
Keysight M8000 Series of BER Test Solutions

Plugins for M8070B System Software

Notices

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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.

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Keysight releases periodic software updates to fix known defects, incorporate product enhancements, and address cybersecurity vulnerabilities, if any. Ensure that your product software is always up to date. To search for software updates for your product, visit the Keysight Technical Support page at: <https://www.keysight.com/find/M8000>.

User Documentation

User documentation includes comprehensive information on features that may impact the secure deployment, use, and decommissioning of our products. This includes details on exposed network ports, the use of cryptography and authentication, and firmware security settings, if necessary.









Safety Summary

The following general safety precautions must be observed during all phases of operation of this instrument. 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. Product manuals are provided with your instrument on CD-ROM and/or in printed form. Printed manuals are an option for many products. Manuals may also be available on the Web. Go to www.keysight.com and type in your product number in the Search field at the top of the page.

General	<p>This product is a Safety Class 1 instrument (provided with a protective earth terminal). The protective features of this product may be impaired if it is used in a manner not specified in the operation instructions.</p> <p>All Light Emitting Diodes (LEDs) used in this product are Class 1 LEDs as per IEC 60825-1.</p>
Environment Conditions	<p>This instrument is intended for indoor use in an installation category II, pollution degree 2 environment. It is designed to operate at a maximum relative humidity of 95% and at altitudes of up to 2000 meters.</p> <p>Refer to the specifications tables for the ac mains voltage requirements and ambient operating temperature range.</p>
Before Applying Power	<p>Verify that all safety precautions are taken. The power cable inlet of the instrument serves as a device to disconnect from the mains in case of hazard. The instrument must be positioned so that the operator can easily access the power cable inlet. When the instrument is rack mounted the rack must be provided with an easily accessible mains switch.</p>
Ground the Instrument	<p>To minimize shock hazard, the instrument chassis and cover must be connected to an electrical protective earth ground. The instrument must be connected to the ac power mains through a grounded power cable, with the ground wire firmly connected to an electrical ground (safety ground) at the power outlet. Any interruption of the protective (grounding) conductor or disconnection of the protective earth terminal will cause a potential shock hazard that could result in personal injury.</p>
Do Not Operate in an Explosive Atmosphere	<p>Do not operate the instrument in the presence of flammable gases or fumes.</p>
Do Not Remove the Instrument Cover	<p>Operating personnel must not remove instrument covers. Component replacement and internal adjustments must be made only by qualified personnel.</p> <p>Instruments that appear damaged or defective should be made inoperative and secured against unintended operation until they can be repaired by qualified service personnel.</p>


Safety Symbols

Table 1 Safety Symbol

Symbol	Description
	<p>Indicates warning or caution. If you see this symbol on a product, you must refer to the manuals for specific Warning or Caution information to avoid personal injury or damage to the product.</p>
	<p>The UKCA (UK Conformity Assessed) marking is a new UK product marking that is used for goods being placed on the market in Great Britain (England, Wales and Scotland). It covers most goods which previously required the CE marking.</p>
	<p>This symbol on all primary and secondary packaging indicates compliance to China standard GB 18455-2001.</p>
	<p>Indicates that antistatic precautions should be taken.</p>
	<p>CSA is the Canadian certification mark to demonstrate compliance with the Safety requirements.</p>
	<p>CE compliance marking to the EU Safety and EMC Directives. ISM GRP-1A classification according to the international EMC standard. ICES/NMB-001 compliance marking to the Canadian EMC standard.</p>
	<p>KC is the Korean certification mark to demonstrate that the equipment is Class A suitable for professional use and is for use in electromagnetic environments outside of the home.</p>
	<p>Indicates the time period during which no hazardous or toxic substance elements are expected to leak or deteriorate during normal use. Forty years is the expected useful life of the product.</p>

Compliance and Environmental Information

Table 2 Compliance and Environmental Information

Safety Symbol	Description
	<p>The crossed out wheeled bin symbol indicates that separate collection for waste electric and electronic equipment (WEEE) is required, as obligated by DIRECTIVE 2012/19/EU and other National legislation.</p> <p>See http://about.keysight.com/en/companyinfo/environment/takeback.shtml to understand your Trade in options with Keysight in addition to product takeback instructions.</p>

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This chapter describes how to install, uninstall, update and launch the M8070B supported plugins using the **Plugin Manager**.

Introduction

A plugin is a piece of software application that acts as an add-on to the main software and enhances its capability. A plugin enables the software to host additional functionality without undergoing a major modification or enhancement. A plugin is not a permanent part of the software, hence can be installed, uninstalled and updated as and when required.

The M8070B system software for the M8000 Series of BER Test Solutions supports plugins. Thus, the present capabilities of M8070B can be further enhanced by simply installing the required plugins.

The M8070B software comes with a **Plugin Manager** to simplify all the tasks related to plugin management. For details, see [Plugin Manager](#) on page 11.

Prerequisites for Plugins Installation

- M8070B software version.
- Plugin file which can be downloaded from [Keysight web page](#).

Plugin license (if required). For details on the required licenses and their accessibility, please refer to the respective plugin's *User Guide*.

