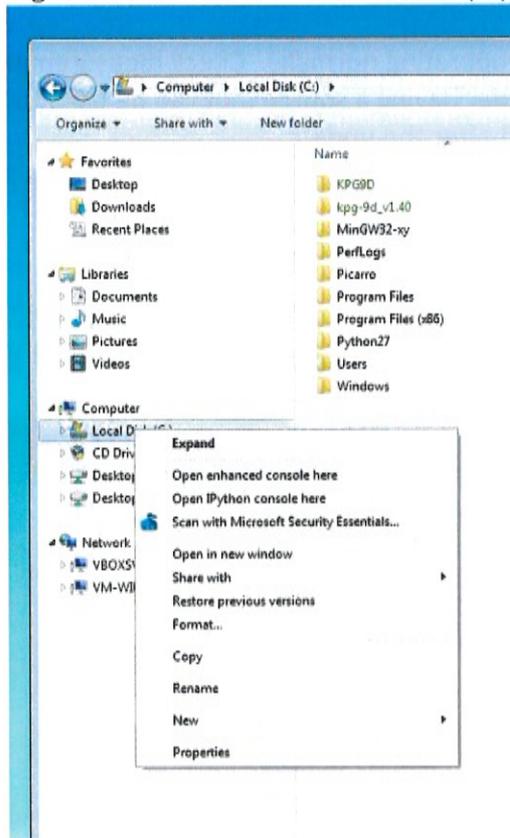
1. Confirm that the instrument is operating normally. Check measurement interval and concentration precision. Consider having a source that can be used to confirm that the calibration has not changed after the update.
2. Confirm that the instrument is running Windows 7 (and not Windows XP)
 - a) Go to <Start> and select <Control Panel>
 - b) Double click on <System>

For Windows Edition it should read: Windows 7 Professional

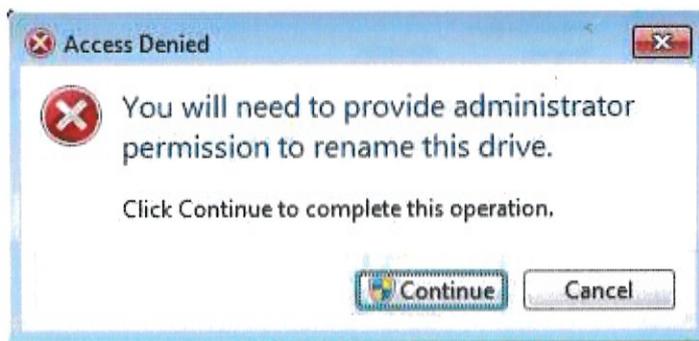


3. Rename drive C: to Picarro – Win7
 - a) Open Explorer by pressing <Windows key><E>

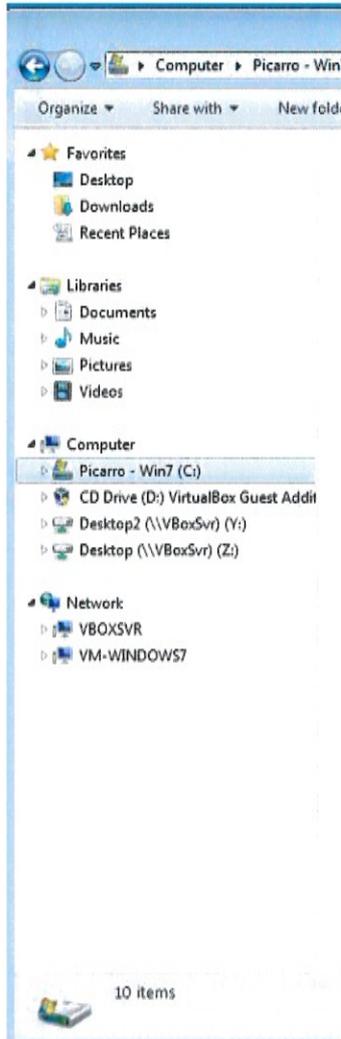
b) Right click with mouse on Local Disk (C:) and select Rename



c) In case of a pop up about administrator permission, click on <Continue>

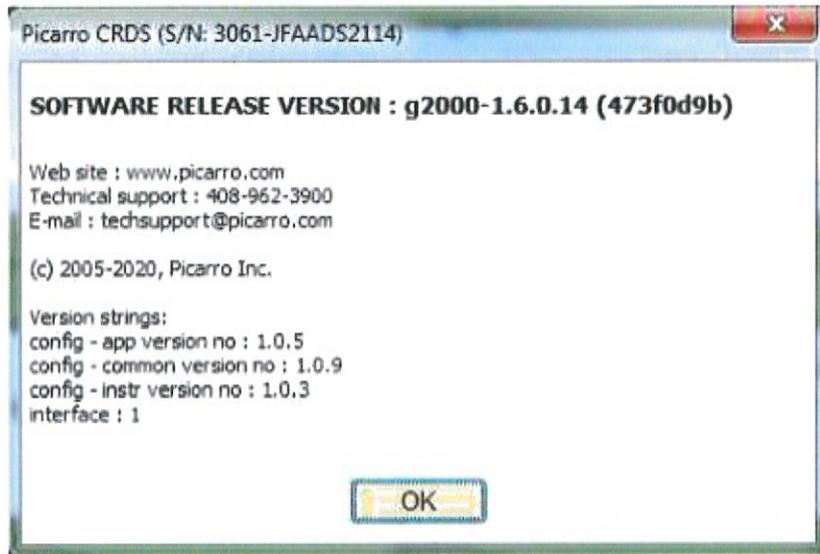


d) Confirm that the name of the drive has changed to Picarro – Win7 (C:)



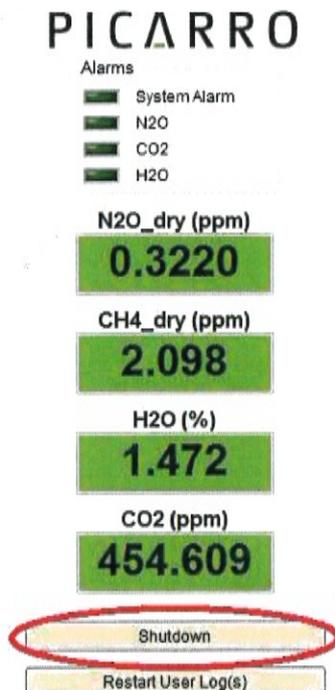
4. Confirm that the instrument is running software 1.5.x.x or 1.6.x.x.

a) In the Picarro GUI, go to <Help> and click on <About>



If the instrument is not running the correct software version, contact Picarro Support before continuing the upgrade process.

