

Keysight M8070ADVB Advanced Measurement Package

The functionalities of the M8070B system software can be enhanced by this package. This package requires M8070B SW 6.7 or later.

Software licensing

The M8070B baseline software is free-of-charge and doesn't require any license. In order to use the Advanced Measurement Package features a valid M8070ADVB license is required. For more details on the required license refer to "License Information" section in the user guide for this package described in [Related Document](#)

Related Document

For detailed information on this package and its functionalities, refer to the following document after installing the package.

- "AdvancedMeasurementPackageUserGuide.pdf"

This document can be found at the following location after you install the package:

C:\Program Files\Keysight\M8070B\Plugins\M8070ADVB\doc

The M8070B documents can be located by clicking *Start > All Programs > Keysight M8070B > Keysight M8070B Documentation*. Alternatively, you can also visit

www.keysight.com/find/M8070B to find the latest versions of M8070B documents.

Installation Steps

To install the Keysight M8070ADVB package, perform the following steps:

- Start the M8070B software. To do so, go to *Start Menu > All Programs > Keysight M8070B*.
- Click *Utilities -> Plugin Manager menu*.
- Click on the Install Plug-in from File button. A File Open dialog is displayed.
- Locate the M8070ADVB.M8KP to install and click OK. On the successful installation of M8070ADVB package, a message is displayed.
- Install the required licenses via the Keysight License Manager (if not done before). To know about the details of required licenses, refer to the user guide mentioned above.
- Restart the M8070B software. You should be able to use additional features thru various menus like “Measurements”, “Utilities” etc. To know more about how to use the features of this package, refer to the user guide mentioned above.

M8070ADVB Package

Release 1.3.200.4

Released Date:	April 09, 2020
Operating System:	Microsoft Windows 7 (64 bit) SP1, Microsoft Windows 8 (64 bit) Microsoft Windows 8.1 (64 bit) Microsoft Windows 10 (64 bit) Version 1607 (Anniversary Update) or newer
Controller requirements:	Embedded PC: Choose M8020A-BU3 or M8040A-BU3 for a pre-installed embedded controller M9537A including pre-installation of M8070B software and module licenses. Otherwise: M9537A 1-slot AXIe embedded controller, choose options for Windows 7 or 10, 8 or 16 GB RAM, USB External PC: USB connection recommended between external PC and AXIe chassis. Minimum of 8 GB RAM recommended. For PCIe connectivity please refer to list of tested PCs for AXIe Technical Note, pub no. 5990-7632EN
Display resolution:	Minimum requirement 1024 x 768
Software pre-requisites:	M8070B SW version 7.0.600.4 or higher Keysight IO Library rev. 18.0.22209.2 or above AXIe Chassis Firmware (Embedded System Module (ESM) from Keysight Technologies) greater than or equal to version 1.3.42
File Name:	M8070ADVB_1.3.200.4.m8kp

Enhancements

- Adoption of J-TOL measurement to support M8046A below 5GBd

Release 1.2.800.2

Released Date:	October 14, 2019
Operating System:	Microsoft Windows 7 (64 bit) SP1, Microsoft Windows 8 (64 bit) Microsoft Windows 8.1 (64 bit) Microsoft Windows 10 (64 bit) Version 1607 (Anniversary Update) or newer
Controller requirements:	Embedded PC: Choose M8020A-BU1 or M8040A-BU1 for a pre-installed embedded controller M9536A/M9537A including pre-installation of M8070A software and module licenses. Otherwise: M9536A/M9537A 1-slot AXIe embedded controller, choose options for Windows 7 or 8, 8 or 16 GB RAM, USB External PC: USB connection recommended between external PC and AXIe chassis. Minimum of 8 GB RAM recommended. For PCIe connectivity please refer to list of tested PCs for AXIe Technical Note, pub no. 5990-7632EN
Display resolution:	Minimum requirement 1024 x 768
Software pre-requisites:	M8070B SW version 6.7 or higher Keysight IO Library rev. 17.2.20605 or above AXIe Chassis Firmware (Embedded System Module (ESM) from Keysight Technologies) greater than or equal to version 1.3.42
File Name:	M8070ADVB_1.2.800.2.m8kp

Enhancements

- Auto-Deemphasis - This optimizes the de-emphasis settings at the end of the cable to get the best eye performance from the instrument.

Fixed defects

M8K-114 DC coupled signals not supported on UXR.