License Information

The plugins can be freeware or licensed. For the plugins which require a license to operate, you need to install the plugin license in the M8070B software. For details on the licenses and their accessibility, please refer to the respective plugin's *User Guide*.

Locate Documentation

After installing the M8070B software, you will find the required documentation from the **Start** menu. Select **Keysight M8070B > Keysight M8070B Documentation**.

For plugins related documents, navigate to **C:\Program Files\Keysight\M8070B\Plugins*<plugin_foldername>*\doc**

where *<plugin_foldername>* is the name of the folder corresponding to the plugin of interest. For example, you must navigate to C:\Program Files\Keysight\M8070B\Plugins\M8070B_IEEE_TxEqTraining\doc to access the *Keysight IEEE MultiGBASE-KR TX EQ Training User Guide*.

You can also visit www.keysight.com/find/m8000 to find the latest versions of related manuals.

Contact Keysight Technologies

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Plugin Manager

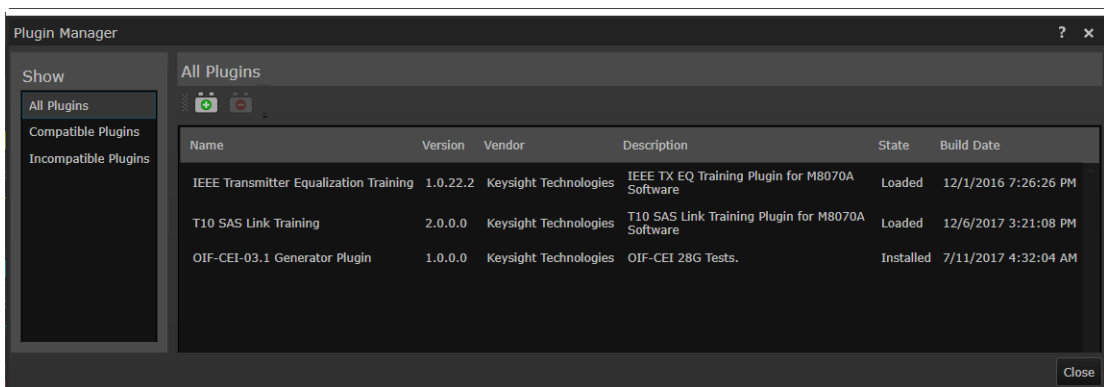
The **Plugin Manager** simplifies all the tasks related to plugin management. It displays a list of plugins that are installed in the software. For each plugin, it displays the information such as Name, Version, Vendor, Description, State and Build Date. In addition, the **Plugin Manager** also allows you to install, uninstall and upgrade the plugins.

NOTE

You cannot install, upgrade, or uninstall the M8085A Plugins for MIPI Receiver Test Solutions using Plugin Manager. For information on how to install these plugins, refer to [Installing M8085A Plugins for MIPI Receiver Test Solutions](#) on page 19.

Uninstall these plugins from Control Panel.

To launch **Plugin Manager**, open the M8070B user interface and then go to the menu bar. Select **Utilities** and then **Plugin Manager**. The **Plugin Manager** window appears as shown in the following figure:



The **Plugin Manager** window displays two types of plugins:

- **Compatible Plugins** – plugins which are compatible with the current version of software.
- **Incompatible Plugins** – plugins which are not compatible with the current version of software.

The **Plugin Manager** window displays the following information of each plugin:

- **Name** - Name of the plugin
- **Version** - Version number of the plugin
- **Vendor** - Vendor/publisher of the plugin
- **Description** - Brief description of the plugin
- **State** - State of the plugin. For details on different plugin states, see [Plugin States](#) on page 12.
- **Build Date** - Build date of the plugin

Plugin States


There can be the following plugin states:

- **Installed** - When the plugin is installed but the M8070B software is not restarted. In this case, the installed plugin is not loaded or it cannot be used. You have to restart the M8070B software in order to load the plugin.
- **Loaded** - When the plugin is installed and the M8070B software has been restarted. In this case, the installed plugin is ready to be used. Remember, you have to restart the M8070B software in order to load the plugin.
- **Not Loaded** - When the plugin is installed but failed to load. In this case, the installed plugin cannot be used.
- **Version Incompatible** - When the version of the installed plugin is not compatible with the current version of M8070B software.

How to Install a Plugin

The **Plugin Manager** window enables you to install a plugin.

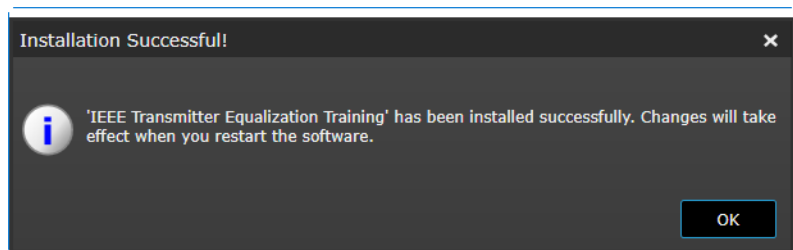
To do so, perform the following steps:

- 1 Download the required plugin file from the [Keysight web page](#).
- 2 Click  **Install plugin from file** icon. A standard Windows **Open** dialog appears.
- 3 Locate the plugin file (*.M8KP) you want to install and click **Open**. A **Keysight End User License Agreement** window will appear.
- 4 Click **Agree** to accept the Keysight software license agreement.

