

S E R V I C E N O T E

SUPERSEDES: NONE

Model 54820A Infinium Oscilloscopes

Serial Numbers: See Below

Upgrade Infinium Oscilloscopes With 64 MB RAM For Improved Performance and Reliability**Duplicate Service Notes:**

54810A-06 Serial Numbers: US00000000 / US38389999
 54815A-06 Serial Numbers: US00000000 / US38389999
 54820A-06 Serial Numbers: US00000000 / US38389999
 54825A-06 Serial Numbers: US00000000 / US38389999
 54845A-06 Serial Numbers: US00000000 / US38389999

To Be Performed By: Agilent-Qualified Personnel**Parts Required:**

Part No.	Description	Qty
1818-7682	DRAM-SIMM 8Mx32 (32MB RAM)	2

Software Revision 2.51 or higher

Continued

DATE: March 1999

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS: LABOR 1.0 Hours	
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		
AUTHOR: RK ENTITY: 0840		AGILENT RESPONSIBLE UNTIL: March 2004	
		ADDITIONAL INFORMATION:	



Obtain the latest SW from Infinium Customer Care website at url:
<http://www.tmo.agilent.com/tmo/pia/infinium/PIATop/English/>
(Simply register as the Infinium owner giving your address, the Infinium serial number, and approximate ship date.)

Situation:

The performance upgrade involves installing software Rev 2.51 or higher, replacing existing 16 MB RAM with 64 MB RAM, and setting up BIOS for hard disk power down mode. This upgrade allows the drive to power down once the application is loaded thus extending hard drive life. With this configuration the oscilloscope application is all loaded in RAM for better performance since the hard drive is not accessed.

Solution/Action

The following steps are done in this upgrade:

Verify the code is revision 2.51 or higher. If needed obtain new code from the Infinium Customer Care website and load in the oscilloscope.

Remove two old 8 MB RAM SIMMs and install the two 32 MB RAM SIMMs in the oscilloscope motherboard.

Setup the BIOS using the following procedure to recognize the new memory and enable the power management.

BIOS Setup

1. Connect the power cable to the oscilloscope.
2. Connect an external VGA monitor to the rear panel connector of the oscilloscope. (This step is not required on newer vintage units that are equipped with display board p/n's 54810-66513 and above.)
3. Connect an external keyboard and a mouse to the oscilloscope.
4. While holding down the Insert key on the external keyboard, press the power switch on the oscilloscope. Continue holding down the Insert key until the information appears on the VGA monitor or scope screen.

After 10 seconds or so, the text near the center of the monitor will read something like this:

```
AMI Atlas-XX PCI/ISA
AMD-Kx(tm)-/x00
Checking NVRAM
65536 KB OK
WAIT...
<INS> Pressed
Press F1 to Run SETUP
Press F2 to load default values and continue
```

(DO NOT press F2 to load default values.)

5. Press F1 to get into the BIOS setup program.
6. Do the following within the BIOS setup program:
 - a. Double-click on Optimal Defaults. Click Yes in response to "Load Optimal values?"
 - b. Double-click on Standard Setup, then select Date/Time. Use the mouse to set the current Month, Day, Year and Time. When finished Exit the Date/Time block.
 - c. Under Standard Setup, select Floppy A. Select 1.44 MB 3-1/3. Exit Floppy A.
 - d. Under Standard Setup, select Floppy B. Select Not Installed. Exit Floppy B, then exit Standard Setup.
 - e. Select Advanced Setup, then select System Keyboard. Select Absent.
 - f. Exit the Advanced Setup. NOTE: This only tells the computer not to check the keyboard during power-up self-test. The keyboard will still function after this.
 - g. Double-click on PPCI/PnP Setup, then select IRQ9. Select ISA, then exit PCI/PnP Setup.
 - h. Double-click on Peripheral Setup and then select OnBoard Primary/ Secondary IDE. Select Primary, then exit Peripheral Setup.
 - i. Double-click on Power Management.
 - j. Click Power Management/APM and select Enabled.
 - k. Click Hard Disk Power Down Mode and select Suspend.
 - l. Click Hard Disk Time Out (Minute) and select 15 min.
 - m. Exit Power Management Setup.
 - n. Hold down the Insert key while exiting the Setup program and save the changes you have made. Continue to hold the Insert key until the monitor displays the same information as was seen in step 4.
7. Re-enter the WINBIOS to change one parameter that could not be set in step 6.
 - a. Press F1 to re-enter the BIOS setup.
 - b. Double-click on Detect IDE Utility. The line labeled Pri. Master should contain numeric information indicating that it has found the hard drive. Exit this utility.
 - c. Exit the WINBIOS Setup and save the changes you made. The oscilloscope should now reboot, load Windows 95, and come up with a scope display. If it does not, recheck your steps in the above procedure. If all the settings are correct, go to the Primary Troubleshooting Procedure in the service manual.
8. Warm up the oscilloscope and perform the software self calibration. A BNC cable is needed to perform this self cal.
9. Run the selftests to verify the unit is operating properly.