

E5052B-12B

Information Only Internal Only Document Service Note

Supersedes: E5052B-12A

E5052B Signal Source Analyzer

Serial Numbers: MY47100001 to MY47799999, SG47100001 to SG47799999 Manufacturing ID Number: N/A

Re-imaging instruction

Parts Required:

P/N

Description

Qty.

See Storage KPN on Solution/Action

ADMINISTRATIVE INFORMATION

[[]] Calibration Required [X] Calibration NOT Required PRODUCT LINE: WN AUTHOR: jm

ADDITIONAL INFORMATION:



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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	Storage	OS	CPU	Storage	TPC	Re-Image	WannaCry
	Label	KPN				driver	Tool	Patch
MY471,	NM302	E5052-	Win-XP	E5052-	HDD	Gunze	Available	Not
SG471	to	82202	(NUC)	61011	(PATA)			applied
	NM332							
MY472/473,	NF330	E5052-	Win-XP	E5070-	HDD	Gunze	Available	Not
SG472/473	to	82203	(FES)	62070	(SATA)			applied
	NF332							
MY474/475/476,	NW401	E5052-	Win-7	E5052-	SSD	Gunze	Available	Applied
SG474/475/476	to	82204	(WES)	62080	(SATA)			
	NW509							
MY477,	NH609	E5052-	Win-10	E5052-	SSD	Gunze	Available	Applied
SG477	to	82205	(IoT	62090	(SATA)			
	NH999		Enterprise					
			x64)					

For example, MY472 unit which had Win-XP with HDD was upgraded to Win-7 with SSD, the unit is equivalent to MY474/475/476.

Note: For MY471/472/473, SG471/472/473 (Win-XP), replace the defective HDD/SSD then follow the procedure to apply WannaCry patches.

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

[For MY474/475/476, SG474/475/476 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"

👞 Administrato	or: Command Prompt					
Microsoft W Copyright (indows [Version c) 2009 Microsof	6.1.7601 t Corpor] ation. A	ll ri	ghts reserved.	
C:\WINDOWS\	system32≻diskpaı	۰t				
Microsoft D Copyright (On computer	iskPart version C> 1999-2008 Mic : F365JC2	6.1.7601 rosoft C	orporatio	n.		
DISKPART> 1	ist disk					
Disk ###	Status	Size	Free	Dyn	Gpt	
Disk Ø Disk 1	Online Online	476 GB 28 GB	0 B 0 B			
DISKPART> s	elect disk 1					
Disk 1 is n	ow the selected	disk.				
DISKPART> 1	ist disk					
Disk ###	Status	Size	Free	Dyn	Gpt	
Disk Ø * Disk 1	Online Online	476 GB 28 GB	0 B 0 B			
DISKPART> c	lean					
DiskPart su	cceeded in clear	ing the	disk.			
DISKPART> c:	reate partition	primary				
DiskPart su	cceeded in creat	ing the	specified	part	ition.	
DISKPART> f	ormat fs=ntfs la	bel=resc	ue quick			
100 perce	nt completed					
DiskPart su	ccessfully forma	ntted the	volume.			
DISKPART> a	ssign					
DiskPart su	ccessfully assig	ned the	drive let	ter o	r mount point.	
DISKPART> a	ctive					
DiskPart ma	rked the current	; partiti	on as act	ive.		
DISKPART> e:	xit					
Leaving Dis	kPart					
C:\WINDOWS\	system32>					
						-

14. Go to http://mktgkobe.kob.is.keysight.com/08 communication/information everyone/Re-Image/E5052B/E5052-82204/

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

Cmktgkobe.kob.is.keysight.com - /08_communication/information_everyone/Re-Image/E5052B/E5052-	-822 - Internet Explorer		
🕞 🕞 🗢 🛄 http://mktgkobe.kob.is.keysight.com/08_communication/infor 🔎 🚽 🐓 🔽 Yahoo! JAPAN	G Google	Service Notes E5052A/B CTD Kobe Products SW	🔤 mktgkobe.kob.is.keysi 🗙 👔 🏤 🏡
File Edit View Favorites Tools Help			

mktgkobe.kob.is.keysight.com - /08_communication/information_everyone/Re-Image/E5052B/E5052-82204/



- 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 NWxxx.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/E5052B/E5052-82204/

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



Note that actual checksum is not identical with the above.