5. Shutdown the instrument using shutdown option in the GUI.

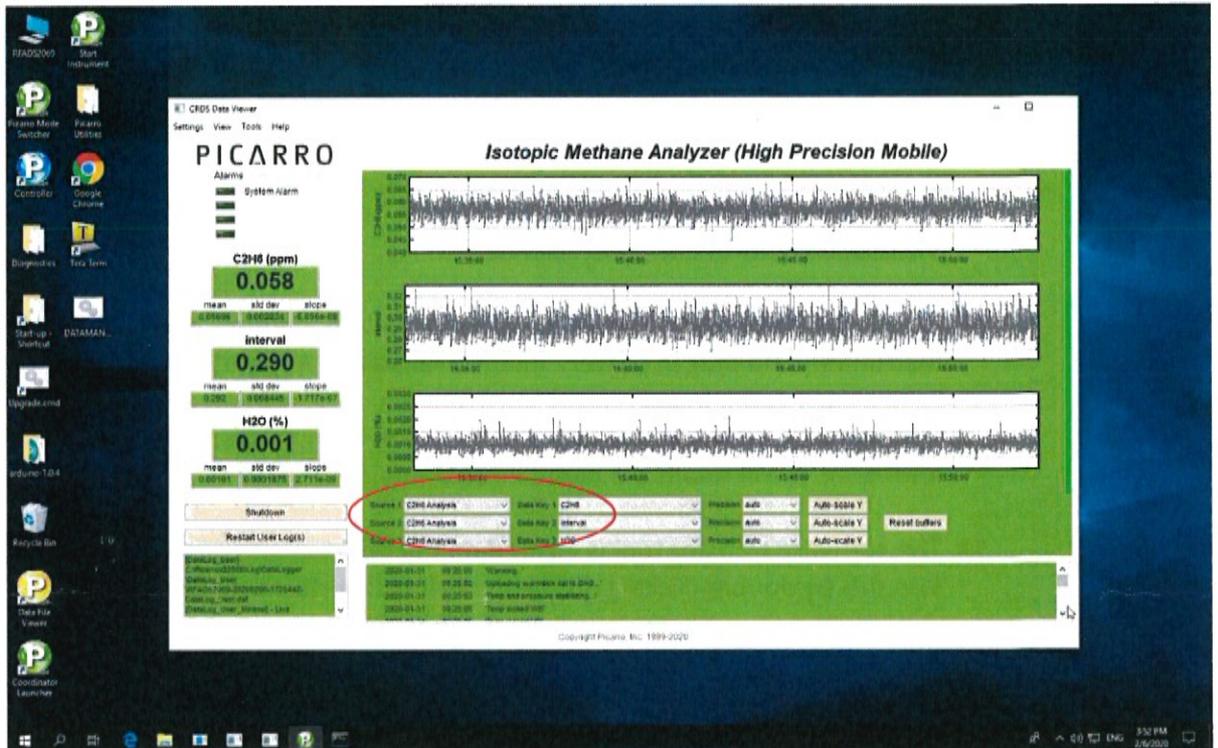


6. Use the provide static wrist strap when handling any internal components.
7. Remove the bottom cover, using a 2 mm hex key.

8. Remove the existing SSD/HDD and install the new Windows 10 SSD
 - a. Instructions for this step are in appendix E.
9. Start up with the new Windows 10 SSD
10. If the analyzer fails to startup normally, a BIOS adjustment may be required.
 - a. Enter BIOS by pressing the <Delete> key when the system is booting.
 - b. Write down existing settings in case it is desired to start up from Windows 7 drive again.
 - c. Instructions for BIOS changes are in Appendix C
11. Confirm normal Windows 10 boot. (should have automatically logged into the user Picarro; password: Extreme_Science!)
12. Connect the Windows 7 drive to the SATA to USB adapter, plug the USB into the instrument and plug in power. Image available in Appendix D.
13. Confirm that the Windows 7 drive is visible in File Explorer. (Typically, as drive "D:" and "E:"). It will retain the name Picarro – Win7
14. The software transfer tool is located on the desktop and named "Win10 Transfer". Run this by double-clicking on the icon. It will perform the transfer of data and settings and then ask to power down when finished.
 - a. Accomplish power down by selecting windows prompt, <Shut Down> and restart the whole system.
15. Run the instrument software installer for that product
 - a. Software installs are found on the desktop in a folder marked "Picarro Host SW"
 - b. Locate the letter portion of the Serial Number on the back of the analyzer.
 - i. Serial Number 3410-CFADS2033 equals CFADS | 2871-CFKADS2269
 - c. Navigate to the folder labeled with this code.
 - d. Run installer for Host SW.
 - e. If your letter code is MADS, contact support@picarro.com after completing this procedure and ask to have your pressure setpoint verified.
16. Install other Picarro software needed to run peripherals
 - a. Navigate to folder "Peripherals" on the desktop
 - b. Execute the appropriate installers
 - c. Some peripherals do not have installers. Contact support@picarro.com for help with these.
17. Re-start the instrument

18. Confirm normal instrument software startup (splash screen should show normal check marks)

19. When the GUI with the data plots opens, verify that there are no errors at the beginning of the log. See image below. Note that you may have to scroll to the top of the sub-window to see the first entries.



20. Confirm normal instrument operation

21. Enter the Windows 10 Certificate of Authenticity (COA) in windows activation, and allow windows to activate.

22. Remove the Windows 7 sticker from the back of the analyzer and replace with the provided Windows 10 sticker.

Windows is a registered trademark of Microsoft Corporation.

Appendix A: Windows 10 Upgrade Kit

- a) SSD with Windows 10 (each type of mainboard has a different SSD)
Includes Picarro software and "Win10 transfer" software
- b) Windows 10 license
- c) SSD mounting, 4 screws and 4 spacers
- d) SATA to USB adapter
- e) Instructions

Appendix B: Picarro Software Identification

Picarro GUI Software version	Operating System
1.4.1.x	Windows XP
1.5.1.x	Windows 7
1.6.1.x	Windows 7
1.6.5.x and higher	Windows 10
1.7.0.x and higher	Windows 10