NOTE

To proceed with the installation of this software, you must agree to comply with the terms in the software license agreement. Failure to agree the license agreement will prevent the installation process from continuing.

- 5 On the successful installation of plugin, a message similar to the following appears:



- 6 Restart the software. Once you restart the software, the plugin state will change to **Loaded**. See [Plugin States](#) on page 12.


NOTE

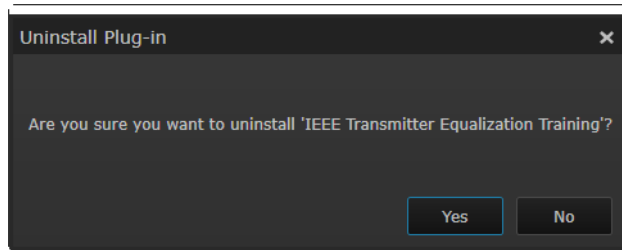
Ensure to restart the M8070B software for the changes to take effect.

How to Uninstall a Plugin

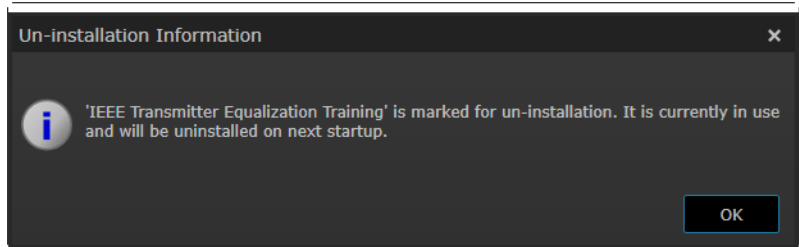
The **Plugin Manager** window enables you to uninstall a plugin.

To do so, perform the following steps:

- 1 Select the plugin from the list.
- 2 Click  **Uninstall selected plugin** icon or right-click on the selected plugin and select **Uninstall Plugin**. The **Uninstall Plugin** dialog appears.



- 3 Click **Yes**. If the state of plugin is **Installed**, then it will be immediately uninstalled from the software.
- 4 However, if the plugin is currently in use (**Loaded or Not Loaded**), then you will receive the following message.




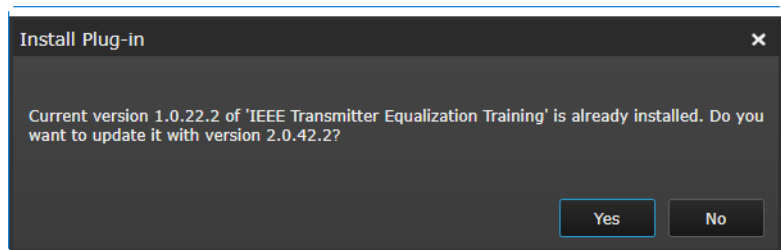
- 5 Restart the M8070B software. The plugin will be uninstalled on software startup.

How to Update a Plugin

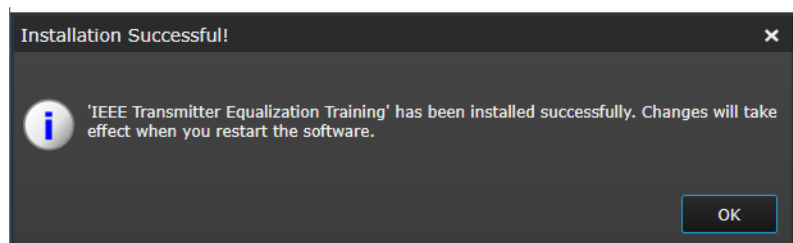
The **Plugin Manager** window also enables you to update an already installed plugin.

Perform the following steps to update the plugin with its higher version:

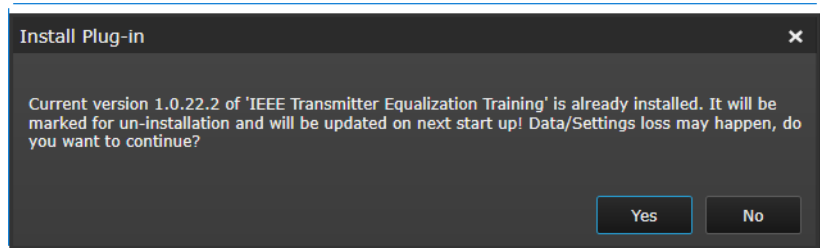
- 1 Download the latest plugin file from [Keysight web page](#).
- 2 Click  **Install plugin from file** icon. A standard Windows **Open** dialog appears.
- 3 Locate the plugin file (*.M8KP) you want to update and click **Open**. You will see the following message:



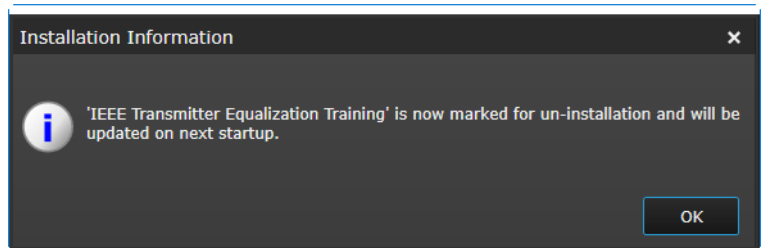
- 4 Click **Yes**. If the state of plugin is **Installed**, then it will be immediately updated and the following message will appear:



- 5 However, if the plugin is currently in use (**Loaded or Not Loaded**), then you will receive the following message.