- 22. Both of checksums are identical, then go to the next step. Else go back to step14.
- 23. Right Click on NWxxx.zip -> WinZip -> Extract to...
- 24. Type "ctd-kobe", then Click OK



I WinZip Extract					×
Computer + rescue (F:)		👻 🚱 Searc	h rescue <mark>(</mark> F:)		2
Organize 🔻 New folder				•	?
Image: Second Secon	Date modified No items match your sear	Type ch.	Size		
🕀 🗣 Network					
		<u>H</u> elp <u>U</u> r	izip 🔻	Cancel	

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 xxxx.lic file under D: (Factory)\license to your USB pen drive, if xxxx.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 E5052B MY474/SG474 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 on Keysight Software End User License Agreement

- 38. System -> Service Menu -> Exit -> OK
- 39. Right Click Windows Start -> Open Windows Explorer
- 40. Restore xxxxx.lic file to D: (Factory)\license from your USB pen drive
- 41. Restart your instrument

[For MY472/473, SG472/473 or its equivalent] [Create Bootable USB pen drive] Follow the step01 to step13 of [For MY474/475/476, SG474/475/476 or its equivalent]

14. Go to <u>http://mktgkobe.kob.is.keysight.com/08 communication/information everyone/Re-Image/E5052B/E5052-82203/</u>

15. Right Click on NF332.zip -> Save Target As Select C:\Users*user*\Downloads, then Click Save



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/E5052B/E5052-82203/

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

/// cksum-before-download - Notepad	- 🗆 ×	/// cksum-after-download - Notepad	_ 🗆 🗙
Elle Edit Format View Help		Ele Edit Format View Help	
/// //File Checksum Integrity Verifier version 2.05.	4	/// // File Checksum Integrity Verifier version 2.05.	*
11235d0d843d6d03aea687b3fe5297e2_nf332.zip		11235d0d843d6d03aea687b3fe5297e2_nf332.zip	
	V		×

22. Both of checksums are identical, then go to the next step. Else go back to step14.
23. Right Click on NF332.zip -> WinZip -> Extract to...

Follow step24 of [For MY474/475/476, SG474/475/476 or its equivalent].

25	Select your	IISR r	en drive	for the	Extract to	destination	then	Click IInzi	n
۷٦.	Select your	OSD h	Jell ul ive	ioi uie	EXILACT 10	uestination,	ulen	CHCK UHZI	μ

UinZip Extract						×
G → - Computer + rescue (F:)			- 🛃	Search rescue (F:)		2
Organize 🔻 New folder					•	0
Image: Second Secon	Name *	Date modified No items match your sear	Type ch.	Size		
Network						
			Help	<u>U</u> nzip 🗸	Cancel	

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_xp.cmd F:\ImageX\fciv.exe F:\ImageX\imagex.exe F:\ImageX\readme.txt F:\ImageX\restore_xp.cmd F:\ImageX\restore_xp_helper.cmd F:\ImageX\save_xp.cmd F:\ImageX\show_disk0.txt F:\ImageX\image\cksum.txt F:\ImageX\image\AutoBuild.wim

- 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 F2 to boot from USB pen drive when "Press F2 for System Utilities" is shown



33.1 Press agt0nly, when Enter Password is shown, if not skip this step. Note: 0 is numeric zero, not alphabetic o.



33.2 Move to Boot screen to enter \rightarrow key three times. Move to Boot Order to enter \downarrow key, then hit "Enter" key

	PhoenialIBS Setup Util	its.
Main Information	Configuration Ex	ot Exit
Bart Weber		Item Specific Help
Sunnary screen: Noot-time Diagnostic Sc QuickBoot Node: PUST Errors	(Disabled) (Disabled) (Eaabled) (Eaabled)	Alter the order of booting devices.

