

86100B-02B**S E R V I C E****N O T E**Supersedes:
86100B-02A**86100B Infiniium DCA Wide Bandwidth Oscilloscope**

Serial Numbers: [0000A00000 / 9999Z99999]

When installing the A4 PC Motherboard, part number 0960-2568, into an 86100B, the BIOS must be flashed.**Depending on the existing CPU version, the A11 GPIB Board Assembly may have to be moved to a new PCI slot.****Parts Required:**

P/N	Description	Qty.
0960-2568	Pentium 3 MicroATX MOTHERBOARD	1
5042-1798	Rear Foot, Bumper 2	
E2078-62101	GP-IB Extender	
N/A	BIOS Files*	
	815gag10.bin 1	
	AUTOEXEC.BAT 1	
	AWDFLASH.EXE 1	

* Download new BIOS programs for P/N 0960-2568 from:
http://lwd.marketing.agilent.com/Service_Support/Product_Support/86100/mainframe_support_information.htm or email dsa_support@agilent.com

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

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Situation:

86100B CPU Motherboard P/N 0960-2481 and 0960-2521 (discontinued) was replaced with P/N 0960-2568.

To minimize inventory of different Motherboard P/N for Agilent, when installing P/N 0960-2568 (from stock) into an 86100B the BIOS must be flashed. The default BIOS is setup for Colorado scope products (largest user).

The 86100B was shipped with an older Motherboard (e.g. P/N 0960-2481 or 0960-2252) which had 4 PCI slots (PCI 1 through PCI 4).

The new motherboard has 3 PCI slots (PCI 1 through PCI 3) and 1 AGP slot – the AGP slot is unused on DCA. Note that the AGP slot replaces one of the PCI slots so the A11 GPIB board must be relocated if upgrading CPU assy.

Solution/Action:

When installing P/N 0960-2568 into an 86100B, the BIOS must be flashed.

1. After installing the new motherboard (refer to 86100A/B/C Service Guide for instructions), ensure A11 GPIB card is installed into PCI 3 (right hand slot when looking from the rear) on Motherboard P/N 0960-2521. Refer to Figure 1.



A11GPIB Board Assembly inserted in the A4PCI 3 Slot with newest A4 Motherboard

Figure 1, New GPIB Assembly Location

Note – On Motherboard P/N 0960-2481 and earlier, A11 GPIB card was located in PCI1. There is no change to the A5/A6 assembly locations. Refer to Figure 2.



A11GPIB Board Assembly inserted in the A4PCI 1 Slot with previous revision of the A4 Motherboard

Figure 2, Original GPIB Assembly Location

NOTE: If the GPIB assembly was relocated to the new slot, follow steps one and two below.

1. Replace the original rear feet, part number 5042-1753, with 5042-1798. The new style foot allows clearance with the GPIB connector on the rear panel.
2. Install the GPIB Extender, part number E2078-62101, on the GPIB board assembly. This item is required because of the lack of a cut out on the new PC board location. See Figure 3.



Figure 3, GPIB Extender Installed.

1. Use the Test System Controller (or other computer) and create the appropriate boot media for the 86100B (CD). This BIOS disk may be used for all upgrades of this type.
 - a. On the Agilent Intranet, go to http://lwd.marketing.agilent.com/Service_Support/Product_Support/86100/mainframe_support_information.htm and locate the “86100B/C BIOS FLASH 0960-2521” section.

Note - If you are unable to access this URL, contact dsa_support@agilent.com for more information.

- b. Copy the following files to the newly formatted boot media:
815gag10.bin
AUTOEXEC.BAT
AWDFLASH.EXE
2. Connect an external monitor to the motherboard VGA output. Do not use the A5 EI Mirage display adapter output.
3. Connect a keyboard and mouse to the DCA
4. Power on the instrument.
5. The external video display will be active.
6. Allow the DCA to go through the boot sequence. During this time you will be prompted to install drivers for the “new” hardware that is found. This is normal and you should install all the drivers when asked.
7. The following steps will set the video from the external monitor to the internal DCA display.
8. Close or iconize the DCA application by clicking File Exit or clicking the button on the screen in the upper right corner.
9. Right click on the desktop to bring up the display properties.
10. Click Properties and then Settings.

Note:

- The Digital Flat Panel (640x480) on Chips and Technologies is the DCA built-in monitor and is identified as monitor number 1.
 - The Default Monitor on Intel Graphics Controller is the external monitor connected directly to the PC Motherboard. It is identified as monitor number 2.
11. To Set the DCA to use the internal monitor (#1) click the following:
 - a. Click on the Blue Box representing monitor 1 (labeled “1”)
 - b. Select “Extend my Windows desktop onto this monitor”
 - c. Select “Use this device as the primary monitor”
 - d. Click “Apply”

Note: Now the DCA monitor should be active. The next steps will disable the external monitor

- e. Looking at the DCA Screen Click on the Blue Box labeled “2”
 - f. Deselect “Extend my Windows desktop onto this monitor”
 - g. Click “Apply”
12. Set the Color Quality to High (24 bit)
 - h. Click on Advanced, Adaptor, List All Modes

- i. Select 640x480, True Color (24 bit) 60 Hz
- j. Click OK, OK, and OK

13. Follow instructions in Test Support Document BIOS Flashing located at:

<http://lwdmfg/Modulation%20and%20Waveform%20Business%20Team/Documents/DCA%20MainFrame/Test/BIOS%20Flashing.doc>

14. After the motherboard has been replaced, ensure that the DCA is functioning correctly.