E5071B ENA Series Network Analyzer, 300 kHz to 8.5 GHz

Serial Numbers: [0000A00000 / 9999Z99999]

Update procedure of disk image(operating system) for E5071B

Parts Required: see solution

The change from E5071B-10A to E5071B-10B is as follows.
- to change the CONFIG.SYS and to add PANEL.EXE file on the first boot disk in order to support no A26 LCD Interface/Video Card type E5071B. (S/N MY4242455 and above)

<table>
<thead>
<tr>
<th>E5071B Serial-Number</th>
<th>MY4242454 and below</th>
<th>MY4242455 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>A26 LCD Interface Card/Video Card</td>
<td>54810-66525</td>
<td>N/A</td>
</tr>
<tr>
<td>A22 Front Panel Keyboard</td>
<td>E5070-66522</td>
<td>E5070-66529</td>
</tr>
</tbody>
</table>

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR: jm PRODUCT LINE: WN

ADDITIONAL INFORMATION:

This procedure must be performed by Agilent Technologies service offices
**Situation:**
When using the A1 source board (E5071-66571/69571) in repairs, Rev A.05.00 or later firmware is required. If customer unit’s firmware version is less than Rev.A.05.00, it should be updated by changing the operating system. With Rev A.03.60 or below version firmware, an error message “Power on test failed (A1 not found)” is shown at lower left part on a display at power on. With Rev A.03.62 or A.04.00 version firmware, any of messages “Power on test failed (A1 DC-bus, 0x00000010)”, “Power on test failed (A1 DC-bus, 0x00000020)”, or “Power on test failed (A1 DC-bus, 0x00000030)” is shown at power on.

To avoid troubling on customers, especially after a system recovery timing, it’s necessary to update the E5071B operating system if customer unit’s firmware is Rev.A.4.00 or below.

**Solution/Action:**
The installation procedure for the E5071B operating system is as follows.

**Required Equipment**
- **OS Image:** DVD disk (Operating system for E5070B/71B, F/w rev.5.00, Agilent service office use only)
- **Software:** Symantec Ghost™ 8.0 and later (English version, Enterprise product)
- **System(PC):** Windows 2000 Professional (or Windows XP Professional) with DVD drive
  (or available to support external DVD drives)
- **LAN Cable:** Cross (It enables the peer-to-peer communication between the E5071B and the PC.)
  (or 2 straight cables and a hub.)
- **PC installed E5070/71B adjustment program(VEE, Agilent service office use only) and a GPIB cable**

**Outline of the procedure**
1. Make Boot disks using Symantec Ghost (only needs to be done one time) (5 min.)
2. Connect the E5071B to your PC installed Symantec Ghost directly
3. Set up IP address and subnet mask of your PC (5 min.)
4. Set up GhostCast server (20 min.)
5. Copy the image file onto the E5071B’s HDD (30 min.)
6. Perform initial setting for the E5071B (20 min.)
1. Make Boot disks using Symantec Ghost (Required for the first time)

1) Click Start – Programs – Symantec Ghost – Ghost Boot Wizard.
2) Select Network Boot Disk and press the Next button.

3) Select Intel PRO100 and press the Next button.

4) Press the Next button.
5) Enter Parameters `-szeE`, and then press the Next button.

6) Press the Next button.

7) Select The IP setting ….., and enter IP address 192.168.0.1 and subnet mask 255.255.255.0. Press the Next button.
8) Insert a floppy disk into your PC’s FDD, and the **Next** button.

![Symantec Ghost Boot Wizard - Destination Drive](image1)

- Select the floppy drive that contains the disks that will be created and the number of disks to be created with the current options.
- You should leave the Format Disk(s) first option checked. This places system files on the boot disk(s) that are required to make it bootable.
- **Flap Disk Drive:** Select the drive.
- **Number of disks to create:** 1
- **Format Disk(s) First (recommended):**
- **Quick Format:**

![Symantec Ghost Boot Wizard - Review](image2)

- Review the settings in the details box. To change settings, click **Back**. To start the disk creation process, click **Next**.
- **Client Details:**
  - **Client:** Symantec Ghost
  - **Destination:** Floppy Drive A (Two disk set)
- **Network Driver:** Intel PRO 100
- **Driver:** 1000 ticks
- **Driver Type:** NDIS2 Driver
- **Configuration Files:**
  - **Autoexec.bat:**
  - **System.ini:**

![Symantec Ghost Boot Wizard - Destination Drive](image3)

- **There is not enough room on a single disk to hold all the drives and executables that you require. The Ghost Boot Wizard will make a two disk set, putting the Ghost executable on the second disk.**

![Symantec Ghost Boot Wizard - Review](image4)

- **Next** button.

9) Press the **Next** button.

10) Press the **OK** button.
11) Press the **Start** button.

12) Press the **OK** button.

13) Press the **OK** button.

14) Press the **Close** button.

15) Copying File.
16) Insert the second disk into your PC’s FDD, and press **OK** button.

17) Press the **Start** button.

18) Press the **OK** button.

19) Press the **OK** button.

20) Press the **Close** button.
21) Copying File.

22) Press the *Finish* button.