Appendix C: BIOS Settings

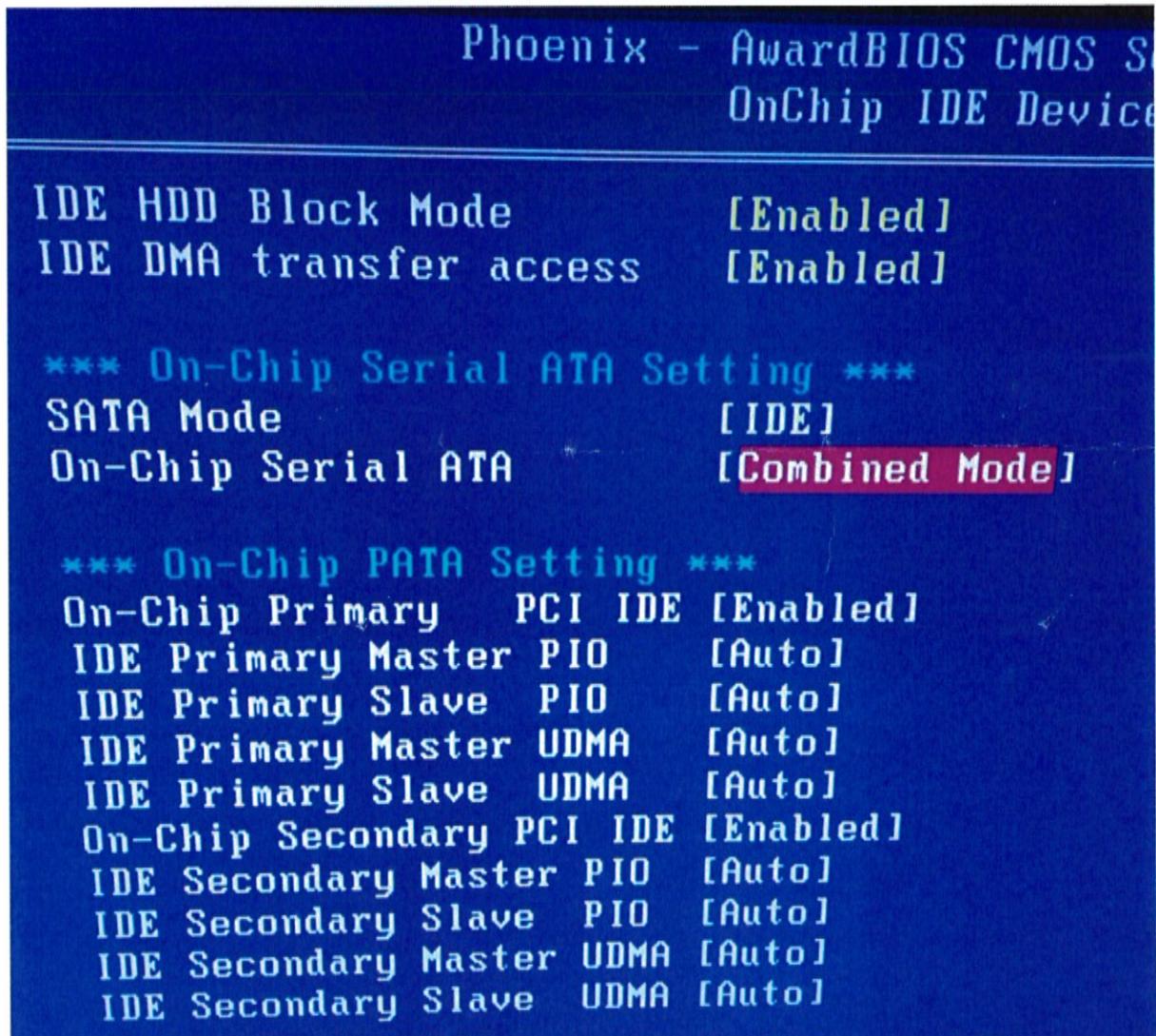
Each Motherboard type has unique settings. Use the appropriate images below for your motherboard type (MI-910, MI-945, MI-970); see Appendix F to identify your motherboard.

MI-910:

Select "Integrated Peripherals"

Select "OnChip IDE Device"

For option, "On-Chip Serial ATA" change to [Combined Mode]. See image below.



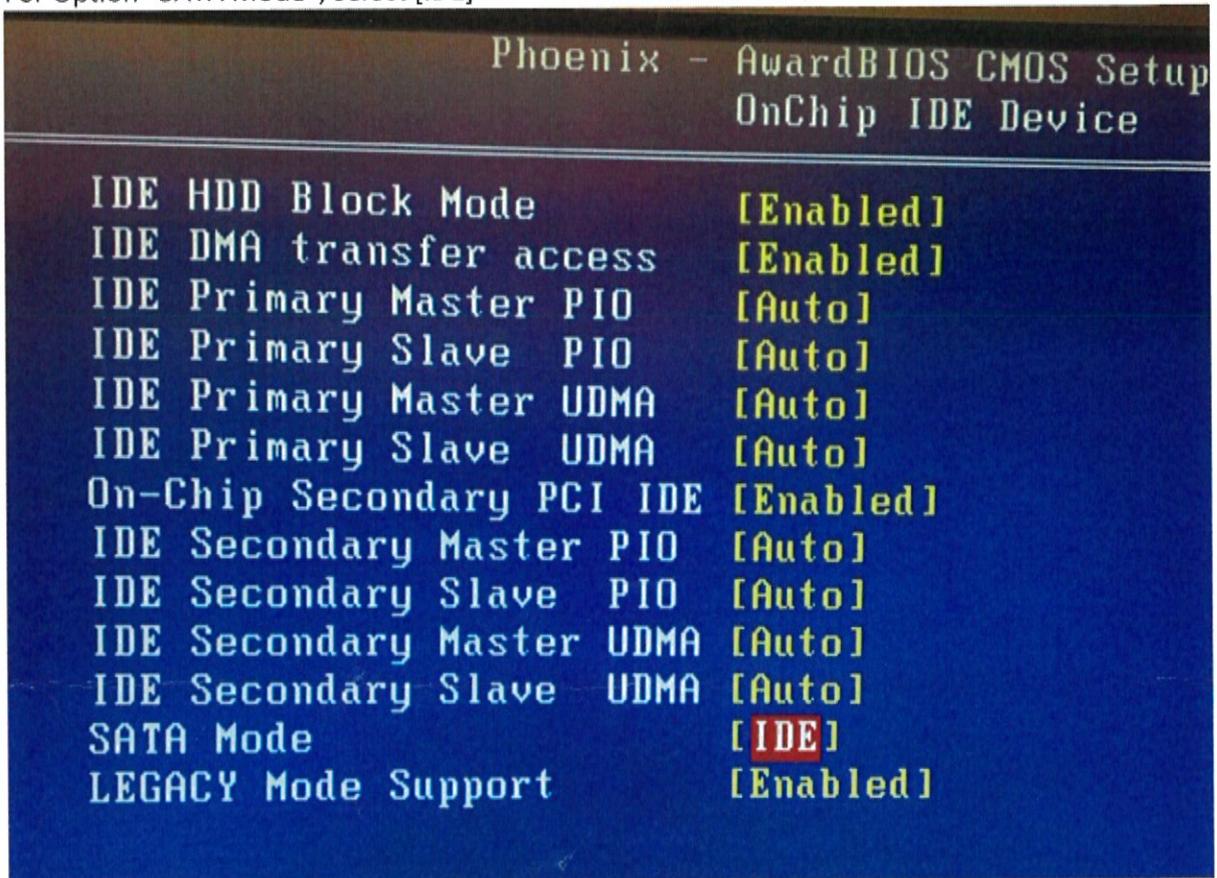
Save changes by pressing F10 and Exit by pressing Esc repeatedly.

MI-945:

Select "Integrated Peripherals"

Select "OnChip IDE Device"

For Option "SATA Mode", select [IDE]

