

E5061B-21

Information Only

Internal Only Document

Service Note

Supersedes:
NONE

E5061B ENA Series Network Analyzer

Serial Numbers: MY49405668 to MY49699999, SG49400058 to SG49699999

Manufacturing ID Number: N/A

Re-imaging instruction

Parts Required:

P/N	Description	Qty.
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See Storage KPN on Solution/Action

ADMINISTRATIVE INFORMATION

☐ Calibration Required
☒ Calibration NOT Required

PRODUCT LINE: WN
AUTHOR: jm

ADDITIONAL INFORMATION:

Situation:

An instrument cannot boot successfully and system recovery cannot solve this.

Solution/Action:

Perform re-image. Then it still cannot solve the issue, replace the defective HDD/SSD to the new one.

Images are unique based on the combination of OS, CPU, Storage and other HW drivers. The necessary Image must be identified by checking product serial-number prefix except the instrument CPU/OS was upgraded.

At first, check Siebel transaction whether the instrument was upgraded or not and make sure the required image.

Serial Prefix	Disk Label	Storage KPN	OS	CPU	Storage	TPC driver	Re-Image Tool	Wanna Cry Patch
MY491, SG491	EL010 to EL114	E5061-82201	Win-XP (NUC)	E5061 - 62170	HDD (PATA)	Gunze	Not Available	Not applied
MY492,MY493, SG492,SG493	KY200 to KY222	E5061-82202	Win-XP (FES)	E5061 - 62170	HDD (SATA)	Gunze	Not Available	Not applied
MY494,MY495, SG494,SG495	KW302 to KW462	E5061-82203	Win-7 (WES)	E5061 - 62180	SSD	Gunze	Available	Not applied
MY496, SG496	YD472 to YD999	E5061-82204	Win-7 (WES)	E5061 - 62180	SSD	Dawar	Available	Patch applied

For example, MY492 unit which had Win-XP with HDD & Gunze TPC was upgraded to Win-7 with SSD and Gunze TPC, the unit is equivalent to MY494/MY495.

The below is the re-image instruction for MY494 to MY496, SG494 to SG496 (Win-7) and its equivalent.

For other serial-prefix units (MY491 to MY493, SG491 to SG493), replace the defective HDD then follow the procedure to apply WannaCry patches.

See http://about.keysight.com/en/quality/WannaCry_Ransomware_Patch_Instructions.pdf , which also contains the link to the Patch Installer.

[For MY494, MY495, SG494, SG495 or its equivalent]

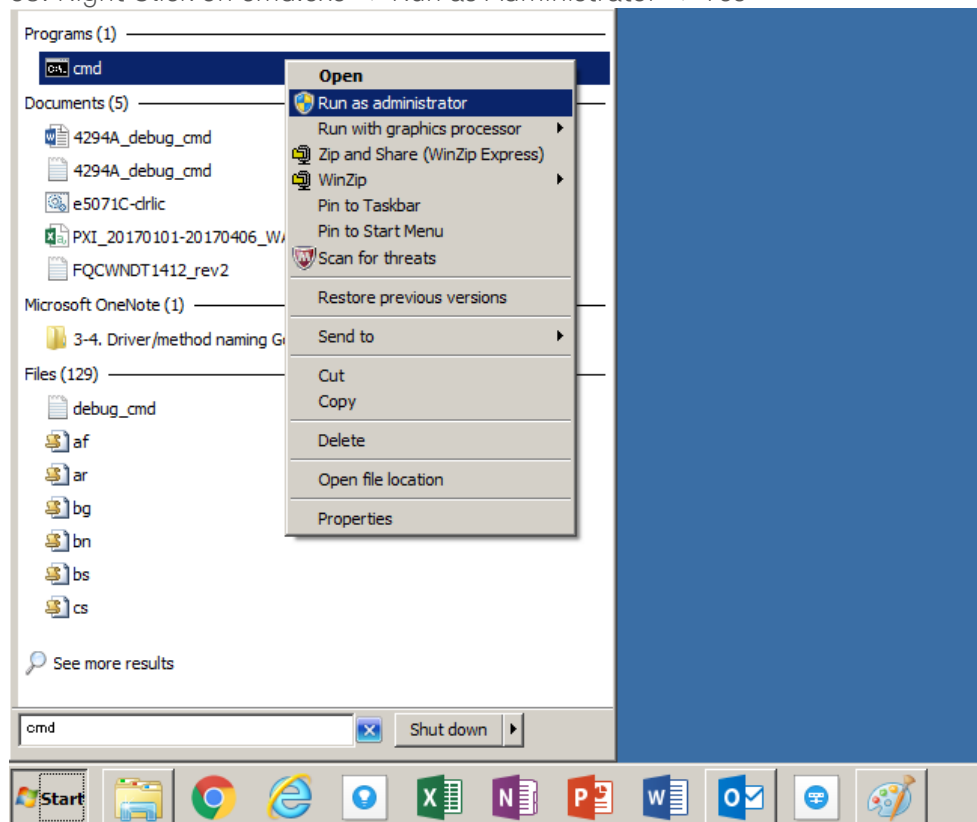
[Create Bootable USB pen drive]

01. Insert one USB pen drive (>32GB) to your PC

Make sure your PC has >64GB free space

02. Windows Start -> Type "cmd" in search field

03. Right Click on cmd.exe -> Run as Administrator -> Yes



04. Type "diskpart"

05. Type "list disk" and recognize <your USB disk number> by checking File Size.

Example: <your USB disk number> is 1 with 28 GB File Size in the below

Note: 28 GB is shown when 32 GB USB pen drive is used

06. Type "select disk <your USB disk number>"

07. Type "list disk" and confirm * is shown at your USB disk number

Note: If you select wrong Disk number, that Disk number data will be erased in the next step.