6 Click **Yes**. The following message will appear:

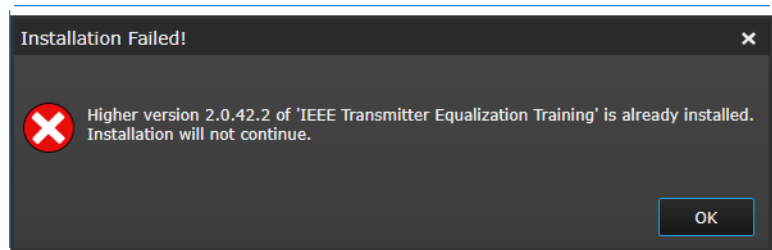


7 Click **OK**. The selected plugin will be uninstalled from the software. You can now install the new version of that plugin. For installation procedure, see [How to Install a Plugin](#) on page 13.

NOTE

Ensure to restart the M8070B software for the changes to take effect.

The **Plugin Manager** window does not directly allow you to update an installed plugin with previous (lower) version. If you try to do so it will give the following error message:



In this case, you have to uninstall the plugin and then install the previous (lower) version of that plugin again.

How to Access an Installed Plugin Through M8070B User Interface

Perform the following steps to access an installed plugin through M8070B user interface:

- 1 Launch M8070B software user interface.
- 2 In the M8070B user interface, go to the **Menu Bar** and then click the **Application** menu. It will list all the installed plugins.
- 3 Select the plugin.
- 4 The plugin user interface appears in the M8070B software.

For complete details on how to operate the plugin user interface, refer to the respective plugin's *User Guide*.

Installing M8085A Plugins for MIPI Receiver Test Solutions

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This chapter describes the requirements and steps for the installation of M8085A Plugins for MIPI Receiver Test Solutions. Plugins other than the M8085A plugins are installed, updated, and uninstalled using **Plugin Manager**. The previous chapter describes the procedures for plugins other than the M8085A plugins.

Introduction

The M8085A Plugins for MIPI Receiver Test Solutions must be installed separately on top of the M8070B software. The installation procedure for the M8085A Plugins for MIPI Receiver Test Solutions is different from the other plugins. After successful installation, you will be able to access the following plugins:

- MIPI C-PHY and D-PHY Editor plugins—Enable you to set the DUT and test configuration.
- MIPI C-PHY and D-PHY CTS plugins—Support the MIPI C-PHY and MIPI D-PHY signal generator configurations for single and multi-lane testing with the Test Automation Software.

Prerequisites for Plugins Installation

The following are the prerequisites for installing Keysight M8085A Plugins for MIPI Receiver Test Solutions:

- M8070B software version 3.5.104.4 or later.
- Installer for M8085A Plugins, which is either available on CD or can be downloaded from [Keysight website](#).
- Plugin licenses. For details on the required licenses and their accessibility, please refer to the respective plugin's *User Guide*.

How to Install M8085A Plugins

Perform the following steps to install Keysight M8085A Plugins for MIPI Receiver Test Solutions on your system.

- 1 Double-click the installer file. This installer file will be available either on CD or Web. The following window is displayed.

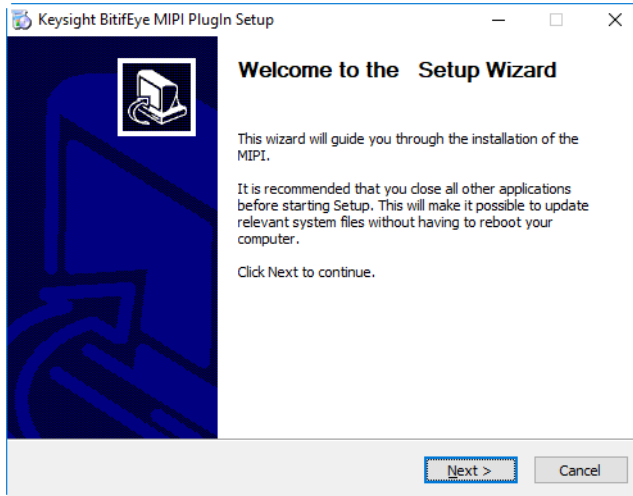


Figure 1 MIPI Plugin Setup Wizard

- 2 Click **Next**. The License Agreement of the MIPI plugin setup is displayed as shown in the following figure.