33.3 Select USB-HDD to use \uparrow key or \downarrow key.



Bhown is DTD2 Setue 1141144	
Phoenitkatus secup ocifity	
Boot	
Boot Order	Item Specific Help
Boot priority order: 1: 1:2 100: HULFNSH REZZERSEN CZ-0810 2: USB HDD: HTS42402 0M9AT00-(USB 2.0 3: USB KEY: 4: USB FDC: 5: IDE CD: 6: USB CDROM: 7: PCI SCSI: 8: Excluded from boot order: : USB ZIP: : USB LS120: : PCI BEV: : Other USB: : PCI:	Up and Down arrows: Select a device. <>> and <->: Move a device up or down. <f> and <r>: Specify a device fixed or removable. <0>: Exclude or include the device to boot. <shift *="" d:="" enable="" or<br="">disable a device. <1-4>: Load default boot sequence.</shift></r></f>
H Help H Select Item / Change Ualues Esc Exit - Select Henu Enter Select ► Sub-Hen	P3 Setup Defaults u F10 Save and Exit

33.4 Move to "Exit" screen to hit "Esc" key twice. Select Exit Saving Changes to use \uparrow key or \downarrow key.

Then hit "Enter" key.

	PhoenixBIOS Setup U	tility
Main Information	Configuration	Boot Exit
Aain Information Exit Sector Changes Exit Discarding Changes Load Setup Defaults Discard Changes Save Changes	Cominguration	Exit the BIOS Setup utility with changes saved to CMOS.
CMOS Restore Condition Save CMOS to Flash Erase CMOS from Flash Restore CMOS from Flas	ICMOS Corruption]	
Fl Help 14 Select Esc Exit • Select	Iten -/* Change Ienu Enter Execut	: Values F9 Setup Defaults e Command F10 Save and Exit

33.5 Select "Yes" and hit "Enter" key.



34. Type "Y "and Click Return Key to start SSD image recovery when "Make sure that this instrument is E5052B MY472/MY473/SG472/SG473 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.

Volume 0 is the selected volume.
DiskPart marked the current partition as an arrow of the current partition as a second s
Microsoft DiskPart version 6.1.7601 Copyright (C) 1999-2008 Microsoft Corporation. On computer: MININT-9SEKRVU
Disk 0 is now the selected disk.
Volume 3 is the selected volume.
DiskPart successfully set the partition ID. cleanup resoure_helper.cmd success: "W:\ImageX\do_restore_xp.cmd" The system cannot find the path specified. The system cannot find the path specified. The system cannot find the path specified.
m:\ImageX>exit

36.5. Press Enter when the below screen is shown.

Please select the operating system to start:

Microsoft Windows XP Professional

Use the up and down arrow keys to move the highlight to your choice. Press ENTER to choose.

For troubleshooting and advanced startup options for Hindows, press F8.

37. Select I accept the agreement, then Click "Next >"



37.1. Click "Next >" when Date and Time Settings screen is shown.

ate and Time Settings Set the correct date and time for your Windows computer	r.	B
Date & Time	5:04:11 PM	
Time Zone		
Automatically adjust clock for daylight say	ving changes	
3		

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



- 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 <u>http://about.keysight.com/en/quality/WannaCry_Ransomware_Patch_Instructions.pdf</u>, which also contains the link to the Patch Installer.
- 43. Press F2 to boot from USB pen drive when "Press F2 for System Utilities" is shown



