

Agilent Desktop EasyEXPERT for Agilent E5270B and E5260 series

Quick Start Guide

Agenda

- Overview
- Installation
- FAQ

Agilent Desktop EasyEXPERT for Agilent E5270B and E5260 series

Desktop EasyEXPERT



Desktop EasyEXPERT PC



GPIB cable



E5262A / E5263A



E5270B



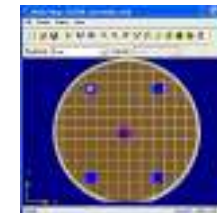
E5260A



Other instruments
E4980A, 81110A, etc.



E5250A, B2200A Switching Matrices



Wafer Prober control



Desktop EasyEXPERT makes parametric test as easy as 1-2-3.

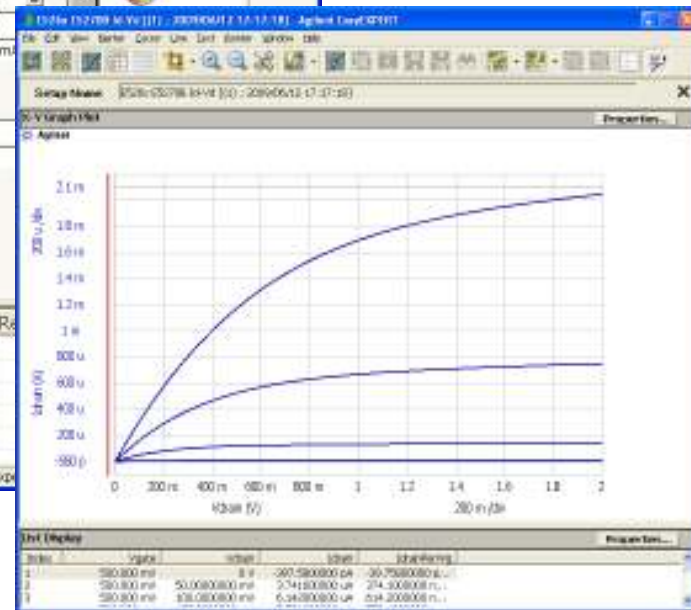
1
Select device or application category

2
Select application test

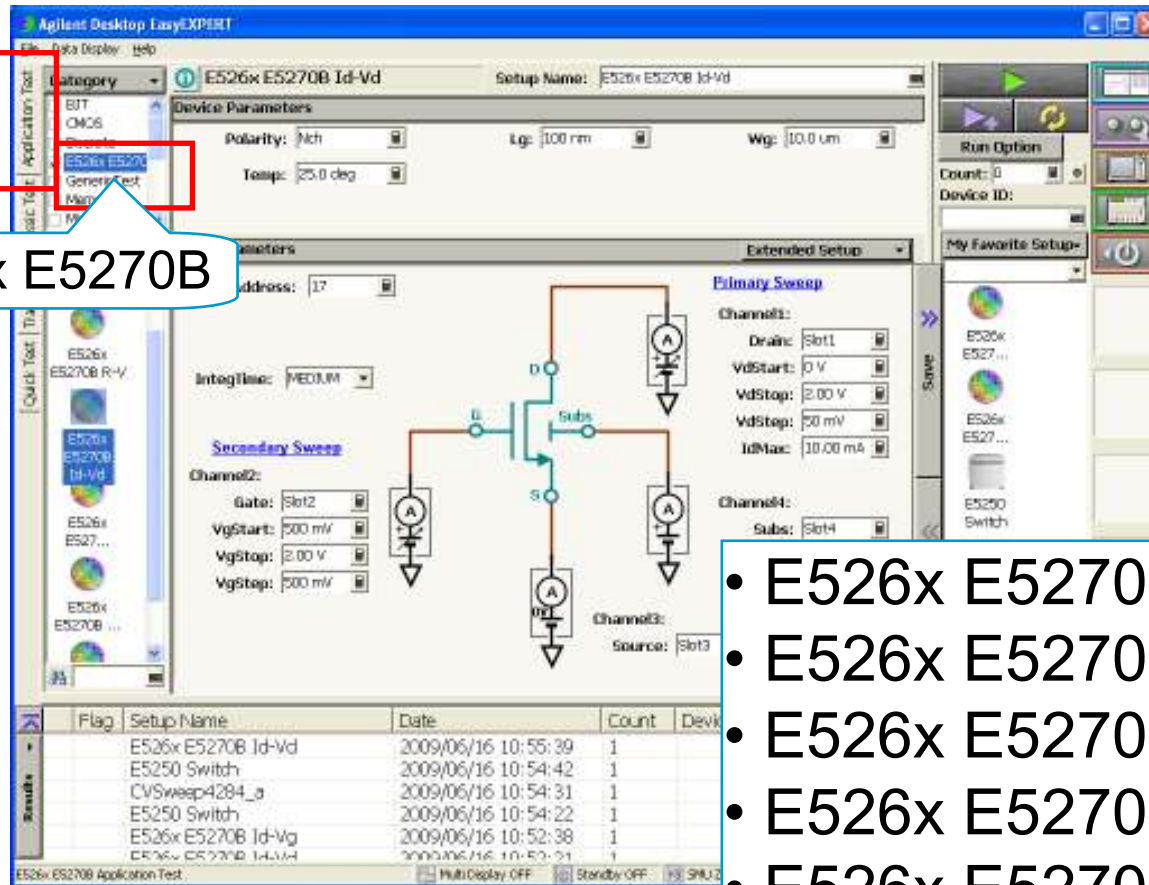
3
Click the Measure Button

Flag	Setup Name	Date	Count	Device ID
	E526x E5270B Id-Vd	2009/06/16 10:55:39	1	
	E5250 Switch	2009/06/16 10:54:42	1	
	CVSweep4284_a	2009/06/16 10:54:31	1	
	E5250 Switch	2009/06/16 10:54:22	1	
	E526x E5270B Id-Vg	2009/06/16 10:52:38	1	
	E526x E5270B Id-Vd	2009/06/16 10:52:21	1	

A graphical plot and data list are generated automatically in real time.