08. Type "clean"

09. Type "create partition primary"
10. Type "format fs=ntfs label=rescue quick"
11. Type "assign"
12. Type "active"
13. Type "exit"



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>diskpart

Microsoft DiskPart version 6.1.7601
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: F365JC2

DISKPART> list disk

   Disk ###  Status              Size       Free      Dyn  Gpt
   -----  -
   Disk 0    Online              476 GB     0 B
   Disk 1    Online              28 GB     0 B

DISKPART> select disk 1

Disk 1 is now the selected disk.

DISKPART> list disk

   Disk ###  Status              Size       Free      Dyn  Gpt
   -----  -
   Disk 0    Online              476 GB     0 B
   * Disk 1   Online              28 GB     0 B

DISKPART> clean

DiskPart succeeded in cleaning the disk.

DISKPART> create partition primary

DiskPart succeeded in creating the specified partition.

DISKPART> format fs=ntfs label=rescue quick

   100 percent completed

DiskPart successfully formatted the volume.

DISKPART> assign

DiskPart successfully assigned the drive letter or mount point.

DISKPART> active

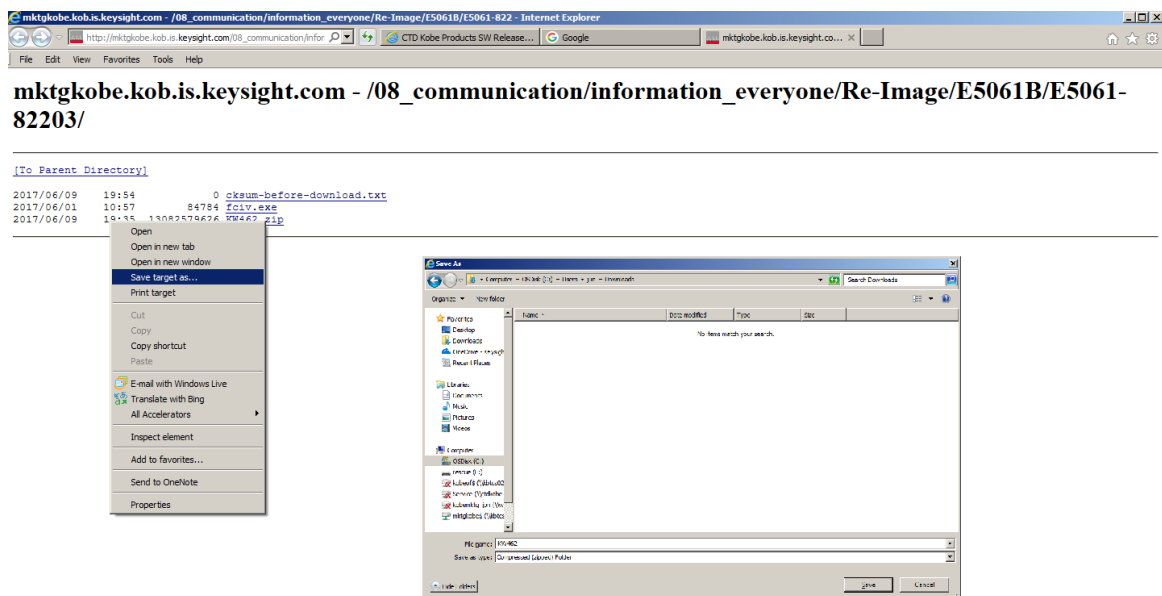
DiskPart marked the current partition as active.

DISKPART> exit

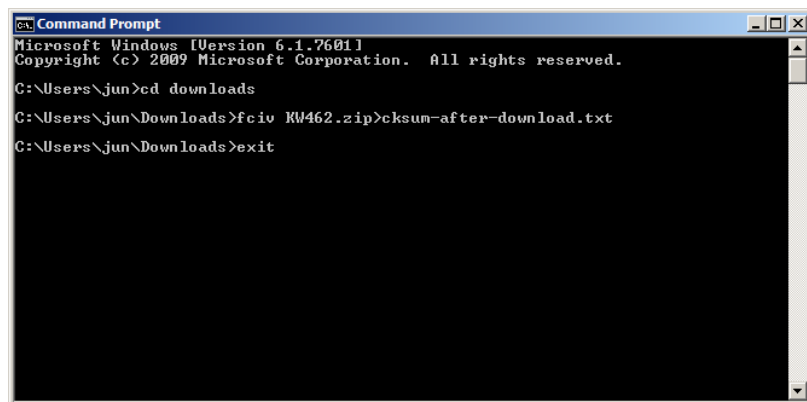
Leaving DiskPart...