43.1 Press agt0nly, when Enter Password is shown, if not skip this step. Note: 0 is numeric zero, not alphabetic o.



43.2 Move to Boot screen to enter \rightarrow key three times.

Move to Boot Order to enter \downarrow key, then hit "Enter" key

	10.0
PhoenialIIOS Setup Utility Bain Information Configuration Root	Enit
Summary screen: (Disabled) Doot-time Diagnostic Screen: (Disabled) QuickBoot Mode: (Disabled) PUST Errors (Enabled)	Item Specific Help Alter the order of booting devices.
81 Help 14 Select Item -/+ Change Unlues Exe Exit + Select News Enter Select + Sub-Re	m Plo Setup Defaults m Plo Save and Exit

43.3 Select IDE-HDD to use \uparrow key or \downarrow key.

	Move IDE-HDD	to th	e top	to enter	+ key.
--	--------------	-------	-------	----------	--------

PhoenixBIOS Setup Utility	
Boot	
Boot Order	Item Specific Help
Boot priority order: 1: 100 HOD: HTS42402 0H9AT00-(USB 2.0 3: USB KEY: 4: USB FDC: 5: IDE CD: 6: USB CDROM: 7: PCI SCSI: 8: Excluded from boot order: : USB ZIP: : USB LS120: : PCI DEV: : Other USB: : PCI:	Up and Down arrows: Select a device. <>> and <->: Move a device up or down. <f> and <r>: Specify a device fixed or removable. <x>: Exclude or include the device to boot. <shift *="" d:="" enable="" or<br="">disable a device. <1-4>: Load default boot sequence.</shift></x></r></f>
P1 Help 14 Select Item -/• Change Ualues Esc Exit + Select Menu Enter Select ► Sub-Men	P3 Setup Defaults u F10 Save and Exit

43.4 Move to "Exit" screen to hit "Esc" key twice.

Select Exit Saving Changes to use \uparrow key or \downarrow key. Then hit "Enter" key.

PhoenixBIOS Setup Utility	
Hain Information Configuration Boot	Exit
Exit Saving Changes	Item Specific Help
Load Setup Defaults	Exit the BIOS Setup
Discard Changes	utility with changes
Save Changes	saved to CMOS.
CMOS Restore Condition [CMOS Corruption] Save CMOS to Flash Erase CMOS from Flash Restore CMOS from Flash	
F1 Help 14 Select Item -/+ Change Values	F9 Setup Defaults

^{43.5} Select "Yes" and hit "Enter" key.

Setup Confirmation				
Save configuration	changes and exit now?			
[Yes]	[No]			

[For MY471, SG471 or its equivalent] [Create Bootable USB pen drive] Follow the step01 to step13 of [For MY474/475/476, SG474/475/476 or its equivalent]

14. Go to <u>http://mktgkobe.kob.is.keysight.com/08 communication/information everyone/Re-Image/E5052B/E5052-82202/</u>

15. Right Click on NM332.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 NM332.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/E5052B/E5052-82202/

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 NM332.zip -> WinZip -> Extract to...

Follow step24 of [For MY474/475/76, SG474/475/476 or its equivalent].

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

💐 WinZip Extract						×
G → - Computer - rescue (F:)			👻 🚱 Search	rescue (F:)		2
Organize 🔻 New folder					-	0
□ ☆ Favorites □ Desktop □ Downloads △ OneDrive - Keysight Technologies □ Recent Places □ Libraries □ Documents □ Music □ Pictures □ Videos □ I Documents □ Wideos □ I Documents □ Wideos □ I Computer □ SDisk (C:) □ Removable Disk (D:) □ rescue (F:) □ ☆ kobeof\$ (\\kbtcs02m) (P:) □ ☆ kobemktg_jpn (\\wspew01) (W:) □ mktgkobe\$ (\\kbtcs02m) (Z:)	Name *	Date modified No items match your sear	Type	Size		
Vetwork	1					_
			<u>H</u> elp <u>U</u> nz	ip 🔽	Cancel	