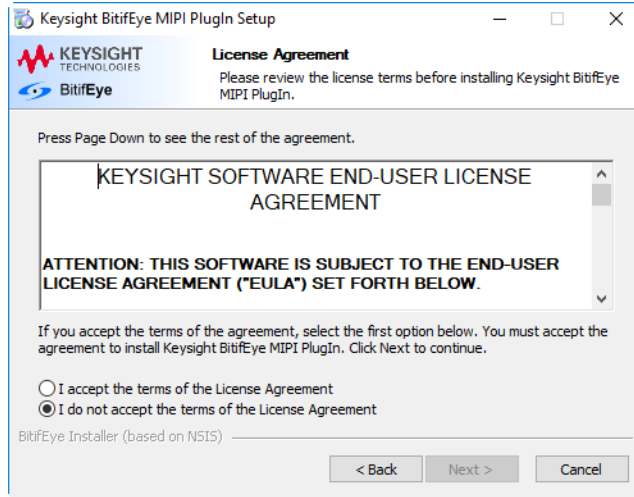


Figure 2 MIPI Plugin Setup License Agreement window

- 3 Read all the terms and conditions of the **License Agreement** carefully.
- 4 Select **I accept the terms of the License Agreement**.
- 5 Click **Next**. The following window is displayed.

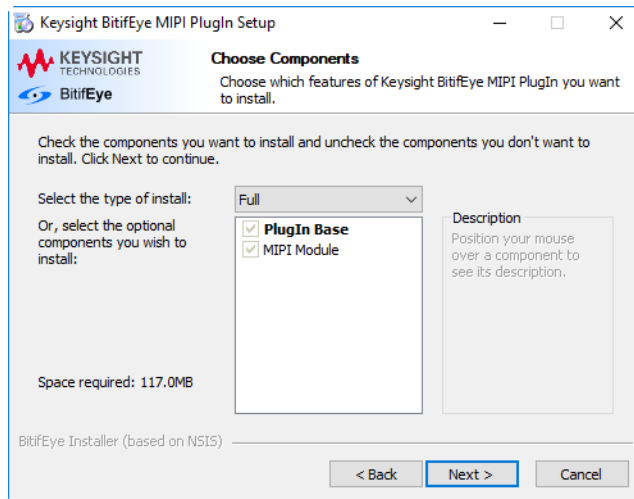


Figure 3 MIPI PlugIn Setup select components window

- 6 Select the type of installation (**Full** or **Custom**).
- 7 Click **Next**. The following window is displayed.

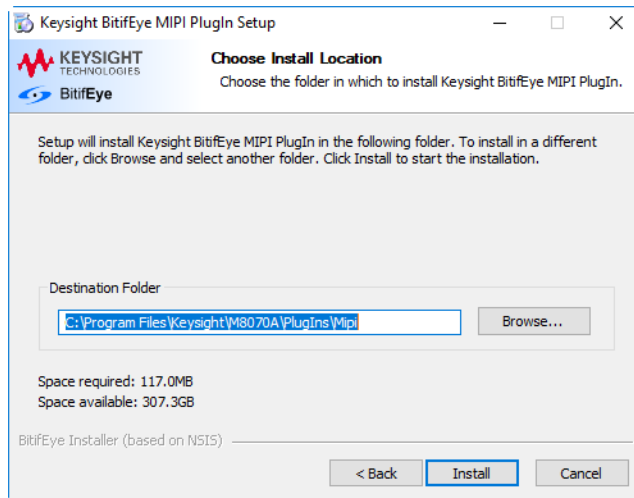


Figure 4 MIPI PlugIn Setup - select install location window

- 8 Click **Browse** to select the destination folder where the software must be installed.

