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\*\*\*\* Read Me First \*\*\*\*  
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Version: 2.2.2.0

Oct 2020

## Introducing the AgB29xx IVI Driver for the Keysight B29xx family of instruments

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This instrument driver provides access to the functionality of the B2901A, B2902A, B2911A, B2912A, B2961A and B2962A through a COM server or ANSI C API which also complies with the IVI specifications. This driver works in any development environment which supports COM or C programming including Microsoft Visual C++, Microsoft .NET, Keysight VEE Pro, National Instruments LabView, LabWindows CVI, MATLAB(32 bit only) and others.

## Supported Instruments

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B2901A  
B2902A  
B2911A  
B2912A  
B2961A  
B2962A  
B2901B  
B2901BL  
B2902B  
B2910BL  
B2911B  
B2912B  
B2961B  
B2962B

## Installation

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System Requirements: The driver installation will check for the following requirements. If not found, the installer will either abort, warn, or install the required component as appropriate.

### Supported Operating Systems:

Windows 7 32-bit, 64-bit  
Windows 8 32-bit, 64-bit  
Windows 10 32-bit, 64-bit

### Shared Components

Before this driver can be installed, your computer must already have:  
IVI Shared Components Version: 2.6.1 or newer installed

The IVI Shared Components installers are available from:  
[http://www.ivifoundation.org/shared\\_components/Default.aspx](http://www.ivifoundation.org/shared_components/Default.aspx)

### VISA-COM

Any compliant implementation is acceptable. Typically, VISA-COM is installed with VISA and other I/O library modules. The latest version of Keysight's IO Libraries is recommended and includes VISA-COM.

You can download the latest version from:  
<http://www.keysight.com/find/iosuite>

## Uninstall

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This driver can be uninstalled like any other software from the Control Panel

using "Add or Remove Programs" or "Programs and Features" dialog.

The IVI Shared Components may also be uninstalled like any other software from the Control Panel using the "Add or Remove Programs" or "Program & Features" dialog.

Note: All IVI-COM/C drivers require the IVI Shared Components to function. To completely remove IVI components from your computer, uninstall all drivers and then uninstall the IVI Shared Components.

#### Source Code

Driver source code is available by enabling the "Source Code" option in the "Custom Setup" dialog when installing the driver. This code is provided as is for informational purposes only. Modification of this code is not supported. Code is a Visual Studio 2010 C++ project and may be updated to new versions of Visual Studio.

Caution: Once you have installed version 2.x of the IVI Shared Components, you will not be able to build IVI drivers and applications developed with earlier versions. You will need to upgrade those drivers/applications to the new IVI Shared Components and to build on Visual Studio 2010 or higher or you will need to build those drivers/applications on a different machine that does not have version 2.x of the IVI Shared Components.

#### Start Menu Help File

A shortcut to the driver help file is added to the Start Menu, All Programs, Keysight Instrument Drivers, IVI-COM-C Drivers, KtIviComDrv group. It contains "Getting Started" information on using the driver in a variety of programming environments as well as documentation on IVI and instrument specific methods and properties.

You will also see shortcuts to the Readme and Introduction files and programming examples for this driver.

#### Additional Setup

##### .NET Framework

The .NET Framework itself is not required by this driver. If you plan to use the driver with .NET, the minimal .NET framework version is: 2.0

The .NET Framework requires an interop assembly for a COM server. A Primary Interop Assembly, along with an XML file for IntelliSense is installed with the driver. The driver's PIA along with IVI PIAs are installed by default in: drive:\<Program Files>\IVI Foundation\IVI\Bin\Primary Interop Assemblies

The PIA is also installed into the Global Assembly Cache (GAC) if you have the .NET framework installed.

#### Using a New Version of the Driver

New versions of this Keysight IVI-COM/C driver may have a new ProgId.

If you use the version dependent ProgId in CoCreateInstance, you will need to modify and recompile your code to use the new ProgID once you upgrade to the next version of the driver. Doing a side-by-side installation of the driver to use multiple versions of the driver is not supported. If you need to go back to an older version of the driver, you need to uninstall the later version and install the older version.

If you use the version independent ProgId in CoCreateInstance, you will not

need to modify and recompile your code. The new version of the driver has been tested to be backwards compatible with previous versions.

