

## Instructions for Use of the 16500A Floppy Disk Emulator

The floppy diskette files for the 16500A Logic Analyzer use HP’s Logical Interchange Format (LIF). These files are not readable directly on a DOS or Windows PC.

### Emulator Operation and Files

The floppy disk emulator ships with four SD cards:

1. Two SD cards labeled 16500A REV 06.00 with diskette images 1 through 6 (see Table I). The two SD cards are duplicates and will boot the HP 16500A.
2. One SD card labeled SYSTEM.... PVTEST... and will boot the HP 16500A.
3. One SD card labeled BLANK FOR PVTEST...

The floppy disk emulator uses an SD card to store images of the original floppy diskettes. The SD card files are in the emulator vendor’s “HxC” format (.hfe). Each “xxxxx.hfe” file represents a floppy diskette image of the original 16500A floppy diskette with the LIF files for the 16500A.

The emulator DSKA000x.hfe files are not readable directly on a PC. The vendor’s software is used only to generate the DSKA0000.hfe file from a floppy diskette image. Once the diskette image is converted to the “.hfe” format, the emulator appears to the 16500A as a just one of its floppy drives. You read, write, and format just as you would using real floppy drive and diskette.

The SD card shipped with each emulator kit has six files with 16500A Rev 6.00 “OP\_SYS” software and one emulator configuration file (HXCSDFE.CFG). The 16500A emulator files are labeled DSKA0000.hfe, DSKA0001.hfe, DSKA0002.hfe, DSKA0003.hfe, DSKA0004.hfe, and DSKA0005.hfe. The 16500A boots from the first file, DSKA0000.hfe, as it has the SYSTEM\_ file. The other DSKA000x.hfe files have the various setup files for the different logic analyzer hardware modules and test routines. Each DSKA000x.hfe file is loaded sequentially by the pushing the button on the emulator. To return to the “boot” image file, DSKA0000.hfe, push and hold the emulator button for **2 seconds**. **NOTE: The emulator remembers the last diskette image loaded at power up and will only boot if diskette DSKA0000.hfe file is loaded at power up.**

The 16500A files on each diskette image DSKA000x.hfe file are listed Table I.

Table I.

DSKA0000.hfe (Disk 1)	DSKA0001.hfe (Disk2)	DSKA0002.hfe (Disk 3)	DSKA0003.hfe (Disk 4)	DSKA0004.hfe (Disk 5)	DSKA0005.hfe (Disk 6)
SYSTEM	SYSTEM_0.04	SYSTEM_0.40	SYSTEM_0.01	PVTEST	PVTEST
SYSTEM_0.21	SYSTEM_0.13	SYSTEM_0.42	SYSTEM_0.11	PVTEST_0.01	PVTEST_0.04
SYSTEM_0.32			SYSTEM_0.30	PVTEST_0.11	
			SYSTEM_0.31	PVTEST_0.13	
				PVTEST_0.21	
				PVTEST_0.30	
				PVTEST_0.31	
				PVTEST_0.32	
				PVTEST_0.40	
				PVTEST_0.42	

Each DSKA000x.hfe diskette image file in Table I contain the 16500A files corresponding to Disk 1 through Disk 6 as downloaded from the Keysight website for the 16500A revision 6.00 software.

In addition to the SD card with OP\_SYS files listed in Table I, we include an additional preformatted, but blank SD card with each kit that allows the user to perform mainframe disk tests. This SD card’s DSKA0000.hfe file is an image of the 16500A diskette but contains no LIF files and will show “NO FILES” when read by the 16500A. It is inserted into the emulator slot

for the disk test routine when the PVTEST\_ mainframe tests are run. PVTEST\_ can be run from the rear OEM floppy drive diskette or from the emulator DSKA0005.hfe file. It is convenient to put SYSTEM\_ boot file and PVTEST\_ file on a floppy diskette and run it from the rear drive or another SD card with one DSKA0000.hfe containing the SYSTEM\_ and PVTEST\_ files if the rear floppy drive is not working.

### Making New Emulator SD Cards

The emulator uses SD cards formatted as FAT or FAT32 (for large SD cards). They can be formatted or copied on any PC with a SD card slot. Additional SD cards are made by copying the SD card supplied in the kit with the preloaded DSKA000x.hfe files and the configuration file (HXCSDFE.CFG) on a PC that has a SD card slot or a USB to SD card reader adapter and storing the files in a convenient directory on the PC. A new emulator SD card is created by 1) formatting it on the PC (if not already formatted), and 2) copy the DSKA000x.hfe and HXCSDFE.CFG files to it.

Additional floppy diskette images can be created by copying the first DSKA0000.hfe file on the SD card and renaming it DSKA000x.hfe, where x = 1 to 9999. The new image can be formatted by the 16500A and treated as a new blank floppy.

The emulator requires at least one DSKA0000.hfe diskette image file and only one HXCSDFE.CFG file on each SD card. While the emulator can handle more than 9999 diskette images, we recommend keeping the number to a minimum since they are loaded sequentially.

### LIF Utilities

It is not possible to read the LIF formatted files stored in DSKA000x.hfe file directly from the SD card. To get access to the LIF files, you will need a “HxC”-based floppy emulator in a DOS based PC that runs an old HP program “LIFUTIL.EXE”. Here are links to the Keysight download that has the 16500A software version 6.00 and the LIFUTIL.EXE program:

<https://www.keysight.com/main/techSupport.jsp?cc=US&lc=eng&nid=-536900196.536896416&pid=16500A%3Aeps%3Apro&pageMode=DS>

<https://www.keysight.com/main/software.jsp?ckey=sw533&lc=eng&cc=US&nid=-536900196.536896416&id=sw533>

If the links do not work, we can supply the software. Email us at [sales@glkinst.com](mailto:sales@glkinst.com) .