C:\WINDOWS\system32>
```

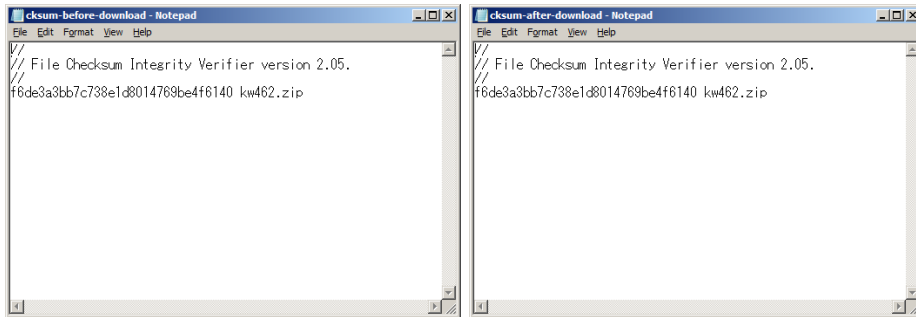
14. Go to http://mktgkobe.kob.is.keysight.com/08_communication/information_everyone/Re-Image/E5061B/E5061-82203/
15. Right Click on [KW462.zip](#) -> Save Target As
Select C:\Users\user\Downloads, then Click Save



16. Right Click on fciv.exe -> Save Target As
Select C:\Users\user\Downloads, then Click Save
17. Windows Start -> Type "cmd" in search field
18. Left Click on cmd.exe
19. Type "cd /d C:\Users\user\Downloads"
20. Type "fciv KW462.zip>cksum-after-download.txt"



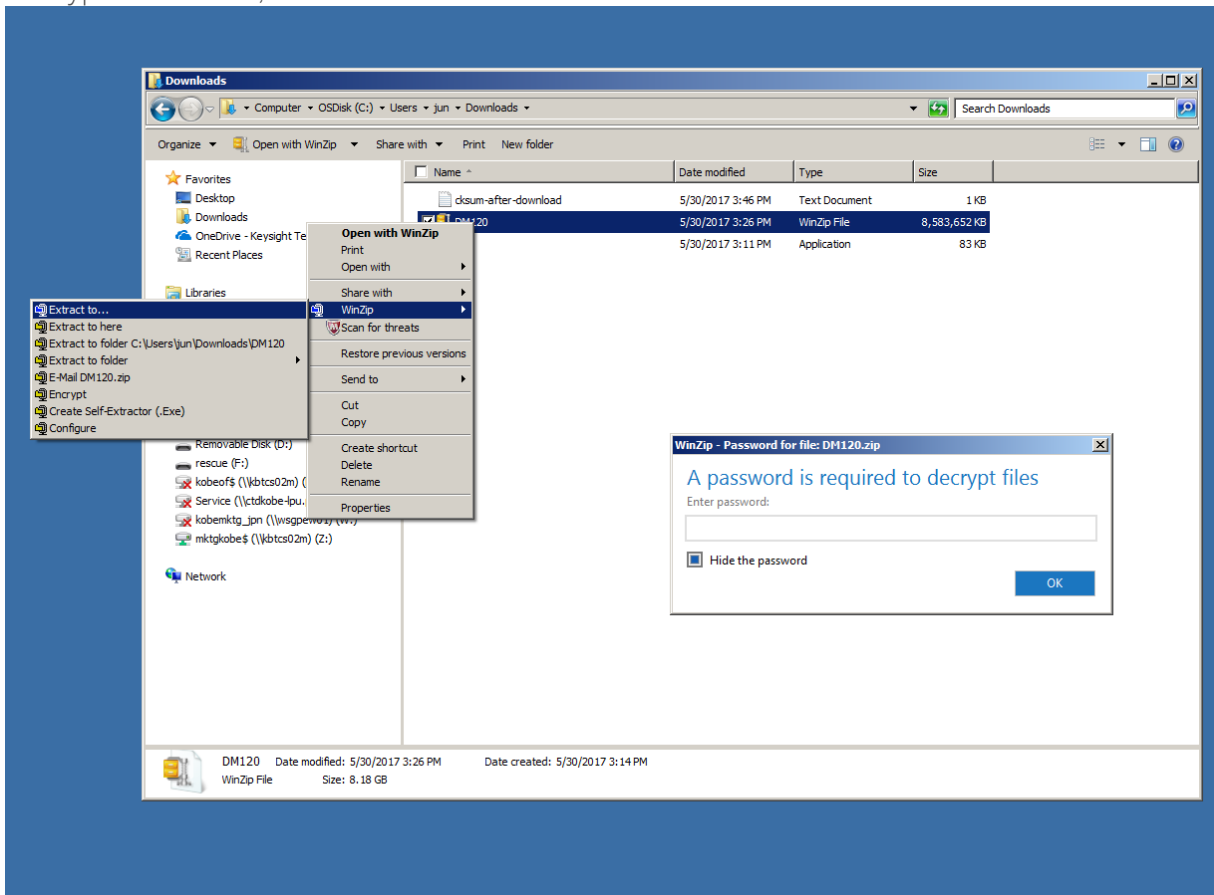
21. Verify the cksum-before-download.txt and cksum-after-download.txt are identical.
cksum-before-download is in