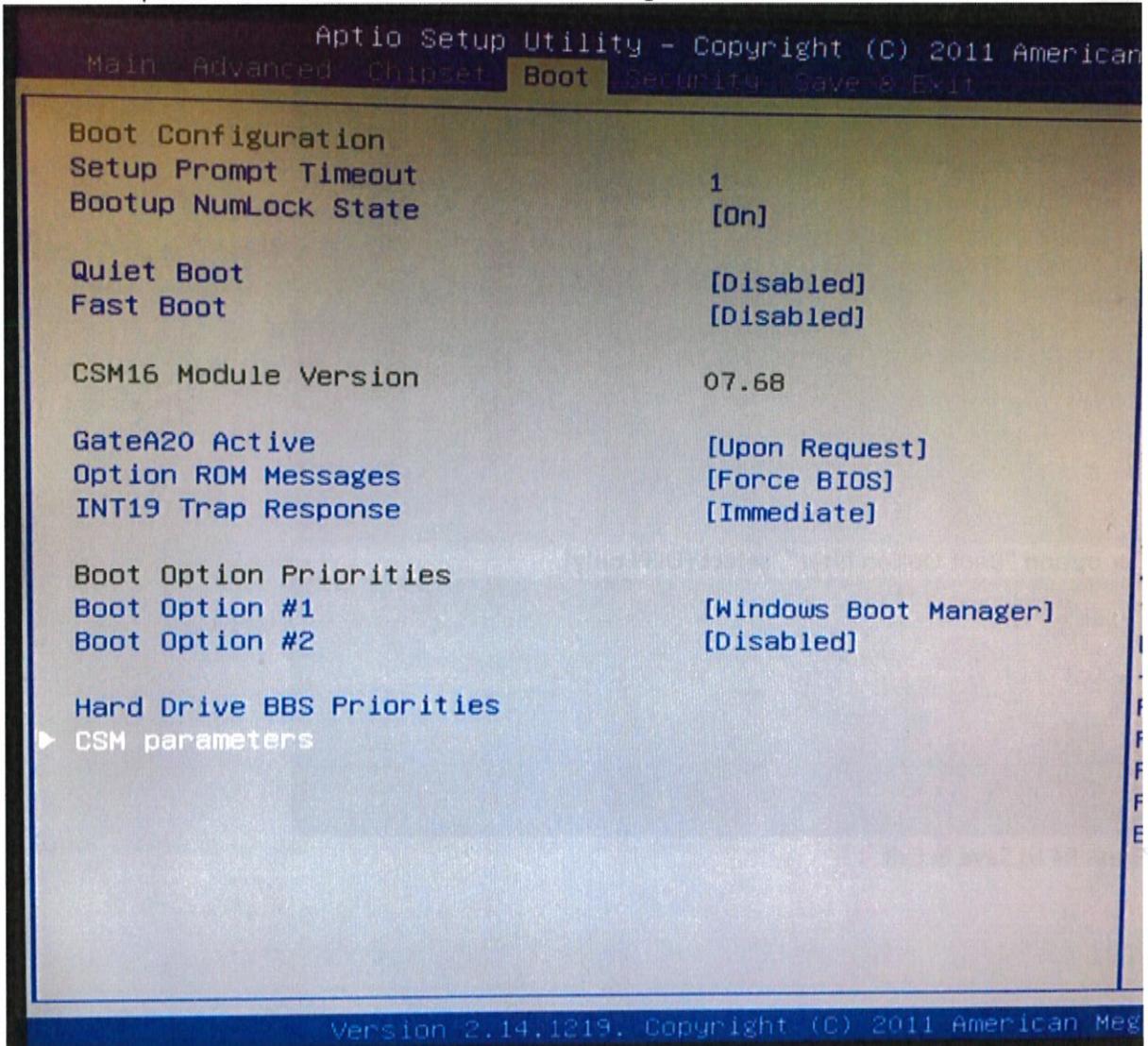


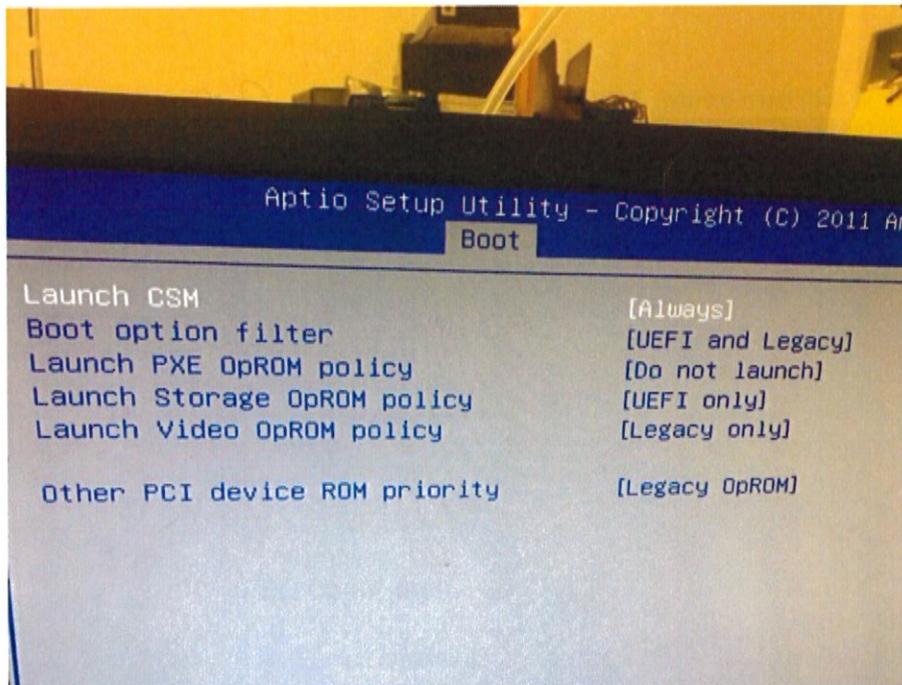
Save changes by pressing F10 and Exit by pressing Esc repeatedly.

MI-970:

Arrow right to the Boot menu.

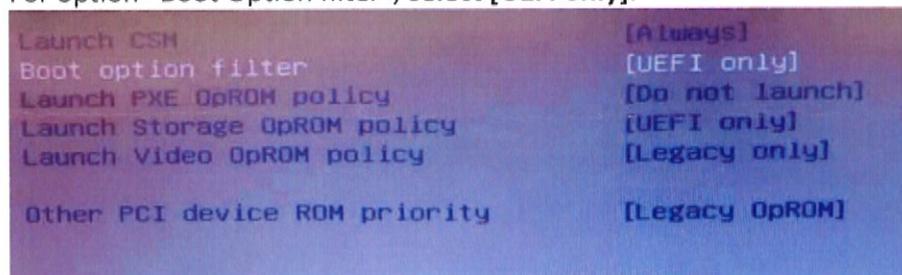
Select CSM parameters. Text will turn white. See image below.