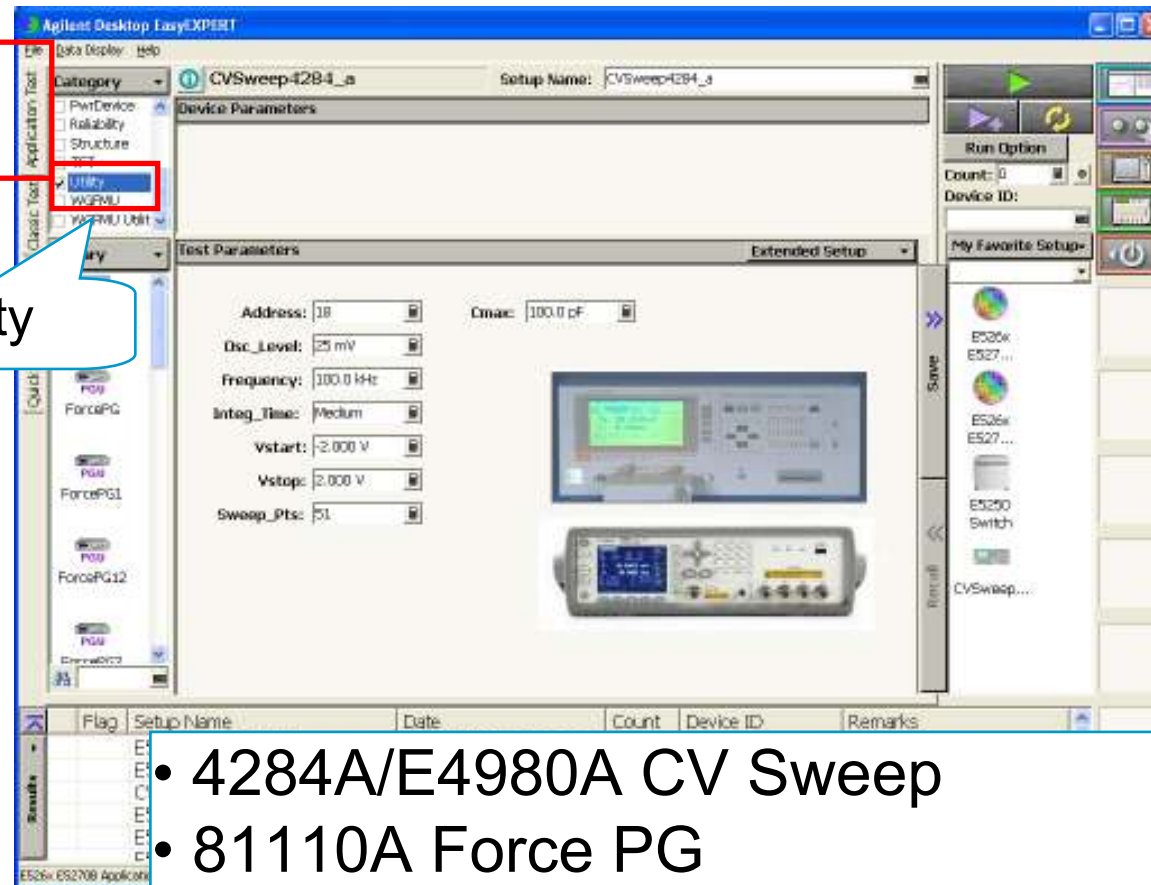


Six prepared Application Tests can perform IV Sweep for E526x/E5270B



- E526x E5270B IV Sweep
- E526x E5270B R-I
- E526x E5270B R-V
- E526x E5270B R-I Kelvin
- E526x E5270B Id-Vd
- E526x E5270B Id-Vg