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\diskpart_partition_config.txt F:\ImageX\do_restore_xp.cmd F:\ImageX\fciv.exe F:\ImageX\imagex.exe F:\ImageX\restore_xp.cmd F:\ImageX\restore_xp_helper.cmd F:\ImageX\readme.txt 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\cleanup_disk0.txt F:\ImageX\diskpart\create drive - 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_F_for_save.txt F:\ImageX\diskpart\create_drive_G_for_save.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 F2 to boot from USB pen drive when "Press F2 for System Utilities" is shown



33.1 Press e5052, when Enter Password is shown, if not skip this step.



33.2 Move to Boot screen to enter \rightarrow key three times. Move to Boot Order to enter \downarrow key, then hit "Enter" key

 Boot Order Boot Order Hoppy check: Summary screen: Boot-time Diagnostic Screen: Logo Video Mode QuickBoot Mode: Extended Memory Testing Installed OS Enable ACPI POST Errors 	Disabled Disabled Disabled Disabled Boox6001 Enabled [Just zero it] [WinXP or later] [No] [Enabled]	Exit Item Specific Help Allows the order that devices will be booted from to be altered.

33.3 Select USB-HDD to use ↑ key or ↓ key. Move USB-HDD to the top to enter + key.

Agilent Technologies E5071C 100 kHz - 8.5 GHz ENA Series Network Analyzer	y対応済 管理番号 MKTG-099 S/N MY46101693
PhoenixBIOS Setup Utility Boot	
Boot priority order: 1: USB HDD: 2: IDE 0: FUJITSU MHU2040AH-(PO) 3: USB FDC: 4: IDE 2: 5: USB CDROM: 6: PCI LAN: 7: 8: Available boot order options: : IDE 1: : IDE 3: : USB ZIP: : USB	Item Specific Help Keys used to view or configure devices: Up and Down arrows select a device. <+> and <-> move the device up or down. <f> and <r> specify the device as fixed or removable (if capable). <x> move device between the Boot priority and Available options lists. <shift +="" 1=""> enables or disables the device. <1 - 4> Loads a default boot sequence.</shift></x></r></f>
Fight Fight Select Item -/- Change Values	F9 Setup Defaults

Click Esc key and Select Enable ACPI and Enter + key to change the value to [Yes]

 Boot Order Floppy check:	Disabled]	Item Specific Help
Summary screen:	Disabled]	Enable/Disable ACPI BL
Boot-time Diagnostic Screen:	Disabled]	(Advance Configuration
Logo Video Mode DuiskBoot Mode	[800x600]	and Power Interface).
Extended Memory Testing Installed OS Enable ACPI POST Errors	[Enabled] [Just zero it] [WinXP or later] [Yes] [Enabled]	Disabling this will free some system memory but will stop ACPI aware Operating Systems from using some advanced options.

33.4 Move to "Exit" screen to hit "Esc" key. Select Exit Saving Changes to use \uparrow key or \downarrow key. Then hit "Enter" key.



33.5 Select "Yes" and hit "Enter" key.



34. Type "Y "and Click Return Key to start SSD image recovery when "Make sure that this instrument is E5052B MY471/SG471 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.



36.5. Click Next > when the below screen is shown.



37. Select I accept the agreement, then Click "Next >"



37.1. Click "Next >" after type in "default" twice.

Setup ur XP softv	e Tour Software ses the information yo vare.	i provide about yourself to personalize yo	
R	Type your full name	and the name of your company of organia	zation
	Name:	default	
	Organization	default	
1 alter aller		<back next=""></back>	

37.2 Click OK, when the below pop-up is shown.



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 <u>http://about.keysight.com/en/quality/WannaCry Ransomware Patch Instructions.pdf</u>, which also contains the link to the Patch Installer.
- 43. Press F2 to boot from USB pen drive when "Press F2 for System Utilities" is shown