9 Click **Install**. The following window is displayed.

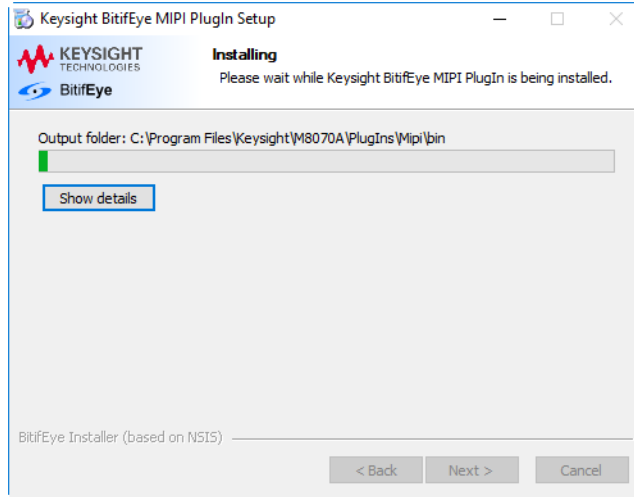


Figure 5 MIPI Plugin Setup installation status window

10 Once the installation is complete, click **Next**. The following window is displayed.

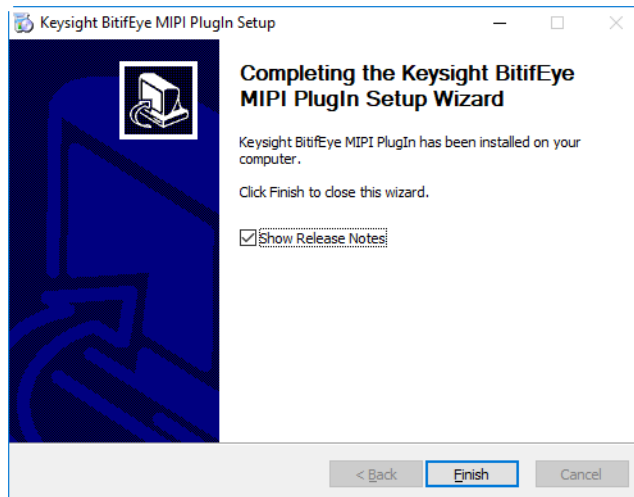


Figure 6 M8085A Plugins installation completion window

- 11 Click **Finish** to complete the installation of Keysight M8085A Plugins for MIPI Receiver Test Solutions.
- 12 Restart the M8070B software.

Accessing the Plugins for MIPI Receiver Test Solutions Through M8070B User Interface

Perform the following steps to access an installed plugin through M8070B user interface:

- 1 Launch M8070B software user interface.
- 2 From the **Application** menu, select one of the following plugins:

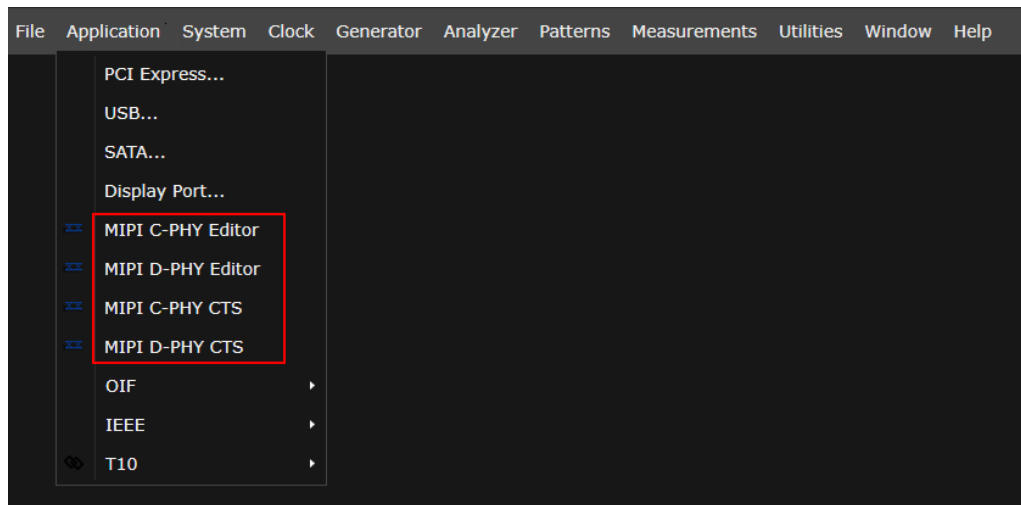


Figure 7 Selecting M8085A Plugin from the Application menu

- MIPI C-PHY Editor Plugin: The default user interface is displayed as shown below.

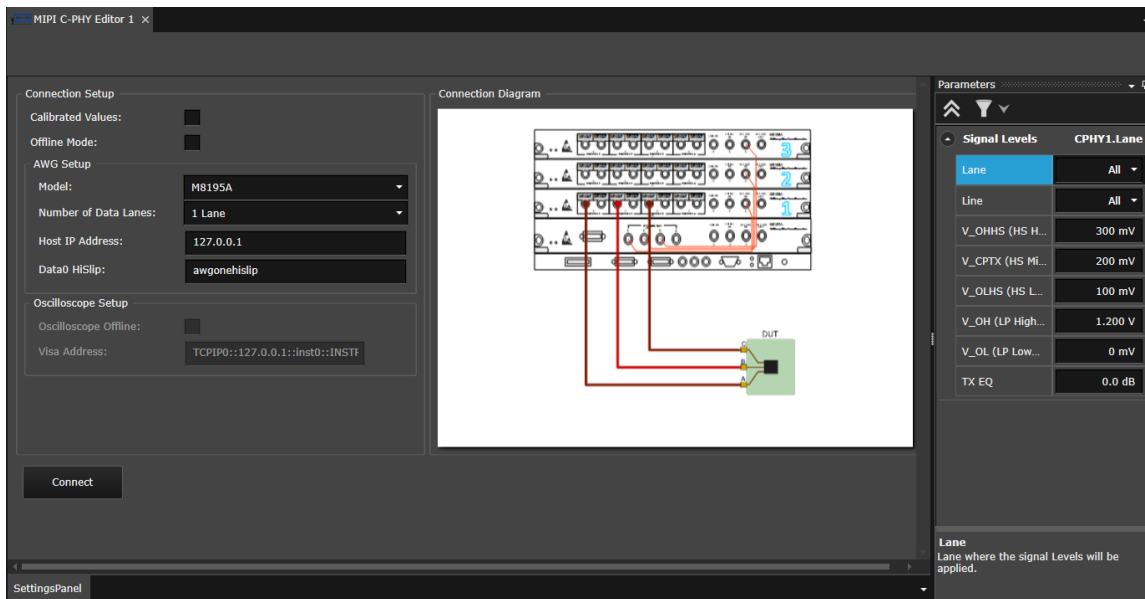


Figure 8 MIPI C-PHY Editor User Interface

- MIPI D-PHY Editor Plugin: The default user interface is displayed as shown below.