Release 1.1.550.2

Released Date:	July 18, 2019
Operating System:	Microsoft Windows 7 (64 bit) SP1, Microsoft Windows 8 (64 bit) Microsoft Windows 8.1 (64 bit) Microsoft Windows 10 (64 bit) Version 1607 (Anniversary Update) or newer
Controller requirements:	Embedded PC: Choose M8020A-BU1 or M8040A-BU1 for a pre-installed embedded controller M9536A/M9537A including pre-installation of M8070A software and module licenses. Otherwise: M9536A/M9537A 1-slot AXIe embedded controller, choose options for Windows 7 or 8, 8 or 16 GB RAM, USB External PC: USB connection recommended between external PC and AXIe chassis. Minimum of 8 GB RAM recommended. For PCIe connectivity please refer to list of tested PCs for AXIe Technical Note, pub no. 5990-7632EN
Display resolution:	Minimum requirement 1024 x 768
Software pre-requisites:	M8070B SW version 6.0 or higher Keysight IO Library rev. 17.2.20605 or above AXIe Chassis Firmware (Embedded System Module (ESM) from Keysight Technologies) greater than or equal to version 1.3.42
File Name:	M8070ADVB.m8kp

Enhancements

- Context menu option on measurements graph to save image with custom size and color scheme options.

Fixed defects

- 572321 Parameter Sweep measurement doesn't enable Jitter state while sweeping High Frequency jitter amplitude
- 563027 In Parameter Sweep measurement graph fixed scaling to show low BER values less than 1e-12

Release 1.0.70.0

Released Date:	March 07, 2019
Operating System:	Microsoft Windows 7 (64 bit) SP1, Microsoft Windows 8 (64 bit) Microsoft Windows 8.1 (64 bit) Microsoft Windows 10 (64 bit) Version 1607 (Anniversary Update) or newer
Controller requirements:	Embedded PC: Choose M8020A-BU1 or M8040A-BU1 for a pre-installed embedded controller M9536A/M9537A including pre-installation of M8070A software and module licenses. Otherwise: M9536A/M9537A 1-slot AXIe embedded controller, choose options for Windows 7 or 8, 8 or 16 GB RAM, USB External PC: USB connection recommended between external PC and AXIe chassis. Minimum of 8 GB RAM recommended. For PCIe connectivity please refer to list of tested PCs for AXIe Technical Note, pub no. 5990-7632EN
Display resolution:	Minimum requirement 1024 x 768
Software pre-requisites:	M8070B SW version 6.0 or higher Keysight IO Library rev. 17.2.20605 or above AXIe Chassis Firmware (Embedded System Module (ESM) from Keysight Technologies) greater than or equal to version 1.3.42
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Features

- Measurements
 - Output timing measurement
 - Output level measurement
 - Eye diagram measurement
 - Jitter tolerance measurement
 - Parameter sweep measurement
- SCPI Utilities
 - SCPI Editor
 - SCPI Recorder

- Scripting
 - DUT Control Interface
 - Script Editor
- External clock recovery for M8046A
 - Add support of N1076B and N1078A as external clock recovery
- Real-time oscilloscope as error detector
 - Add support for UXR0334A
 - New parameters
 - NRZ and PAM4 thresholds
 - Global bandwidth limit
 - Channel bandwidth limit and filter type

Known defects

560971 After UXR0334A has been powered-up or Infiniium got re-started, the oscilloscope is reporting an “Data out of range” error on the first startup of M8070B. The Infiniium version that is showing this behavior is 10.00.3804 and 10.00.3902 This error message can be ignored.

Version History

Release 1.0.59.0

Released Date:	December 17, 2018
Operating System:	Microsoft Windows 7 (64 bit) SP1, Microsoft Windows 8 (64 bit) Microsoft Windows 8.1 (64 bit) Microsoft Windows 10 (64 bit) Version 1607 (Anniversary Update) or newer
Controller requirements:	Embedded PC: Choose M8020A-BU1 or M8040A-BU1 for a pre-installed embedded controller M9536A/M9537A including pre-installation of M8070A software and module licenses. Otherwise: M9536A/M9537A 1-slot AXIe embedded controller, choose options for Windows 7 or 8, 8 or 16 GB RAM, USB External PC: USB connection recommended between external PC and AXIe chassis. Minimum of 8 GB RAM recommended. For PCIe connectivity please refer to list of

	tested PCs for AXle Technical Note, pub no. 5990-7632EN
Display resolution:	Minimum requirement 1024 x 768
Software pre-requisites:	M8070B SW version 6.0 or higher Keysight IO Library rev. 17.2.20605 or above AXle Chassis Firmware (Embedded System Module (ESM) from Keysight Technologies) greater than or equal to version 1.3.42
File Name:	M8070ADVB.m8kp

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This information is subject to change without notice.

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