http://mktgkobe.kob.is.keysight.com/08_communication/information_everyone/Re-Image/E5061B/E5061-82203/
cksum-after-download is in C:\Users\user\Downloads



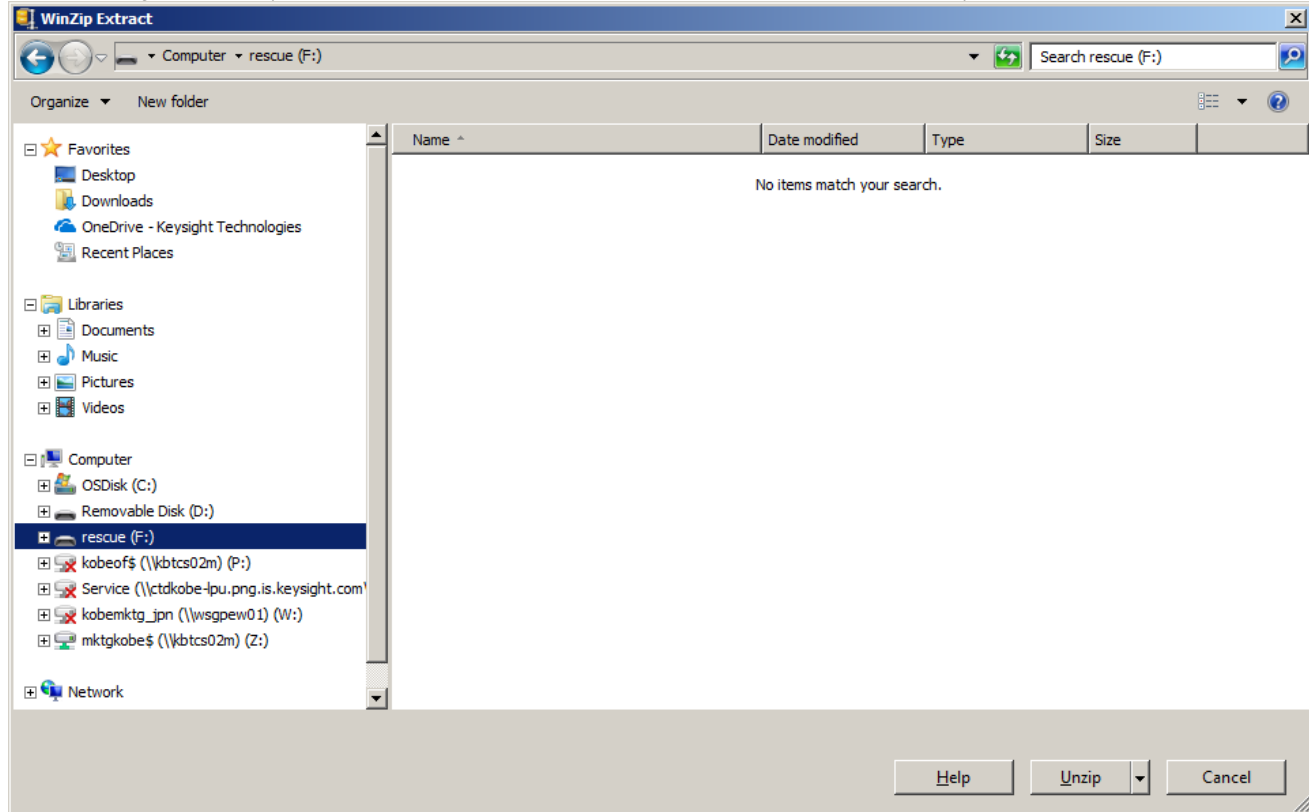
22. Both of checksums are identical, then go to the next step. Else go back to step14.

23. Right Click on **KW462.zip** -> WinZip -> Extract to...

24. Type "ctd-kobe", then Click OK



25. Select your USB pen drive for the Extract to destination, then Click Unzip



Make sure all the files are correctly extracted to USB root. (When you use other unzip tool, like 7-zip,

files are extracted to different folder)

Assuming F: is the drive letter of USB pen drive, the extracted folders and files must be as below.