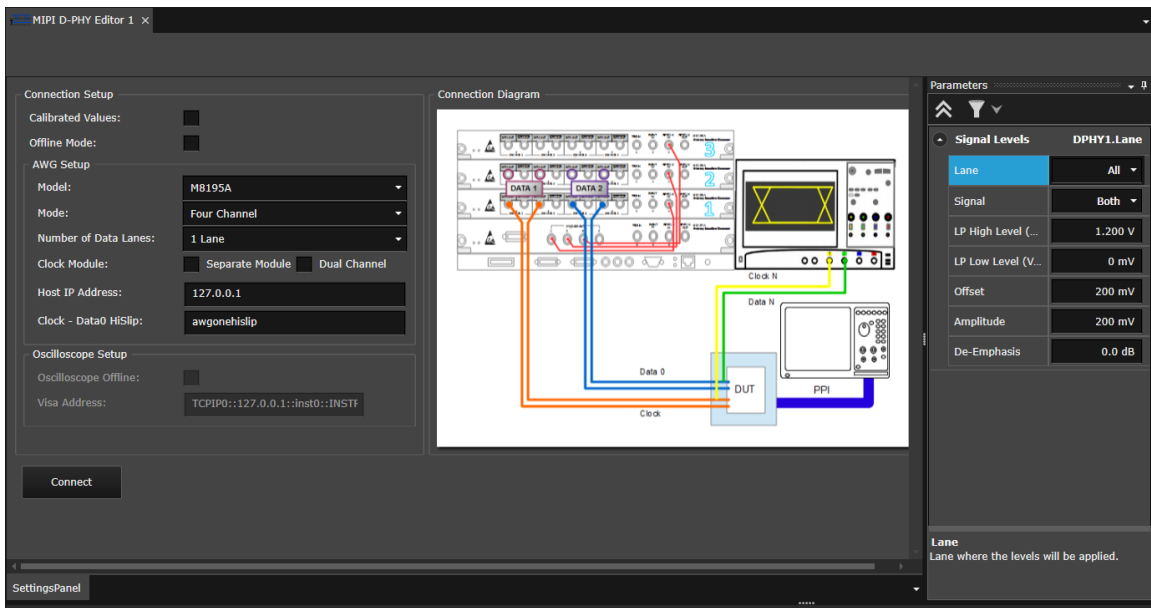


Figure 9 MIPI D-PHY Editor Plugin User Interface

- MIPI C-PHY CTS Plugin: The default user interface is displayed as shown below.