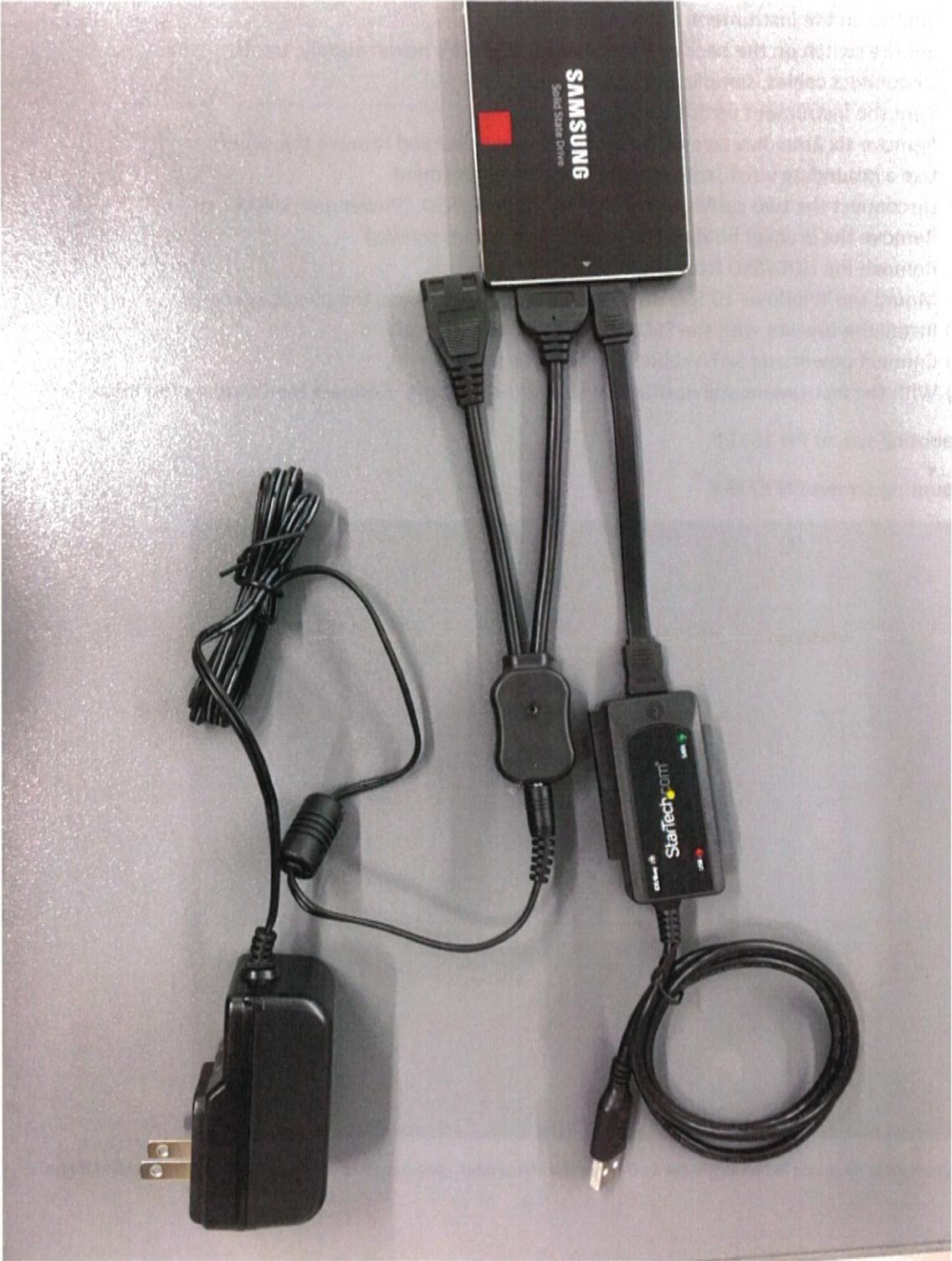
UEFI ONLY

For option "Boot Option filter", select [UEFI only].



Press F4 to Save & Exit.

Appendix D: SATA to USB adaptor connection



Appendix E: To Remove and Replace G/L2xxx Hard Drive or SSD with the Windows 10 SSD

- 1) Shutdown the instrument.
- 2) Set the switch on the back of the instrument, on the power supply, to off.
- 3) Disconnect cables, sample and vacuum line.
- 4) Turn the instrument upside down
- 5) Remove six 2mm hex screws from the bottom cover and remove the cover.
- 6) Use a grounding wrist strap connected to the instrument
- 7) Disconnect the two cables connected to the HDD/SSD. (Power and SATA)
- 8) Remove the bracket holding the HDD/SSD (4 Phillips screws)
- 9) Remove the HDD/SSD from the bracket
- 10) Mount the Windows 10 SSD on the bracket, be sure to use the plastic spacers.
- 11) Install the bracket with the SSD in the instrument
- 12) Connect power and SATA cables to the SSD
- 13) With the instrument still upside down, and the over off. Connect the cables to the instrument.

SSD mounting spacer PN 15311

SSD mounting screws PN 17783

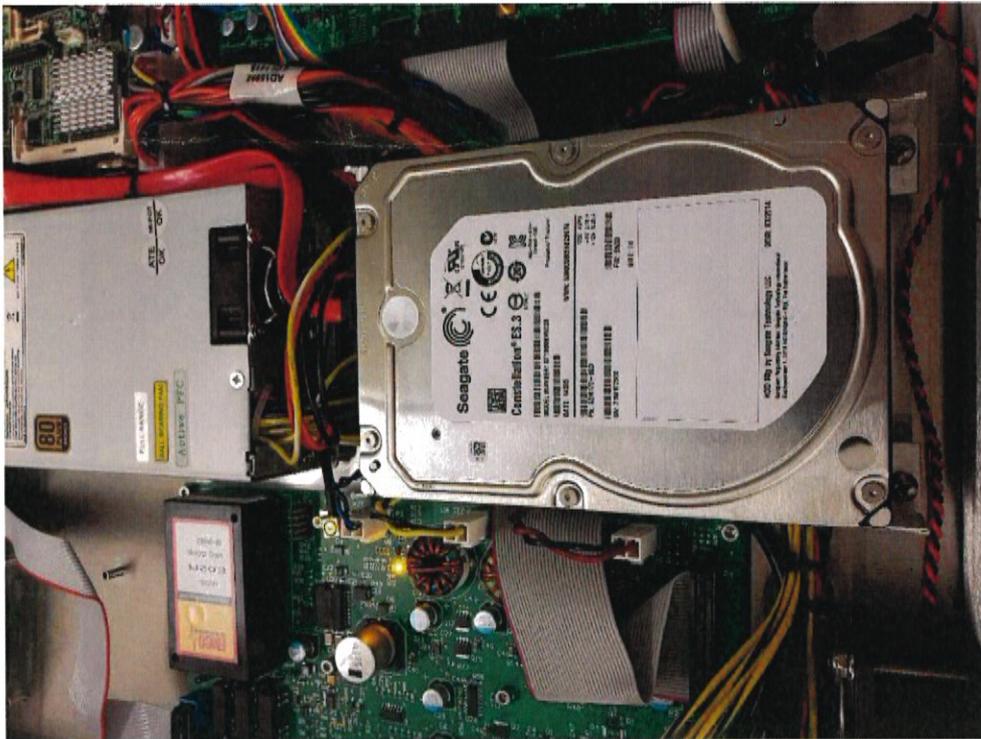


Figure 1 Hard drive mounted in bracket in the bottom of the instrument. Shows two of the four Phillips screws holding it to the chassis.

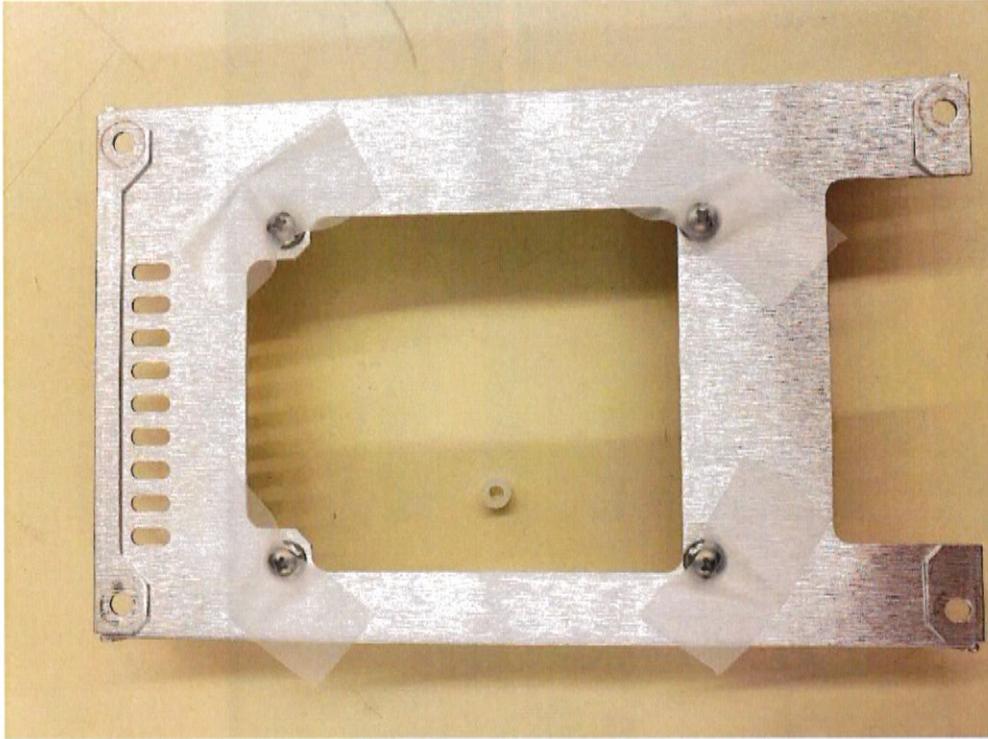


Figure 2 HDD/SSD mounting bracket. Showing the mounting screws held in place by tape.