```
F:\autostart.cmd
F:\boot
F:\BOOTMGR
F:\EFI
F:\sources
F:\boot\BCD
F:\boot\BOOT.SDI
F:\boot\BOOTFIX.BIN
F:\boot\ETFSBOOT.COM
F:\boot\FONTS
F:\boot\FONTS\CHS_BOOT.TTF
F:\boot\FONTS\CHT_BOOT.TTF
F:\boot\FONTS\JPN_BOOT.TTF
F:\boot\FONTS\KOR_BOOT.TTF
F:\boot\FONTS\WGL4_BOOT.TTF
F:\EFI\MICROSOFT
```

F:\EFI\MICROSOFT\BOOT
F:\EFI\MICROSOFT\BOOT\BCD
F:\EFI\MICROSOFT\BOOT\FONTS
F:\EFI\MICROSOFT\BOOT\FONTS\CHS_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\CHT_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\JPN_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\KOR_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\WGL4_BOOT.TTF
F:\sources\boot.wim
F:\ImageX\check_sum.cmd
F:\ImageX\diskpart_partition_config.txt
F:\ImageX\do_restore.cmd
F:\ImageX\fciv.exe
F:\ImageX\imagex.exe
F:\ImageX\restore.cmd
F:\ImageX\restore_helper.cmd
F:\ImageX\save.cmd
F:\ImageX\image\cksum.txt
F:\ImageX\image\AutoBuild.wim
F:\ImageX\diskpart\activate_c_drive.txt
F:\ImageX\diskpart\change_current_drive_letter.txt
F:\ImageX\diskpart\check_existence_target_disk.txt
F:\ImageX\diskpart\cleanup_disk0.txt
F:\ImageX\diskpart\config_drive_c_for_save.txt
F:\ImageX\diskpart\config_drive_d_for_save.txt
F:\ImageX\diskpart\config_drive_e_for_save.txt
F:\ImageX\diskpart\config_drive_r_for_save.txt
F:\ImageX\diskpart\create_drive_c_for_save.txt
F:\ImageX\diskpart\create_drive_d_for_save.txt
F:\ImageX\diskpart\create_drive_e_for_save.txt
F:\ImageX\diskpart\create_drive_r_for_save.txt
F:\ImageX\diskpart\hide_recovery_partition.txt
F:\ImageX\diskpart\rename_drive_c_to_vacant.txt
F:\ImageX\diskpart\rename_drive_d_to_vacant.txt
F:\ImageX\diskpart\rename_drive_e_to_vacant.txt
F:\ImageX\diskpart\rename_drive_r_to_vacant.txt

26. Turn on the instrument.
27. Right Click on Windows Start -> Open Windows Explorer
