
E5868A and E5869A Additional Removable Windows 10 SSDs for 1686x-Series Logic Analyzers

Notices

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Safety Notices

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Safety Summary

The following general safety precautions must be observed during all phases of operation of this product. Failure to comply with these precautions or with specific warnings or operating instructions in the product manuals violates safety standards of design, manufacture, and intended use of the instrument. Keysight Technologies assumes no liability for the customer's failure to comply with these requirements.

General	Do not use this product in any manner not specified by the manufacturer. The protective features of this product may be impaired if it is used in a manner not specified in the operation instructions.
Before Applying Power	Verify that all safety precautions are taken. Make all connections to the product before applying power.
Do Not Operate in an Explosive Atmosphere	Do not operate the product in the presence of flammable gases or fumes.
Cleaning	Clean the outside of the product with a soft, lint-free cloth. Do not use detergent or chemical solvents or too much liquid to avoid damaging sensitive electronic components. Do not attempt to clean internally.
In Case of Damage	Products that appear damaged or defective should be made inoperative and secured against unintended operation. Return the product to a Keysight Sales and Service Office.

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E5868A and E5869A Additional Removable SSDs for
16860-Series Logic Analyzers

Installation Guide

1

Overview

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E5868A and E5869A Additional Removable SSDs

The 1686x-series logic analyzers have a removable Solid State Drive (SSD) imaged with Windows 10 operating system, Logic and Protocol Analyzer application software, and any optional application software ordered with the logic analyzer.

You can remove and replace this SSD with the additional removable SSD without disassembling the logic analyzer. This guide describes how to remove and replace the SSD.

When to Use which Removable SSD

The following two models of additional removable SSDs are available for 1686x-series logic analyzers.

E5868A	E5869A
E5868A has the drive image required for 1686x-series logic analyzers with the older M900 motherboard.	E5869A has the drive image required for 1686x-series logic analyzers with the newer M910 motherboard.
This SSD has a lighter gray color panel with black text.	This SSD has a darker gray color panel with white text.
	

CAUTION

To ensure that you are using the correct model of removable SSD for your 1686x logic analyzer, match the panel color of the additional SSD with the panel color of the SSD you are replacing.

Handling the E5868A and E5869A SSDs

For the integrity of the data on your hard disk drive, Keysight recommends that you take the precautions described in this topic while handling and storing the hard disk drives:

- Store unused SSD in the shipping container.
- Protect the SSD from electrostatic discharge (ESD).

CAUTION

Electrostatic discharge can damage electronic components. Use grounded wrist straps and mats when handling electronic components.

- Protect the SSD from physical shock.

CAUTION

While operating, do not expose the SSD to more than 5 to 500 Hz at 0.3 g rms.

- Protect the SSD Against Contamination of the Edge Connector

CAUTION

The SSD edge connector is sensitive to ESD and mechanical or material contamination. Take precautions to protect the edge connector from contamination during handling and storage.

2 Installing the Additional Removable SSD

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CAUTION

Electrostatic discharge can damage electronic components. Use grounded wrist straps and mats when handling electronic components.

Step 1. Back up Data for Transfer to the New SSD

Before removing the existing SSD from your logic analyzer, ensure that you back up the data such as license files which can later be transferred to the new SSD.

- 1 Close the *Keysight Logic and Protocol Analyzer* application software.
- 2 Back up data using LAN, USB flash drive, writable CDs, etc.
- 3 Back up license files. License files have the extension “.lic”.

Keysight recommends floating licenses for logic analyzers with removable disks such as the 1686x-series logic analyzers.

Server License Files

If the license server is on the logic analyzer, back up the server license files which are located in the “LicenseFiles” folder under the license server’s installation directory. The default location is: C:\Program Files\Keysight Technologies\LicenseServer\LicenseFiles\

Node-locked License Files

You can also use node-locked licenses. However, because the logic analyzer host ID changes with the SSD, you must have separate licenses on each SSD. Node-locked license files are located in the “License” folder under the *Keysight Logic and Protocol Analyzer* application’s installation directory. The default location is: C:\Program Files\Keysight Technologies\Logic Analyzer\License\

Step 2. Power Down the 1686x Logic Analyzer

WARNING

Hazardous voltages exist on the power supply. To avoid electrical shock, disconnect the power from the instrument before performing the following procedures. After disconnecting the power, wait at least six minutes for the capacitors on the power supply board to discharge before servicing the instrument.