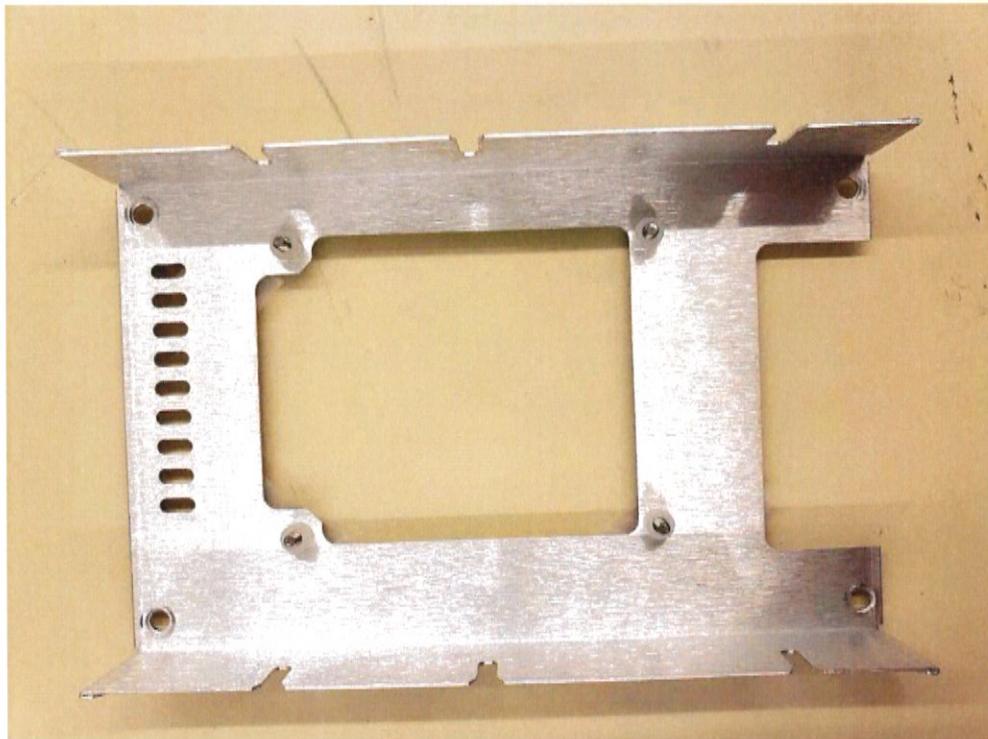


Figure 3 HDD/SSD mounting bracket. Showing the plastic spacers over the screws.

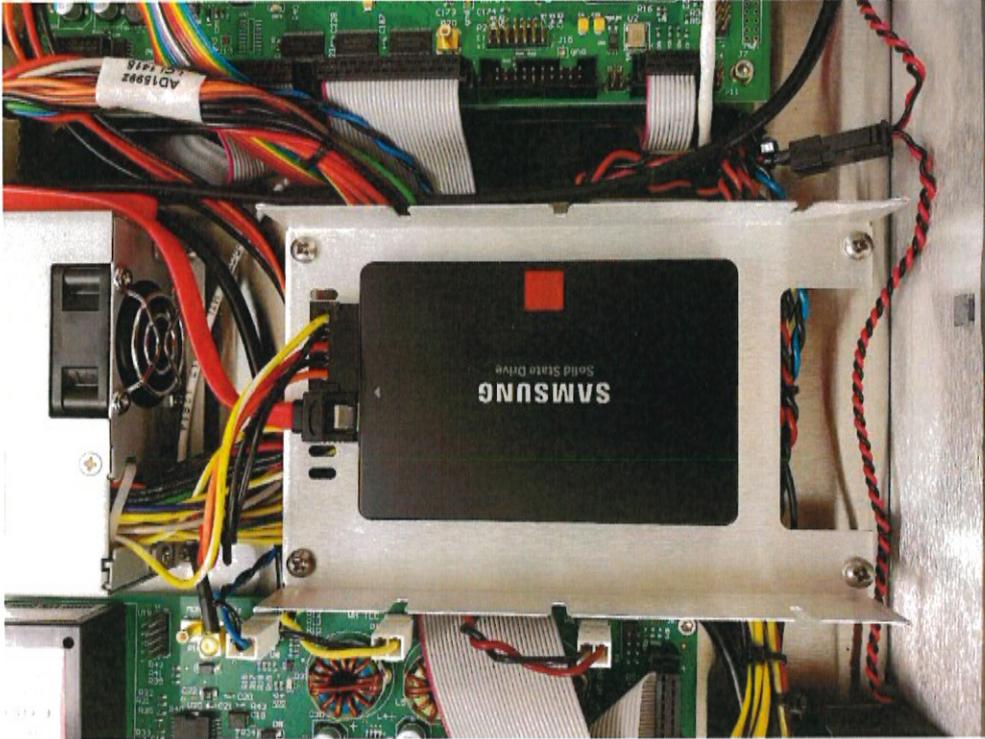


Figure 4 SSD mounted on the bracket. Showing SSD mounting orientation. Secured in the chassis with the four screws. And power and SATA cables connected to the SSD.

Appendix F: Motherboard Identification Sheet

MI-910:

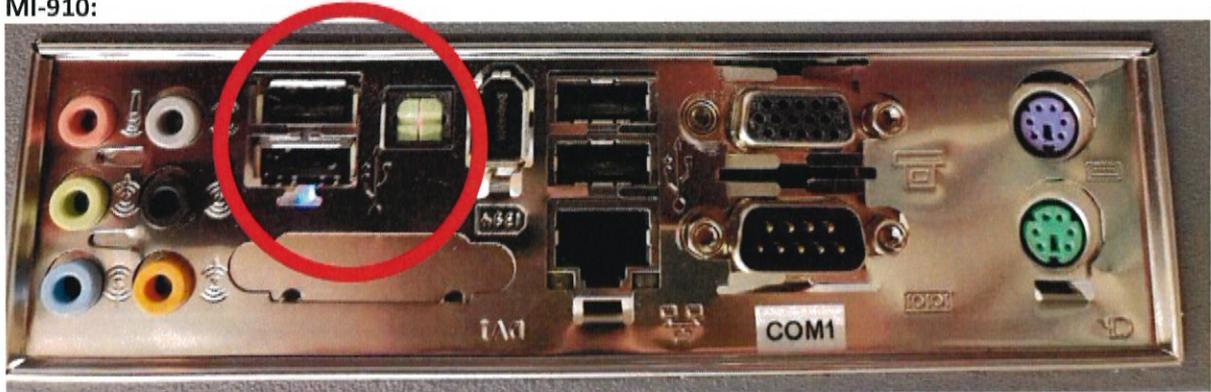


Figure 5 MI-910 Rear Panel

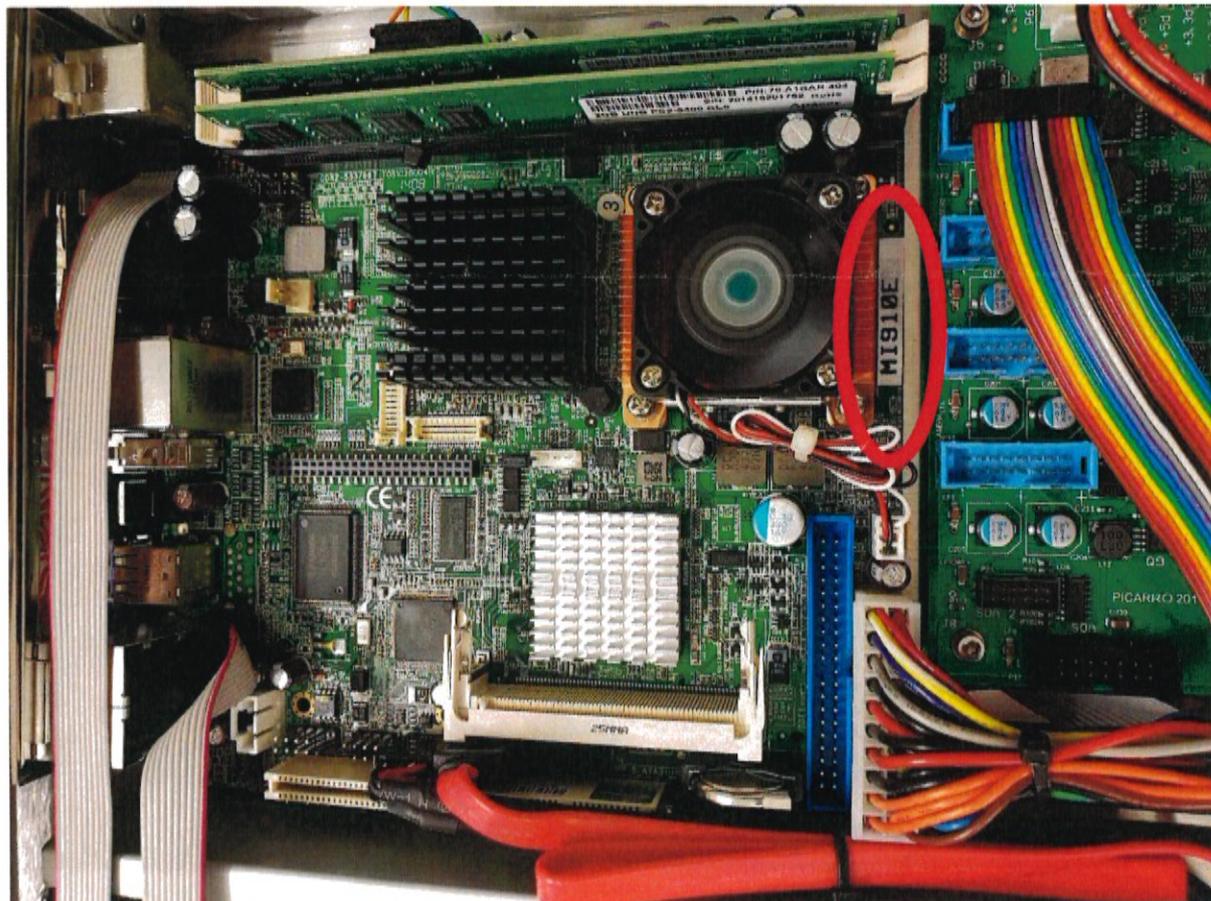


Figure 6 MI-910 Mounted in bottom of the instrument.

MI-945:

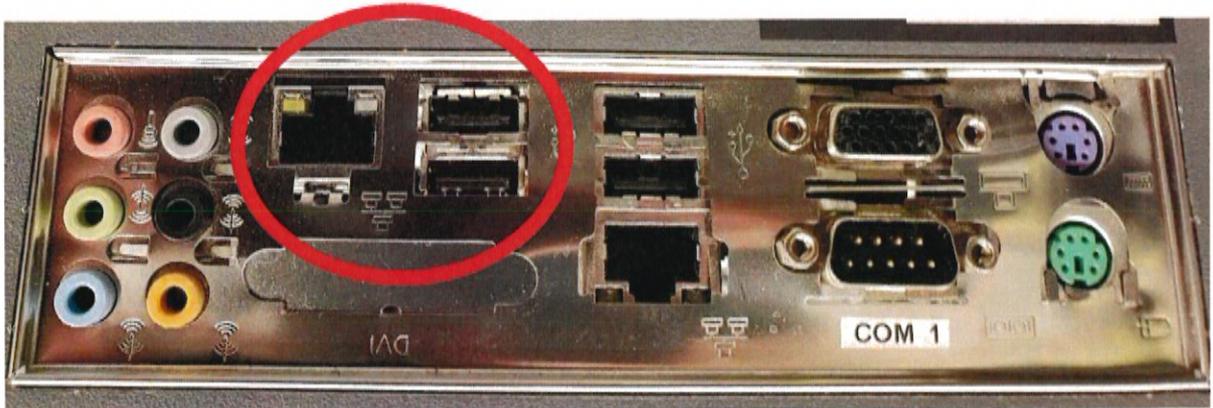


Figure 3 MI-945 Rear Panel

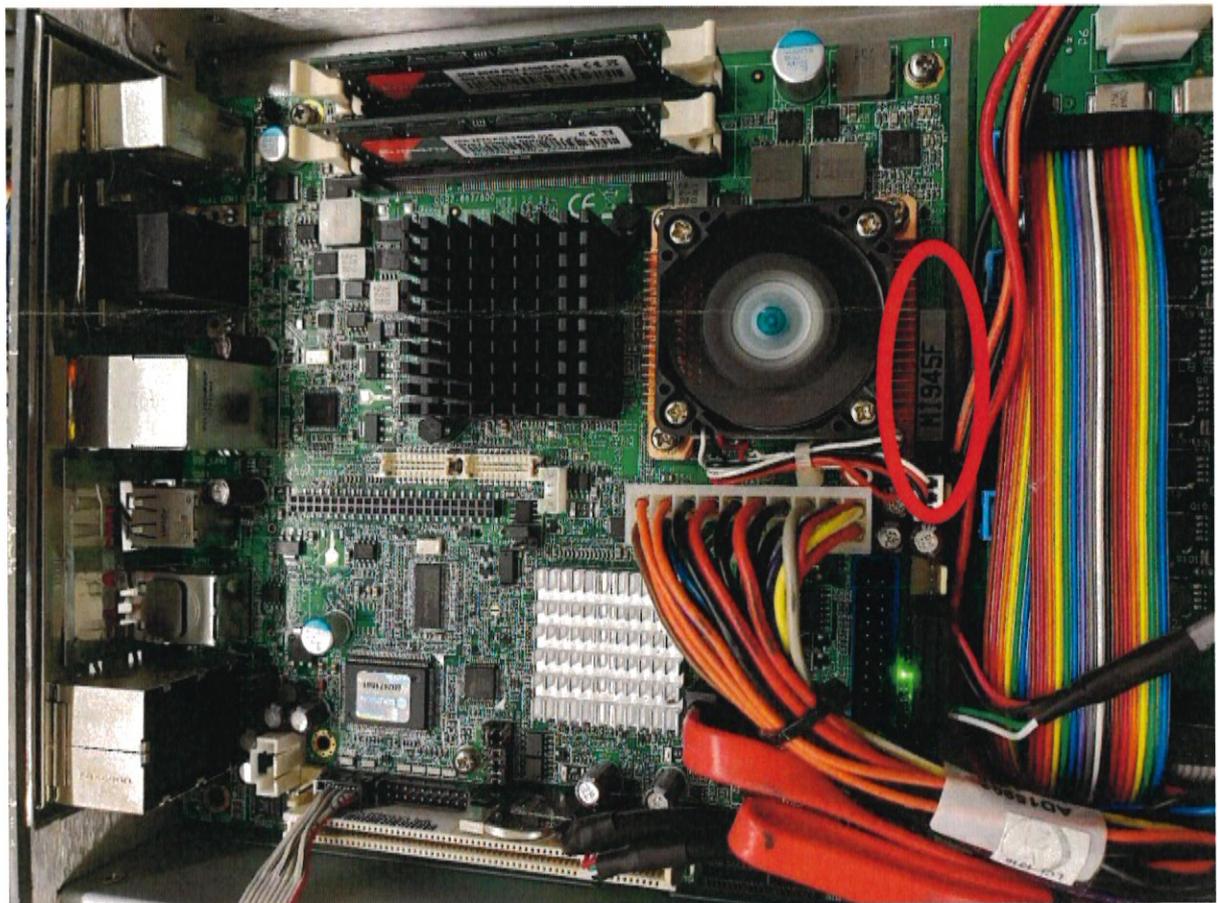


Figure 4 MI-945 Mounted in bottom of the instrument.

MI-970:

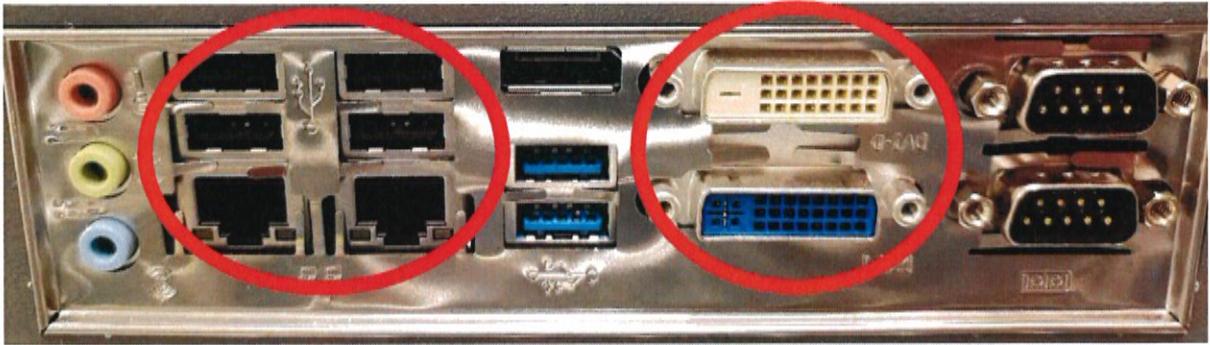


Figure 5 MI-970 Rear Panel

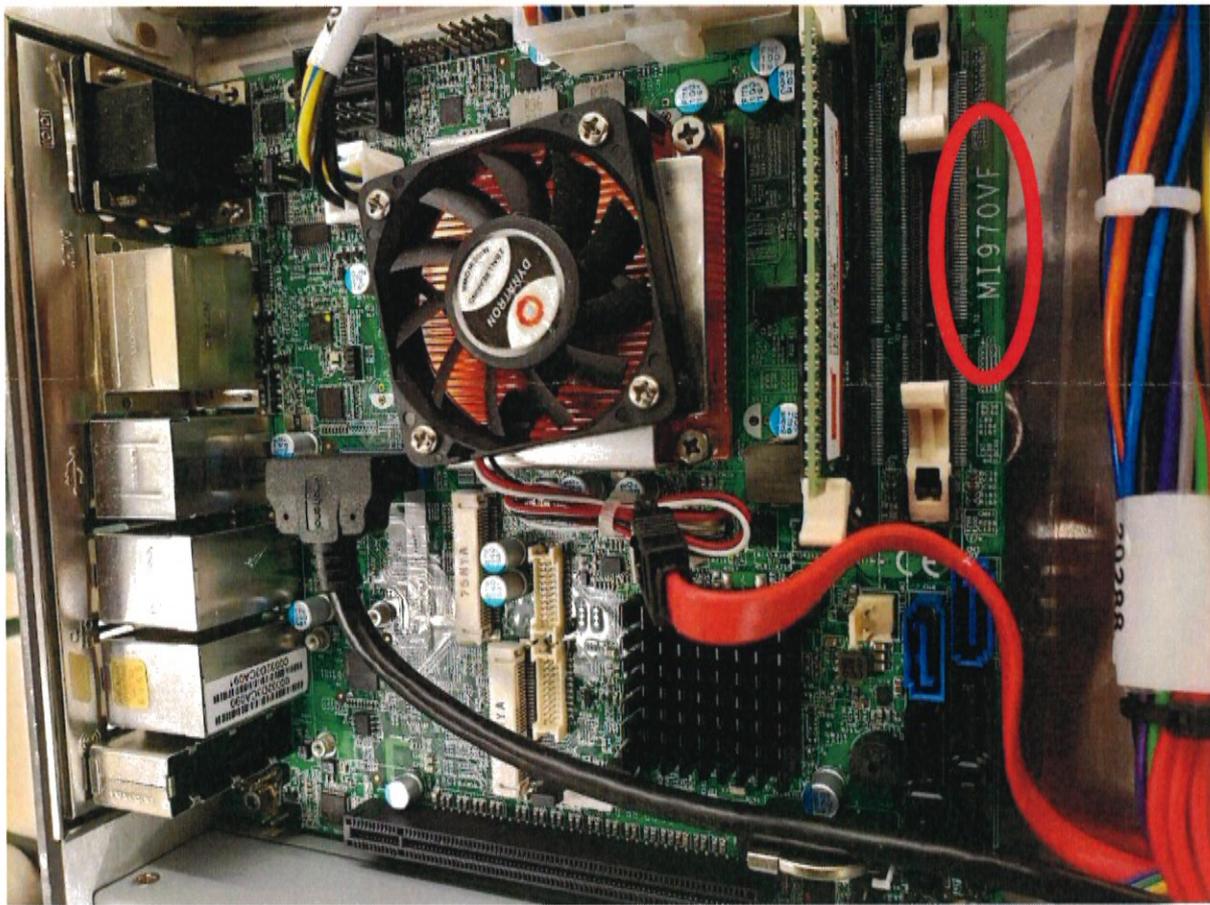


Figure 6 MI-970 Mounted in bottom of the instrument.