28. Copy xxxxx.lic file under E:\license to your USB pen drive, if xxxxx.lic file is there. If xxxxx.lic file is not there, ignore step 39 to 41.

[Re-imaging] (It takes 20 to 30 minutes to complete)

29. Unplug all USB devices and LAN cables from the instrument

30. Plug the USB pen drive and keyboard

31. Turn on the instrument

32. Press F7 to boot from USB pen drive when "Press DEL to enter SETUP, F7 to boot MENU" is shown



33. Select USB pen drive as a boot device

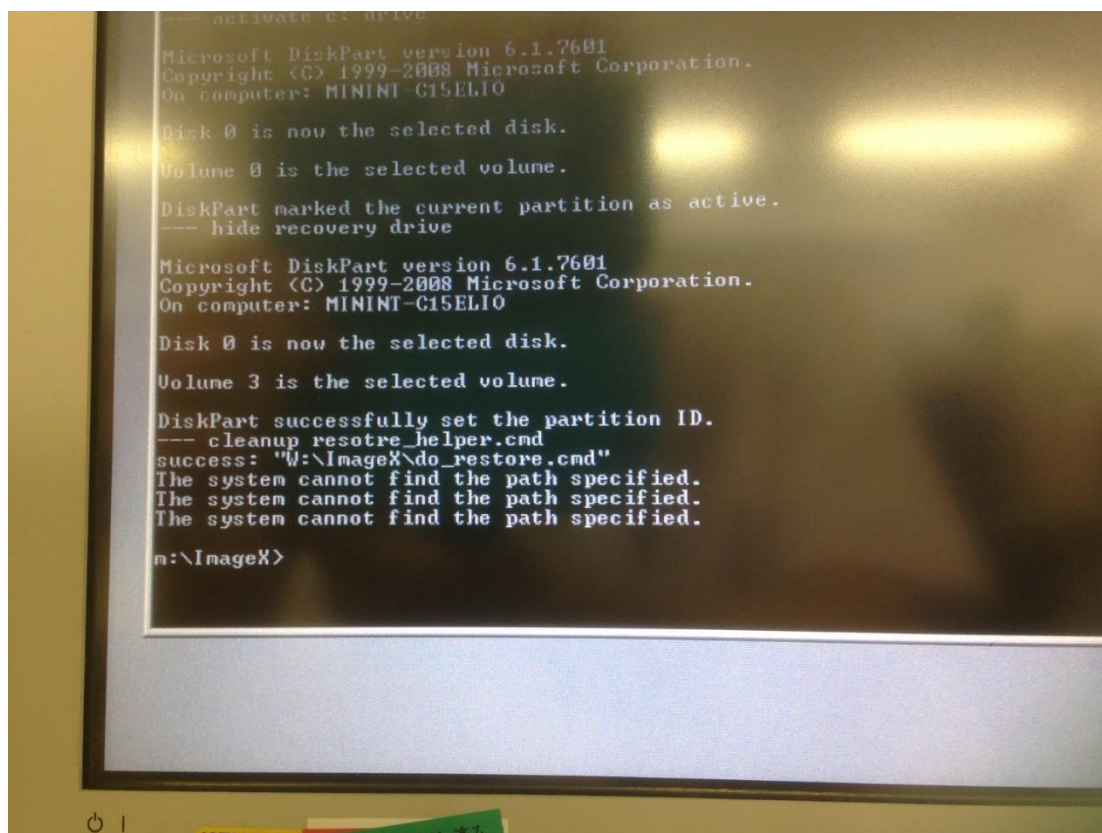


34. Type "Y" and Click Return Key to start SSD image recovery when "Make sure that this instrument is E5061B MY494/MY495/SG494/SG495 or its equivalent. Continue? (Y/N)" is shown

35. Wait for a while during re-booting several times

36. Type "exit", when the below message is shown and Remove the USB pen drive.

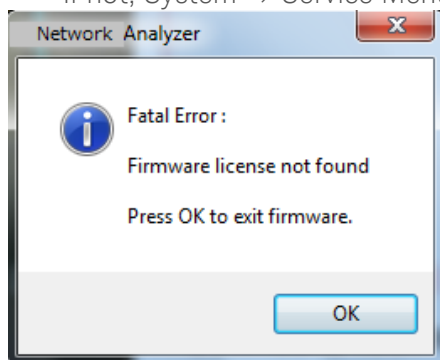
Note: "The system cannot find the path specified." are shown three times. Just ignore them.



37. Click Accept for Keysight Software End User License Agreement

38. Click OK when the below pop-up is shown.

If not, System -> Service Menu -> Exit -> OK



39. Right Click Windows Start -> Open Windows Explorer

40. Restore xxxxx.lic file to E:\license from your USB pen drive

41. Restart your instrument

42. Follow the procedure to apply WannaCry patches.

See http://about.keysight.com/en/quality/WannaCry_Ransomware_Patch_Instructions.pdf , which also contains the link to the Patch Installer.

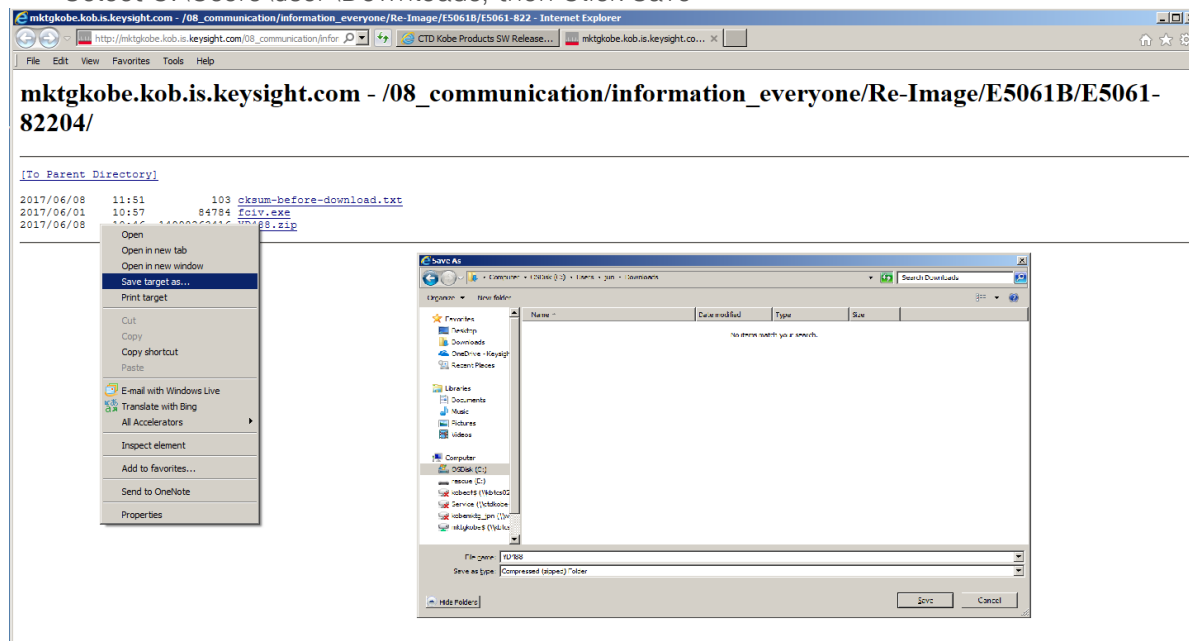
[For MY496, SG496 or its equivalent]

[Create Bootable USB pen drive]

Follow the step01 to step13 of [For MY494, MY495, SG494, SG495 or its equivalent].

14. Go to http://mktgkobe.kob.is.keysight.com/08_communication/information_everyone/Re-Image/E5061B/E5061-82204/