43.1 Press e5052, when Enter Password is shown, if not skip this step.



43.2 Move to Boot screen to enter \rightarrow key three times. Move to Boot Order to enter \downarrow key, then hit "Enter" key

Month Main Monthan Could Poor Order Ploppy check: Summary screen: Boot-time Diagnostic Screen: Logo Video Mode QuickBoot Mode: Extended Memory Testing Installed OS Enable ACPI POST Errors	IDS Setup Utility maation Boot Disabled Disabled Disabled (B00x600) (Enabled) (Just zero it) (WinXP or later) (No) (Enabled)	Exit Item Specific Help Allows the order that devices will be booted from to be altered.
F1 Help 11 Select Item	/+ Change Values	E9 Setup Defaults

43.3 Select IDE 0 to use \uparrow key or \downarrow key. Move IDE 0 to the top to enter + key.

Boot Order Item Specific Help Boot priority order: 1 1: USB HDD: 2: IDE 6: 7: FUJITSU MHU2040AH-(P0) 3: USB FDC: 4: IDE 2: 5: USB CDROM: 6: PCI LAN: 7: 8: Rvailable boot order options: : : IDE 1: : IDE 3: : USB LSI20: : PCI SCSI:	Agilent Technologies E5071C 100 kHz - 8.5 GHz ENA Series Network Analyzer	y対応済 管理番号 MKTG-099 S/N MY46101693
Boot OrderItem Specific HelpBoot priority order:.1: USB HDD:2: IDE 0: FUJITSU MHU2040AH-(P0)3: USB FDC:4: IDE 2:5: USB CDROM:6: PCI LAM:6: PCI LAM:7:8:Available boot order options:: IDE 1:: IDE 2:: USB ZIP:: USB ZIP:: USB LS120:: PCI SCSI:	PhoenixBIOS Setup Utility Boot	
Boot priority order: 1: USB HDD: 2: IDE 0: FUJITSU MHU2040AH-(P0) 3: USB FDC: 4: IDE 2: 5: USB CDROM: 6: PCI LAN: 7: 8: Available boot order options: 1: IDE 1: 1: DE 2: 4: IDE 2: 5: USB CDROM: 6: PCI LAN: 1: DE 1: 1: DE 1: 1: DE 2: 5: USB CIP: 1: Configure devices: Up and Down arrows select a device. 4: A and (-> move the device up or down. 4: A and (-> move the device as fixed or removable (if capable). 5: WSB CIP: 5: USB CIP:	Boot Order	Item Specific Help
boot sequence.	Boot priority order: 1: USB HDD: 2: IDE 0: FUJITSU MHU2040AH-(PO) 3: USB FDC: 4: IDE 2: 5: USB CDROM: 6: PCI LAN: 7: 8: Available boot order options: : IDE 1: : USB 2IP: : USB LS120: : PCI SCSI:	Keys used to view or configure devices: Up and Down arrows select a device. <+> and <-> move the device up or down. <f> and <r> specify the device as fixed or removable (if capable). <x> move device between the Boot priority and fwailable options lists. <shift +="" 1=""> enables or disables the device. <1 - 4> Loads a default boot sequence.</shift></x></r></f>

43.4 Move to "Exit" screen to hit "Esc" key twice. Select Exit Saving Changes to use \uparrow key or \downarrow key. Then hit "Enter" key.



43.5 Select "Yes" and hit "Enter" key.

Setup Confirmation	
Save configuration changes and exit now?	
[<mark>Yes</mark>] [No]	

[For MY477, SG477 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. Format your USB pen drive with NTFS
- (or just delete all the files if your USB pen drive is already formatted with NTFS)

03. Go to <u>http://mktgkobe.kob.is.keysight.com/08 communication/information everyone/Re-Image/E5052B/E5052-82205/</u>

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



10. 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/E5052B/E5052-82205/

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



Note that actual checksum is not identical with the above.