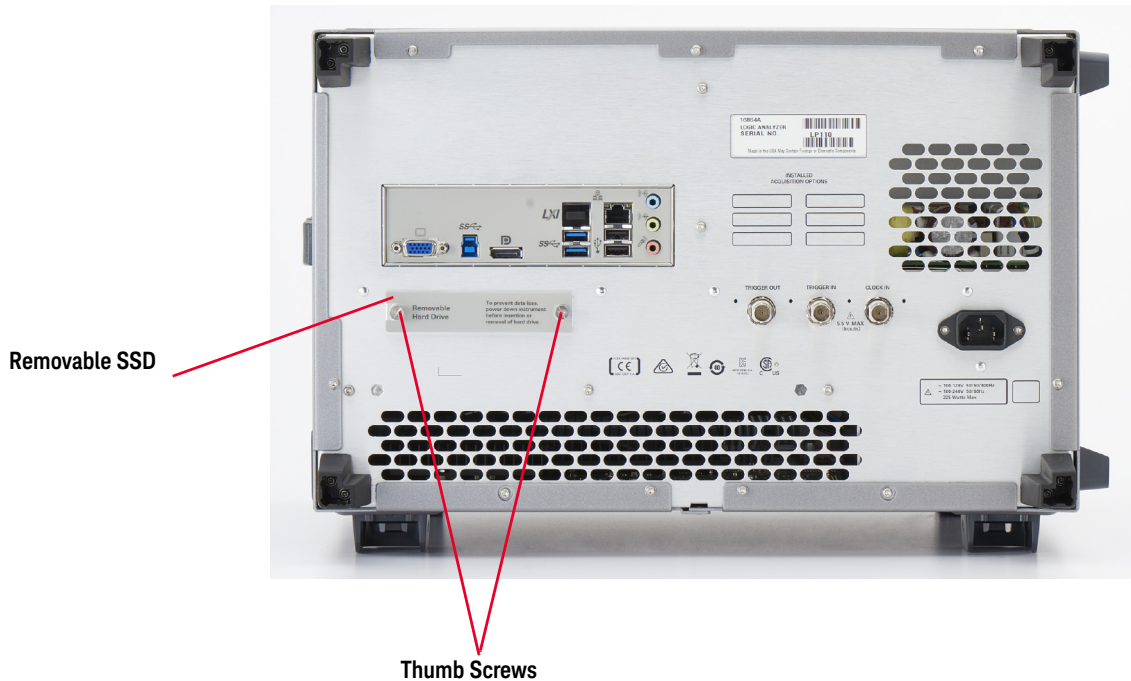
CAUTION

Damage can occur to electronic components if you remove or replace assemblies when the instrument is on or when the power cable is connected. Never attempt to remove or install any assembly with the instrument on or with the power cable connected.

- 1 Power down the logic analyzer system using one of the methods explained below.
 - Using the Windows Shutdown - On the logic analyzer desktop, click **Start > Shut Down** or if you are running remote desktop, click **Start > Settings > Windows Security > Shut Down**.
 - Using a Short Press of the Power Button - Press the power button on the logic analyzer for a short time (less than 2 seconds).
 - Using a Long Press of the Power Button - Press the power button for more than 4 seconds. This powers down the system abruptly. Use this method only when other methods have not responded because Any data that has not been written to the disk will be lost. Also, if the system does not boot, the hard disk drive will need to be re-imaged.
- 2 Remove the power cord.

Step 3. Remove the Currently Installed SSD

- 1 Loosen both thumb screws that hold the hard disk drive in place.



- 2 Pull the drive tray out to remove the disk drive.



Removable SSD pulled out

Step 4. Install the New SSD

- 1 Slide the new SSD into the drive bay.



- 2 Gently press the drive tray all the way in to seat the disk drive connectors.

- 3 Tighten both thumb screws to hold the hard disk drive in place.



Step 5. Power on the 1686x Logic Analyzer

Turn on the logic analyzer.

Step 6. Perform the first-time Setup Steps

If you are using the replacement SSD as an additional bootable drive, the replacement disk is pre-configured with the Windows 10 operating system, frame drivers, and Logic and Protocol Analyzer software (just like the original 1686x SSD as shipped from the factory).

The next step is to perform the first-time setup procedures described in the *16860-Series Logic Analyzers Installation Guide* shipped with the 16860 logic analyzer.

Step 7. Restore Data

Restore the data and license files you backed up in "[Step 1. Back up Data for Transfer to the New SSD](#)" on page 11.

Step 8. Install any Additional Application Software

Resolve any Issues with the Installation

If you have any questions, go to www.keysight.com/find/contactus for help.



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