External instruments can be controlled through GPIB



Utility

- 4284A/E4980A CV Sweep
- 81110A Force PG
- E5250A/B2200A Switching Matrix Control

Quick Test allows fast and easy test sequencing

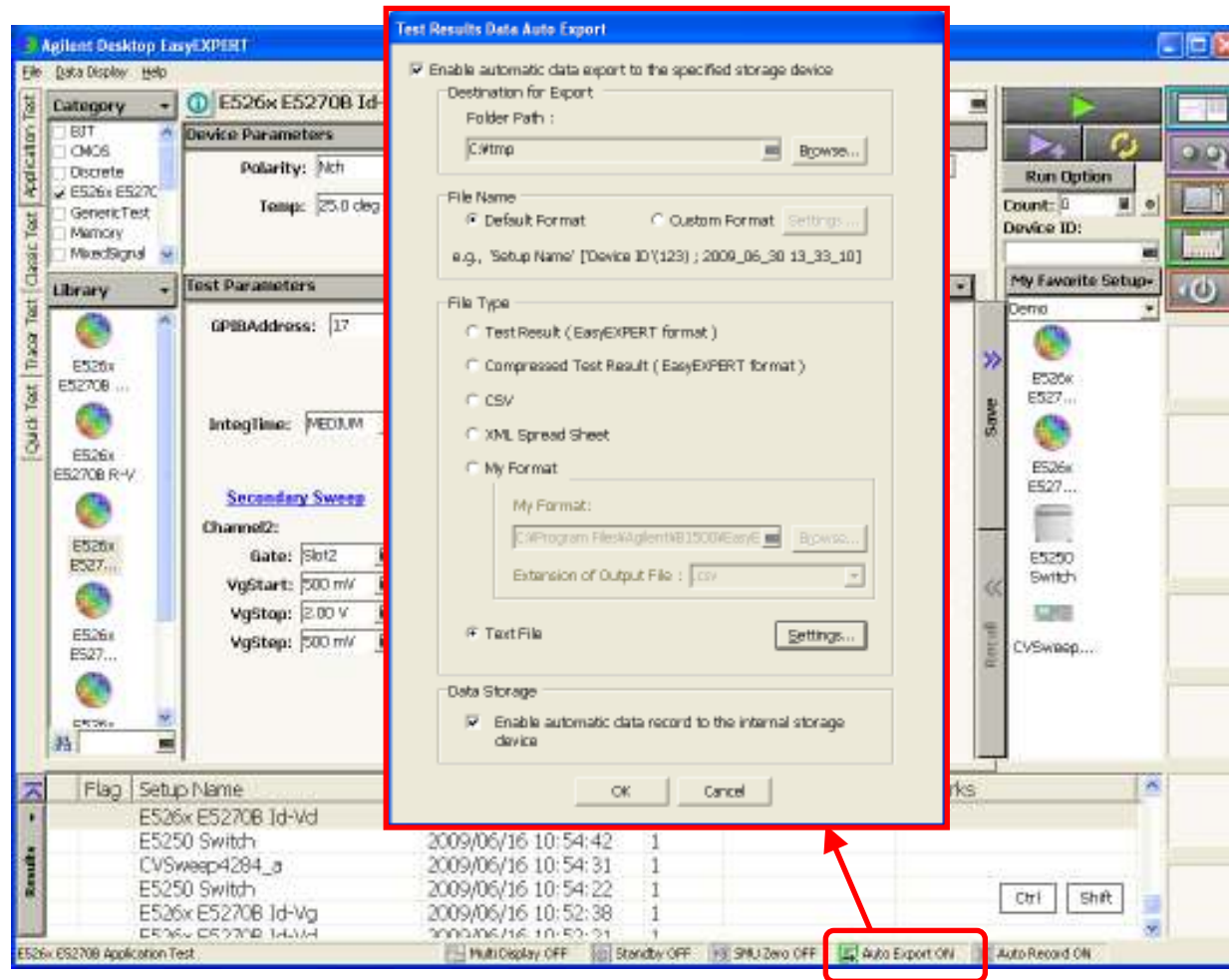
Will be supported in next EasyEXPERT release