- 11. Both of checksums are identical, then go to the next step. Else go back to step14.
- 12. Right Click on NHxxx.zip -> WinZip -> Extract to...
- 13. Type "ctd-kobe", then Click OK



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

I WinZip Extract						×
G ⊂ - Computer → rescue (F:)	G → Computer + rescue (F:) • I Search rescue (F:)				2	
Organize 🔻 New folder						?
Favorites Desktop Downloads OneDrive - Keysight Technologies Recent Places Documents Documents Documents Music Pictures Videos Videos SoDisk (C:) Removable Disk (D:) Removable Disk (D:) Service (()ctdkobe-lpu.png.is.keysight.com' Kobemktg_jpn (\\wsgpew01) (W:) mktgkobe\$ (\\kbtcs02m) (Z:) Network	Name *	Date modified No items match your sear	Type ch.	Size		
• • • • • • • • • • • • • • • • • • •	I					
			<u>H</u> elp <u>U</u> n	zip 👻	Cancel	

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.

Name *	Date modified	Туре	Size	
鷆 boot	5/9/2018 2:50 PM	File folder		
퉬 EFI	5/9/2018 2:50 PM	File folder		
🐌 EfiBcd	5/9/2018 2:35 PM	File folder		
퉬 Images	5/9/2018 2:49 PM	File folder		
퉬 Scripts	5/10/2018 8:30 AM	File folder		
i sources	5/9/2018 2:49 PM	File folder		
퉬 ТЕМР	5/10/2018 8:44 AM	File folder		
BOOTMGR	8/22/2017 10:39 AM	File	378 KB	
WinImageDisk	4/20/2017 1:44 PM	Text Document	1 KB	

15.1. In case the USB pen drive is new and has not been used as USB boot drive, download Activate USBDrive.vbs to F:\Scripts\ from

http://mktgkobe.kob.is.keysight.com/08_communication/information_everyone/Re-Image/E5052B/E5052-82205/

15.2. Launch command prompt as an administrator.

15.3. Change directory to \Scripts, then run ActivateUSBDrive.vbs



16. After the below pop-up dialog is shown, click OK and unplug the USB pen drive from your PC.



- 17. Turn on the instrument.
- 18. Right Click on Windows Start -> Open Windows Explorer
- 19. 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 29 to 30.

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

- 20. Unplug all USB devices and LAN cables from the instrument
- 21. Plug the USB pen drive and keyboard
- 22. Turn on the instrument

23. Press F12 to boot from USB pen drive when "Press DEL to enter SETUP, F12 to boot menu" is shown





25. Type "y "and Click Return Key to start SSD image recovery when "Do you really restore the ImageX files? (y/n):" is shown



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

26. Remove the USB pen drive and press any key, when the below is shown.

The entry {dbgsettings} was successfully created.
The entry {memdiag} was successfully created.
The entry {badmemory} was successfully created.
The entry {globalsettings} was successfully created.
The entry {bootloadersettings} was successfully created.
The entry (emsettings) was successfully created
The energy tempsettings was successfully created.
The operation completed successfully.
Boot files successfully created.
please remove usb key from this instrument now.
Press any key to continue

27. Click Agree when Software End User License Agreement is shown.



- 28. System -> Service Menu -> Administrator Menu -> Exit E5052B -> OK
- 29. Right Click Windows Start -> Open Windows Explorer
- 30. Restore xxxxx.lic file to E:\license from your USB pen drive
- 31. Restart your instrument

Revision History:					
Date	Service Note Revision	Author	Reason for Change		
08 June 2017	E5052B-12	jm	As Published MY474/475/476 [of Win-7] re-imaging procedures		
13 July 2017	E5052B-12A	jm	Added MY471/472/473 [of Win-XP] re-imaging procedures		
15 May 2018	E5052B-12B	jm	Added MY477 [of Win-10] re-imaging-procedure		