15. Right Click on **YD488.zip** -> Save Target As
Select C:\Users\user\Downloads, then Click Save



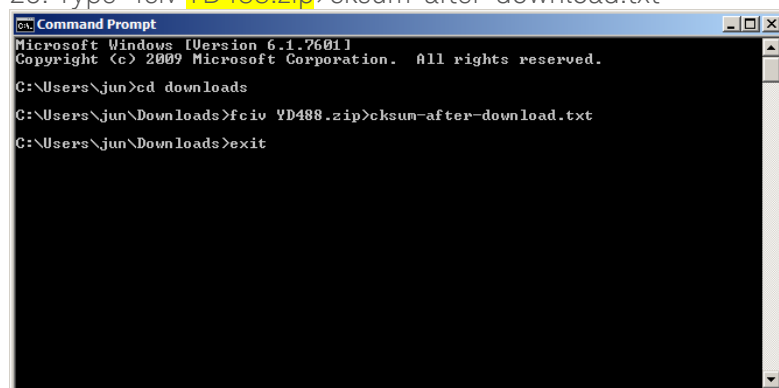
16. Right Click on fciv.exe -> Save Target As
Select C:\Users\user\Downloads, then Click Save

17. Windows Start -> Type "cmd" in search field

18. Left Click on cmd.exe

19. Type "cd /d C:\Users\user\Downloads"

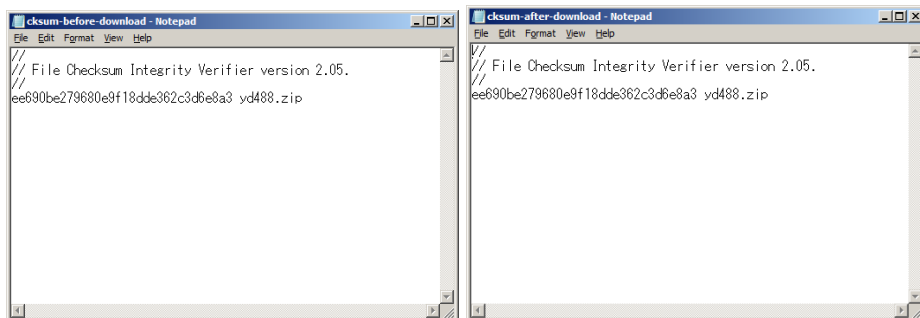
20. Type "fciv **YD488.zip**>cksum-after-download.txt"



21. Verify the cksum-before-download.txt and cksum-after-download.txt are identical.
cksum-before-download is in

http://mktgkobe.kob.is.keysight.com/08_communication/information_everyone/Re-Image/E5061B/E5061-82204/

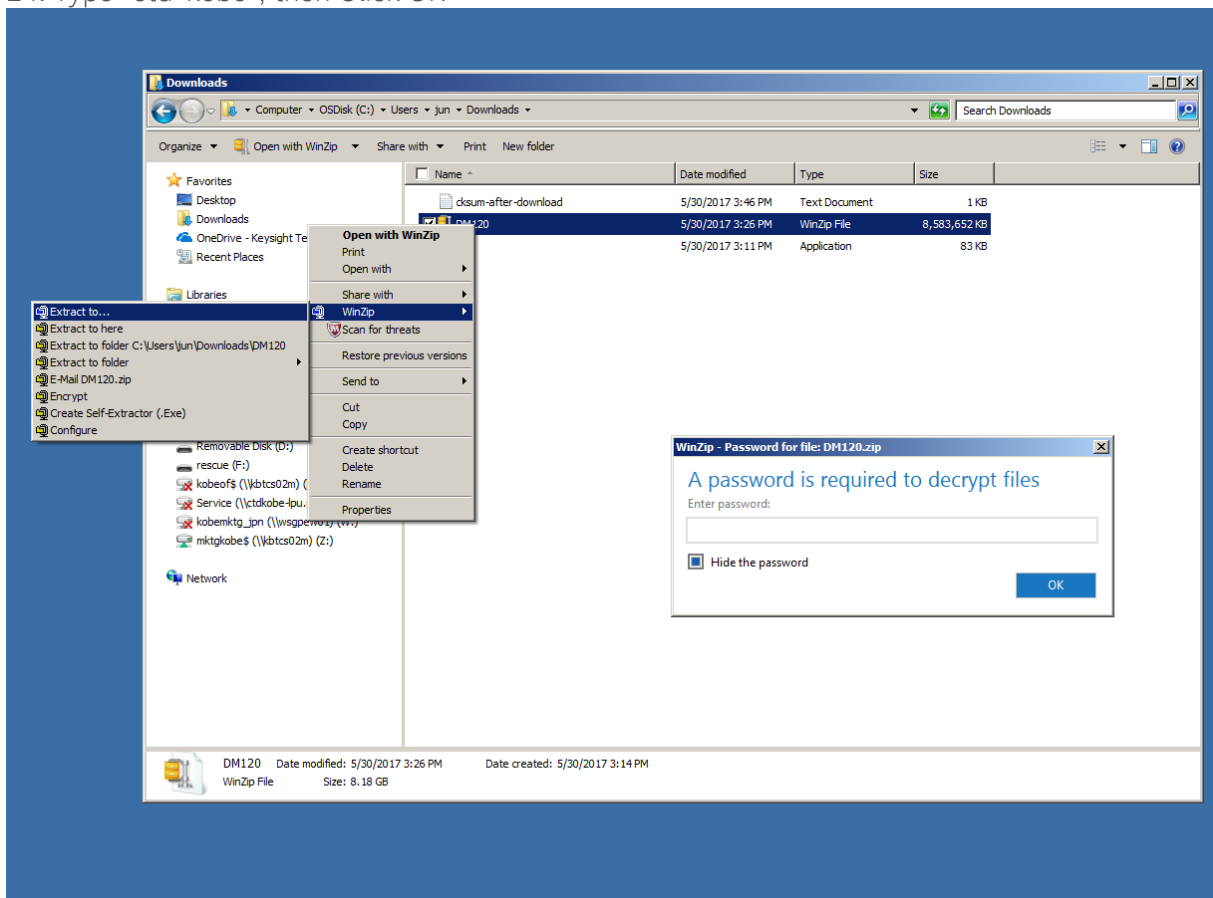
cksum-after-download is in C:\Users\user\Downloads



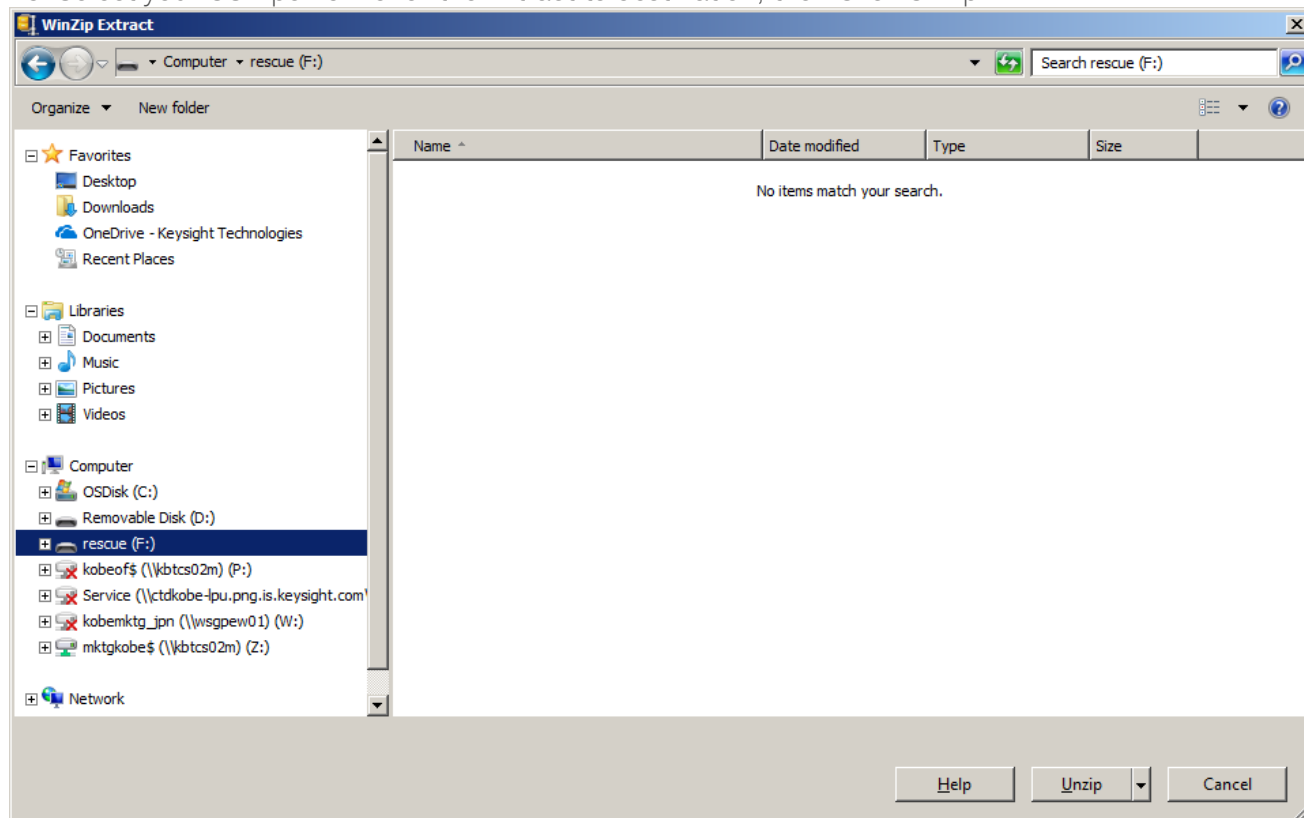
22. Both of checksums are identical, then go to the next step. Else go back to step14.

23. Right Click on **YD488.zip** -> WinZip -> Extract to...

24. Type "ctd-kobe", then Click OK



25. Select your USB pen drive for the Extract to destination, then Click Unzip



Make sure all the files are correctly extracted to USB root. (When you use other unzip tool, like 7-zip, files are extracted to different folder)
Assuming F: is the drive letter of USB pen drive, the extracted folders and files must be as below.

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F:\boot
F:\BOOTMGR
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F:\boot\BCD
F:\boot\BOOT.SDI
F:\boot\BOOTFIX.BIN
F:\boot\ETFSBOOT.COM
F:\boot\FONTS
F:\boot\FONTS\CHS_BOOT.TTF
F:\boot\FONTS\CHT_BOOT.TTF
F:\boot\FONTS\JPN_BOOT.TTF

F:\boot\FONTS\KOR_BOOT.TTF
F:\boot\FONTS\WGL4_BOOT.TTF
F:\EFI\MICROSOFT
F:\EFI\MICROSOFT\BOOT
F:\EFI\MICROSOFT\BOOT\BCD