The screenshot displays the Agilent EasyEXPERT software interface. The main window is titled 'Agilent Desktop EasyEXPERT'. The interface is divided into several sections:

- Top Left:** A menu bar with 'File', 'Data Display', and 'Help'. Below it is a 'My Favorite Setup' dropdown menu.
- Top Center:** A 'Preset Group' dropdown menu set to 'Demo'. A red box labeled '1' highlights this area.
- Center:** A list of test setups under 'Setup Name': 'E526x E5270B Id-Vd', 'E526x E5270B Id-Vg', 'E5250 Switch', and 'CVSweep4284_a'. A red box labeled '2' highlights the list, and a red box labeled '3' highlights the 'Run' button (a green play icon) in the 'Quick Test List' panel.
- Bottom Left:** A 'Results' table with columns: Flag, Setup Name, Date, Count, Device ID, and Remarks. A red box labeled '4' highlights the 'Quick Test' button in the left sidebar.
- Right Side:** A 'Quick Test List' panel with buttons for 'Select All', 'Up', 'Down', 'Refresh', 'Duplicate', and 'Copy'. Below it is a 'Run Opt' panel with 'Count: 0' and 'Device ID:'.
- Bottom Right:** Two overlapping windows showing test results. The top window shows a graph of 'I (mA)' vs 't (s)' with a rising curve. The bottom window shows a graph of 'I (mA)' vs 't (s)' with a rising curve and a falling curve.

Flag	Setup Name	Date	Count	Device ID	Remarks
	E526x E5270B Id-Vd	2009/06/16 10:55:39	1		
	E5250 Switch	2009/06/16 10:54:42	1		
	CVSweep4284_a	2009/06/16 10:54:31	1		
	E5250 Switch	2009/06/16 10:54:22	1		
	E526x E5270B Id-Vg	2009/06/16 10:52:38	1		
	E526x E5270B Id-Vd	2009/06/16 10:52:31	1		

Auto Data Export function provides Easy Management of Many Measurement Date/Result



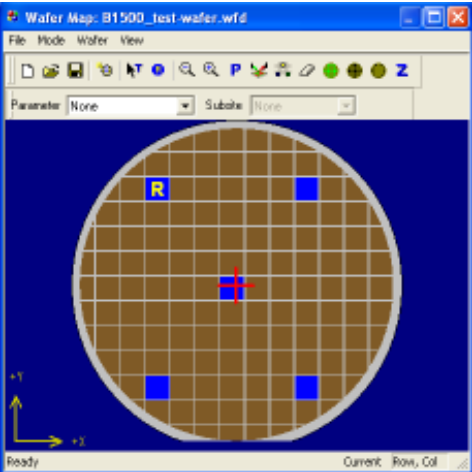
Prober control

Supported Prober:

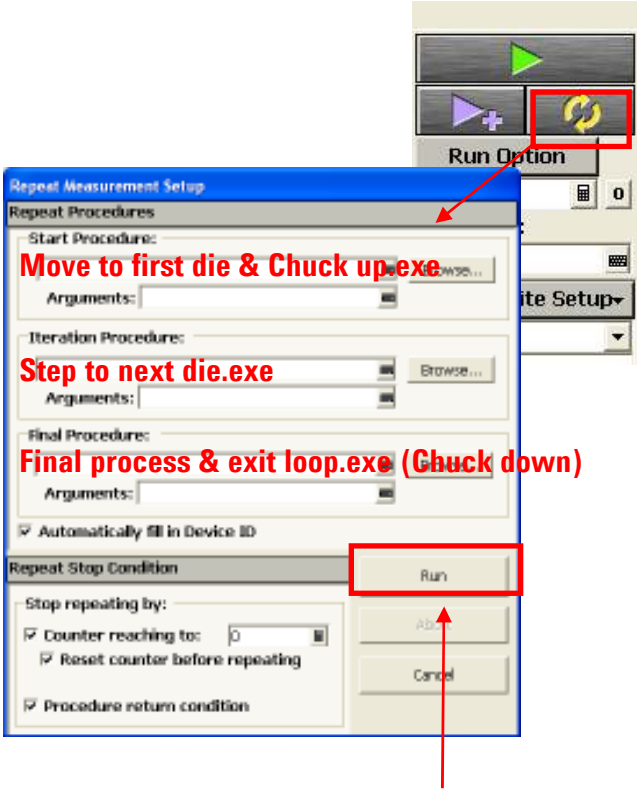
- Cascade Microtech Summit 12K or S300
- SUSS MicroTec PA200 or PA300
- Vector Semiconductor VX-2000 or VX-3000

1. Start Prober Software

2. Create Wafer Map (visit die)



3. EasyEXPERT (Repeat Meas.)



4. Setup Procedure & Run

EasyEXPERT starts Measurements by controlling the prober

Supported Application Test List

Category	Test Definition	Required equipment and quantity	Desc.
E526x E5270B	E526x E5270B IV Sweep		(*1)
	E526x E5270B R-I		
	E526x E5270B R-V		
	E526x E5270B R-I Kelvin		
	E526x E5270B Id-Vd		
	E526x E5270B Id-Vg		
Utility	ForcePG1	81110A (2 outputs) 1	(*2)
	ForcePG2	81110A (2 outputs) 1	
	ForcePG2P	81110A (2 outputs) 1	
	ForcePG12	81110A (2 outputs) 1	
	ForcePG	81110A (2 outputs) 1	
	ForcePGC	81110A (2 outputs) 1	
	Measure Diff-V	3458A 1	
	ResetPG	81110A (2 outputs) 1	
	Subsite move	Wafer prober 1	
	CVSweep4284_a	4284A 1 or E4980A 1	
	E5250_Init	E5250A(E5252A Card) 1 or B2200A 1	(*1)
	E5250_Disconnect_all	E5250A(E5252A Card) 1 or B2200A 1	
	E5250_Connect	E5250A(E5252A Card) 1 or B2200A 1	
	E5250_Switch	E5250A(E5252A Card) 1 or B2200A 1	

(*1) Available for download free of charge from www.agilent.com

(*2) Installed with Desktop EasyEXPERT

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- **Installation**
- FAQ

System requirements

- Desktop EasyEXPERT 4.0 or later
- Agilent I/O Libraries Suite 15.0
- GPIB I/F
 - Agilent 82350B
 - Agilent 82357A/B

Installation (1)

1. Install Agilent IO Library

1-1. Download Agilent IO Library

<http://www.agilent.com/find/iolib>

1-2. Install Agilent IO Library by following Readme

2. Install Desktop EasyEXPERT

2-1. Download Desktop EasyEXPERT

<http://www.agilent.com/find/easyexpert>

2-2. Install Desktop EasyEXPERT by following Readme

Installation (2)