To access the new functionality in a new version of the driver you will need to use the latest numbered IKtIviComDrvr[n] interface rather than the IKtIviComDrvr interface. The IKtIviComDrvr[n].<interface> property will return a pointer to the new IKtIviComDrvr<interface>[n] interface. The IKtIviComDrvr<interface>[n] interface contains the methods and properties for the new functionality and inherits all prior interface functionality. The new interfaces were introduced rather than modifying the existing interfaces for backwards compatibility. The interfaces that were previously shipped have not been changed.

Pre-existing .NET client applications must be re-build before using the new version of the driver.

#### Revision History

Version	Date	Notes
2.2.2.0	Sep 2020	Added model support for B2901B, B2901BL, B2902B, B2910BL, B2911B, B2912B, B2961B, B2962B.
2.1.1.0	Jun 2018	Fixed customer reported defect.
2.1.0.0	Mar 2015	Updated help file, added IVI-2014 Compliance, Rebranded Keysight Technologies
2.0.5.0	Nov 2012	Enhanced driver to support B296x family of instruments
1.0.7.0	June 2011	IviDCPwr class support added for IVI C driver also
1.0.6.0	June 2011	Initial release

#### IVI Compliance

##### IVI-COM/IVI-C IviDCPwr Specific Instrument Driver

IVI Generation: IVI-2014

IVI Instrument Class: IviDCPwr

IviDCPwr Spec: IVI-4.4

Revision: 3.0

##### Group Capabilities Supported:

IviDCPwrBase	Yes
IviDCPwrTrigger	Yes
IviDCPwrSoftwareTrigger	Yes
IviDCPwrMeasurement	Yes

##### Optional Features:

Interchangeability Checking	No
State Caching	No
Coercion Recording	No

##### Driver Identification:

Vendor:	Keysight Technologies
Description:	AgB29xx Arbitrary Waveform Generator
Revision:	2.2.2.0
Component Identifier:	AgB29xx.AgB29xx

##### Hardware Information:

Instrument Manufacturer:	Keysight Technologies
Supported Instrument Models:	B2901A, B2902A, B2911A, B2912A, B2961A, B2962A
Supported Bus Interfaces:	TCPIP, GPIB

##### 32-bit Software Information:

Supported Operating Systems:	Windows 7 32-bit, Windows 8 32-bit, Windows 10 32-bit
Unsupported Operating System:	Windows 2000
Support Software Required:	VISA-COM
Source Code Availability:	Source code included with driver via custom installation option.

**64-bit Software Information:**

Supported Operating Systems: Windows 7 64-bit, Windows 8 64-bit, Windows 10 64-bit  
Support Software Required: VISA-COM  
Source Code Availability: Source code included with driver via custom installation option.

**Unit Testing**  
-----**Test Setup Instrument:**

Instrument Models (FW Revision): B2912B (5.0.2029.1911)  
Bus Interface: TCPIP  
Operating System (Service Pack): Windows 10  
OS Bitness/Application Bitness: 64-bit/32-bit  
VISA Vendor and Version: Keysight VISA-COM (IO Libraries 18.1)  
IVI Shared Components Version: 2.6.1

**Test Setup Simulation:**

Instrument Models: (FW Rev N/A) B2912B  
Bus Interface: N/A  
Operating System (Service Pack): Windows 7 (SP1)  
OS Bitness/Application Bitness: 64-bit/32-bit, 64-bit/64-bit  
VISA Vendor and Version: N/A  
IVI Shared Components Version: 2.6.1

**Driver Installation Testing:**

Operating System (Service Pack): Windows 7 (SP1), Windows 8, Windows 10  
OS Bitness: 32-bit, 64-bit

**Driver Buildability:**

Operating System (Service Pack): Windows 7 (SP1), Windows 8, Windows 10  
OS Bitness: 32-bit, 64-bit  
Visual Studio Version: VS2010

**Driver Test Failures - Known Issues:**

None - This driver does not have any known defects.

Keysight Technologies has evaluated and tested this driver to verify that it meets all applicable requirements of the IVI specifications at the time this compliance document was submitted to the IVI Foundation and agrees to abide by the dispute arbitration provisions in Section 7 of IVI-1.2: Operating Procedures, if the IVI Foundation finds this driver to be non-conformant.

**More Information**  
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For more information about this driver and other instrument drivers and software available from Keysight Technologies visit:  
<http://www.keysight.com/find/drivers>

A list of contact information is available from:  
<http://www.keysight.com/find/contactus>

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