F:\EFI\MICROSOFT\BOOT\FONTS
F:\EFI\MICROSOFT\BOOT\FONTS\CHS_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\CHT_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\JPN_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\KOR_BOOT.TTF
F:\EFI\MICROSOFT\BOOT\FONTS\WGL4_BOOT.TTF
F:\sources\boot.wim
F:\ImageX\check_sum.cmd
F:\ImageX\diskpart_partition_config.txt
F:\ImageX\do_restore.cmd
F:\ImageX\fciv.exe
F:\ImageX\imagex.exe
F:\ImageX\restore.cmd
F:\ImageX\restore_helper.cmd
F:\ImageX\save.cmd
F:\ImageX\image\cksum.txt
F:\ImageX\image\AutoBuild.wim
F:\ImageX\diskpart\config_drive_c_for_save.txt
F:\ImageX\diskpart\config_drive_d_for_save.txt
F:\ImageX\diskpart\config_drive_e_for_save.txt
F:\ImageX\diskpart\config_drive_r_for_save.txt
F:\ImageX\diskpart\hide_recovery_partition.txt
F:\ImageX\diskpart\rename_drive_c_to_vacant.txt
F:\ImageX\diskpart\rename_drive_d_to_vacant.txt
F:\ImageX\diskpart\rename_drive_e_to_vacant.txt
F:\ImageX\diskpart\rename_drive_r_to_vacant.txt

26. Turn on the instrument.
27. Right Click on Windows Start -> Open Windows Explorer
28. Copy xxxxx.lic file under E:\license to your USB pen drive, if xxxxx.lic file is there. If xxxxx.lic file is not there, ignore step 39 to 41.

[Re-imaging] (It takes 20 to 30 minutes to complete)
Follow step29 to step33 of **[For MY494, MY495, SG494, SG495 or its equivalent]**.

34. Type “Y “and Click Return Key to start SSD image recovery when "Make sure that this instrument is E5061B MY496/SG496 or its equivalent. Continue? (Y/N)” is shown

Follow step35 to step41 of **[For MY494, MY495, SG494, SG495 or its equivalent]**.
No need to follow step42, since WannaCry Patch is already applied.

Revision History:

Date	Service Note Revision	Author	Reason for Change
09 June 2017	E5061B-21	jm	As Published