23) Insert the first disk into your PC’s FDD, and open CONFIG.SYS with Notepad.

24) In the CONFIG.SYS, insert “DEVICE=A:\PANEL.EXE” as follows.

```
DEVICE=A:\PANEL.EXE
```

```
[menu]
menuitem=FROMFLPY, This computer was started from a Ghost boot disk
menuitem=FROMCD, This computer was started from a Ghost bootable CD

[FROMFLPY]

[FROMCD]

[COMMON]
DEVICE=\net\protman.dos /I:\net
DEVICE=\net\dis_pkt.dos
DEVICE=\net\e100b.dos
LASTDRIVE = Z
```

25) Download “PANEL.EXE” file from System Update using Symantec Ghost section on the CTD-Kobe web.

   http://kobemktg.jpn.agilent.com/field_eng/service/service_programs/svcprog_e507071b.htm

26) Then the PANEL.EXE file onto the first disk.

====== For E5071B S/N MY4242455 and above, follow the next three steps. 23), 24), 25) and 26). ======

2. Connect the E5071B to your PC installed Symantec Ghost directly

   1) Connect the E5071B to your PC installed Symantec Ghost directly using a crossed LAN cable (or two straight LAN cables and a Hub for LAN).
3. Set up your PC’s IP address and subnet mask

2) In the Control Panel window, double-click **Network and…**, and click **Local Area Connection**.

3) Press the **Properties** button.
4) Select TCP/IP and press the Properties button.

5) Select Use the following IP address, and then enter the IP address 192.168.0.2 and subnet mask 255.255.255.0. Press the OK button.

6) Restart your PC.
4. Set up GhostCastServer

1) Insert the DVD disk (Operating System for E5070B/71B) into your PC's DVD drive (or an external DVD drive). Then copy the image file of the DVD disk onto your PC's HDD (C drive) as a temporary image file.

2) Click Start – Programs – Symantec Ghost – GhostCastServer.

3) Click the Browse button.

4) If Insert disk dialog box is displayed, click the Cancel button.

5) Select the temporary image file you copied, and press the Open button.
6) Enter session name **kobe** and client count 1. Then select **Restore Image** and **Disk**.

7) Click the **Accept Client**. Then, a message of “Waiting for client to connect…” is displayed.
5. Copy the image file onto the E5071B’s HDD

1) Connect the external keyboard and mouse to the connectors on the E5071B rear panel.
2) Insert the ghost boot disk (1st disk) into the FDD of the E5071B.
3) Turn the instrument on.

Press F12 key as soon as the message of “Press TAB to show POST screen, DEL to enter SETUP, F12 to select BOOT DEVICE” is displayed in the splash screen. Wait a few seconds until the Boot Menu screen appears.
4) Select Floppy, and then press Enter key.
5) PC DOS 7.1 Startup Menu is displayed. Then, select 1 and press Enter key.
6) A message of “Insert Ghost boot disk 2 (containing Ghost.exe). Press any key to continue.” is displayed. Then, insert the disk 2 into the FDD, and press Enter key.
7) About Symantec Ghost dialog box is displayed. Then, click the OK button.
8) Click Ghost Cast – Unicast.
9) GhostCast Session Name to Join dialog box is displayed. Enter the session name kobe, select Server IP Address and enter the IP address 192.168.0.2. Then, click the OK button.
10) Select local destination drive by clicking on the driver number dialog box is displayed. Then, click the OK button.
11) Destination Drive Details dialog box is displayed. Confirm that New Size and Old Size of each Label is as follows. Then, click the OK button.

<table>
<thead>
<tr>
<th>Label</th>
<th>New Size</th>
<th>Old Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARPENTER</td>
<td>1411</td>
<td>1411</td>
</tr>
<tr>
<td>USER</td>
<td>3012</td>
<td>3012</td>
</tr>
<tr>
<td>RECOVERY</td>
<td>3012</td>
<td>3012</td>
</tr>
<tr>
<td>SWAP</td>
<td>2149</td>
<td>2149</td>
</tr>
</tbody>
</table>

12) Question: (LB22) dialog box is displayed. Then, click the Yes button.
13) Progress Indicator dialog box appears.
14) In your PC, a message of “GhostCast in progress.” is displayed.

15) In E5071B display, Clone Complete dialog box is displayed. Then, click the Continue button and Quit.
16) Quit Symantec Ghost dialog box is displayed. Then, click the Yes button.
17) A: \GHOST> prompt is displayed. Then, turn the E5071B off.
18) In your PC, Transfer Complete is displayed. Then, click the OK button.
19) Remove the boot disk from the E5071B’s FDD.
20) Turn the E5071B on.
22) Confirm that the firmware revision Rev. A.05.00 is displayed.
23) The measurement view is displayed, and a message of “Calibration data lost (band information)” is displayed. Then, turn the E5071B off.

6. **Perform initial setting for E5071B**
1) Disconnect the LAN cable from the E5071B.
5) Connect the E5071B to your PC installed the E5070/71B adjustment program with a GPIB cable.
6) Turn the E5071B and the PC on.
7) Perform “HDD” in Spot Adjustment of the E5070/71B adjustment program.
8) Calibrate the touch screen (for option 016).