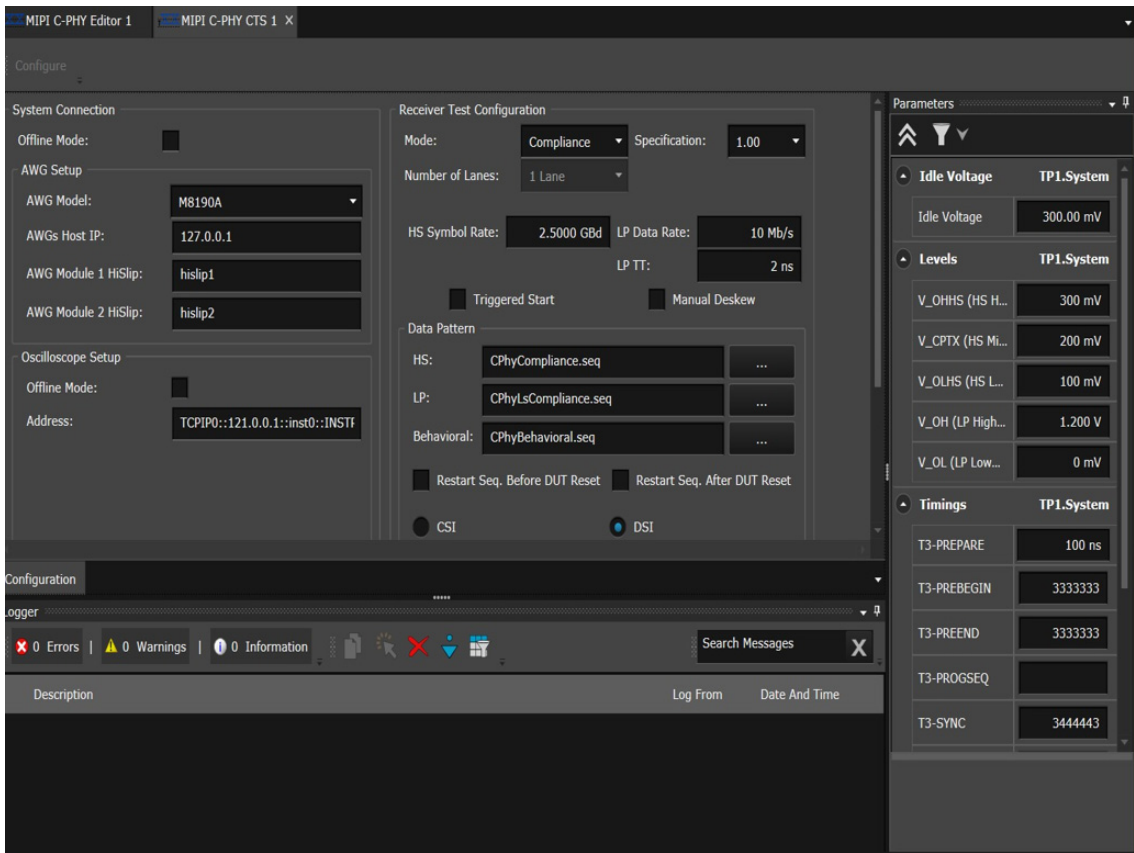


Figure 10 MIPI C-PHY CTS User Interface

- MIPI D-PHY CTS Plugin: The default user interface is displayed as shown below.

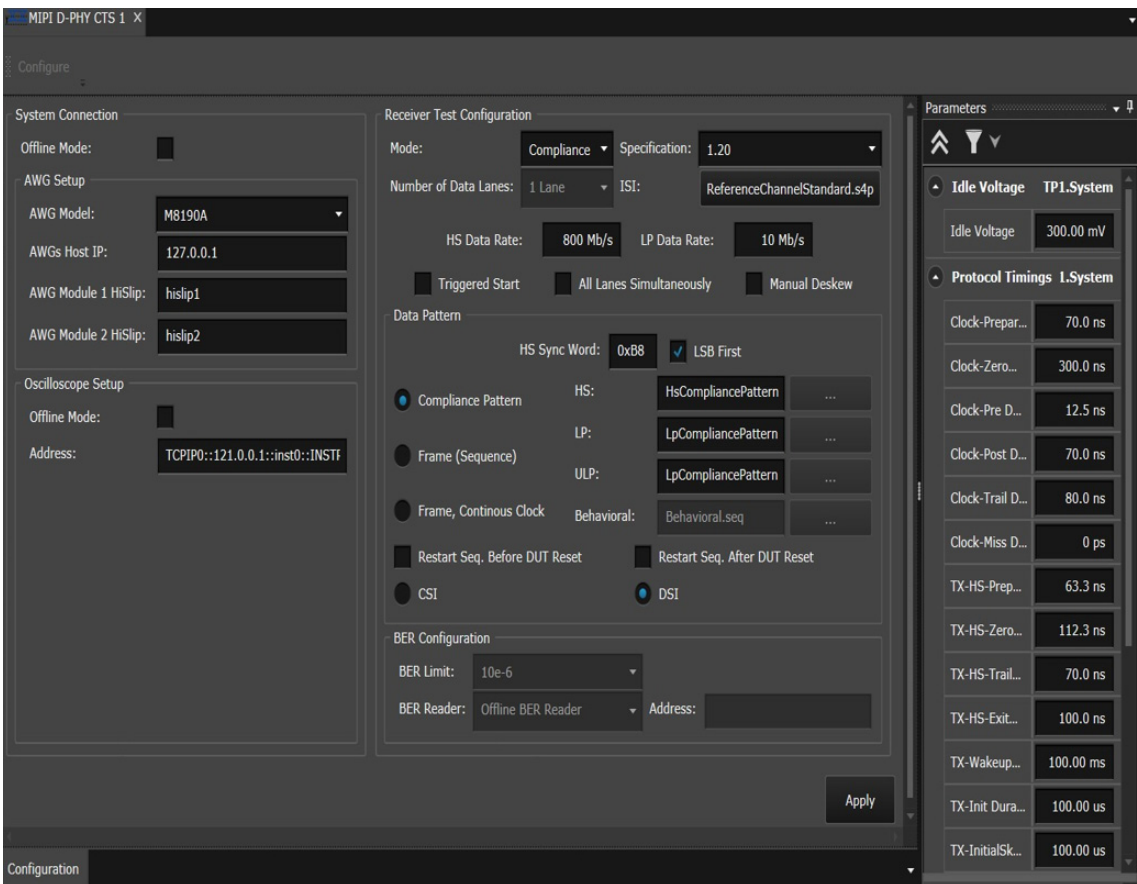


Figure 11 MIPI D-PHY CTS Plugin User Interface

For complete details on how to operate the MIPI D-PHY Editor Plugin user interface, refer to the *MIPI D-PHY Editor User Guide*.

For complete details on how to operate the MIPI D-PHY CTS Plugin user interface, refer to the *MIPI D-PHY Receiver Test Configuration User Guide*.

For complete details on how to operate the MIPI C-PHY Editor Plugin user interface, refer to the *MIPI C-PHY Editor User Guide*.

For complete details on how to operate the MIPI C-PHY CTS Plugin user interface, refer to the *MIPI C-PHY Receiver Test Configuration User Guide*.

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