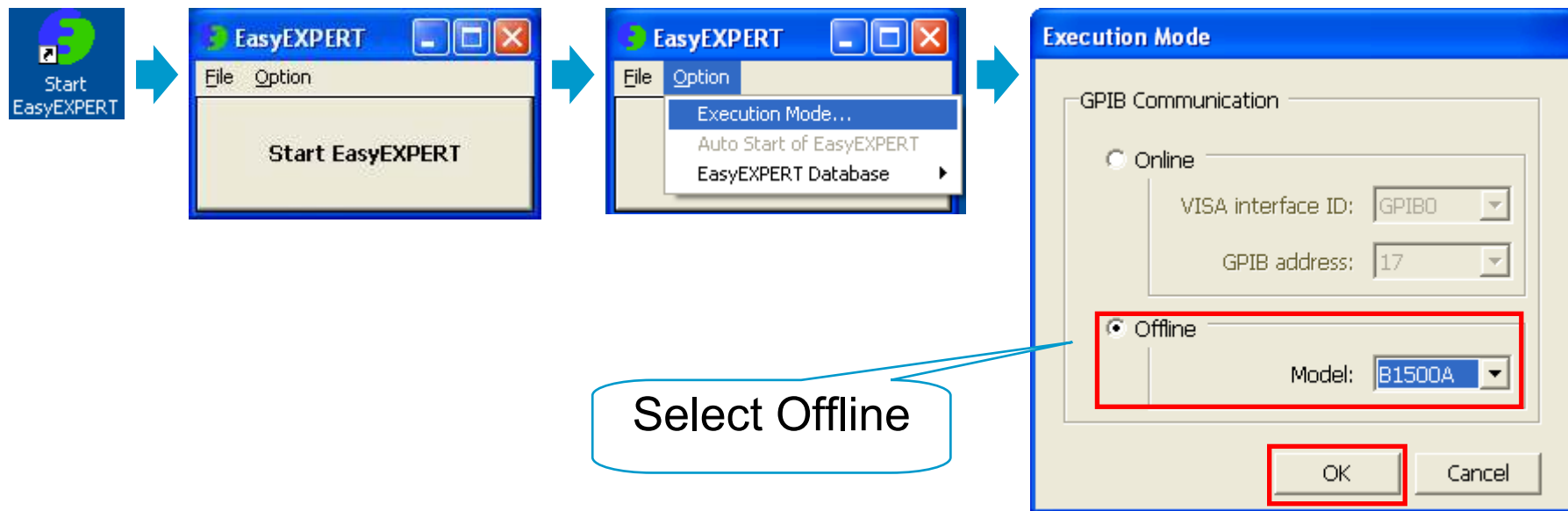
3. Install E526x E5270B Application Test

3-1. Download E526x E5270B Application Test

<http://www.agilent.com/find/easyexpert>

3-2. Unzip the download package

3-3. Start Desktop EasyEXPERT



Installation (3)

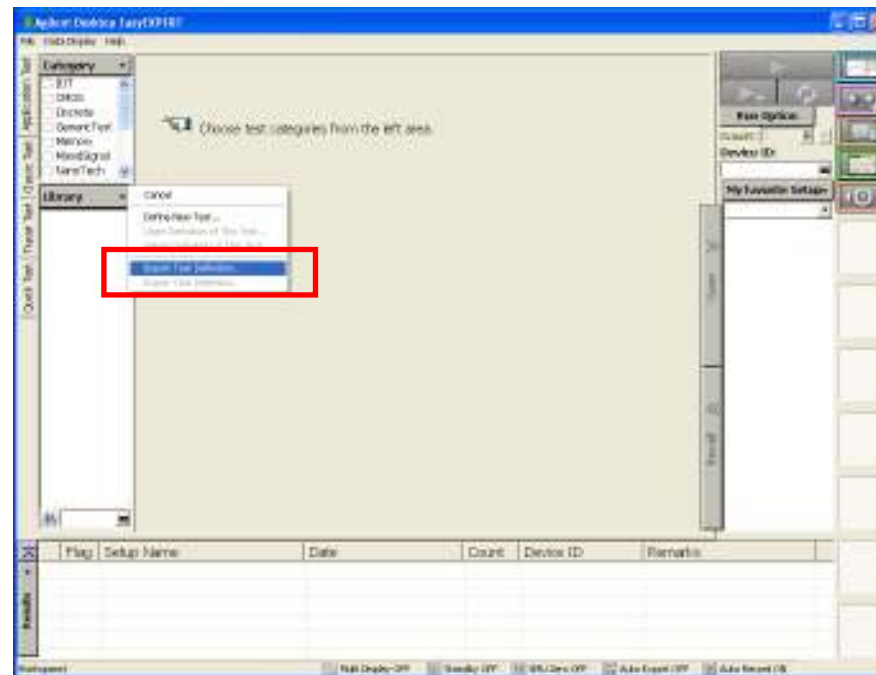
3. Install E526x E5270B Application Test

3-4. Import Test Definition

- E526x E5270B IV Sweep

3-5. Import Test Definition

- E526x E5270B R-I
- E526x E5270B R-V
- E526x E5270B R-I Kelvin
- E526x E5270B Id-Vd
- E526x E5270B Id-Vg

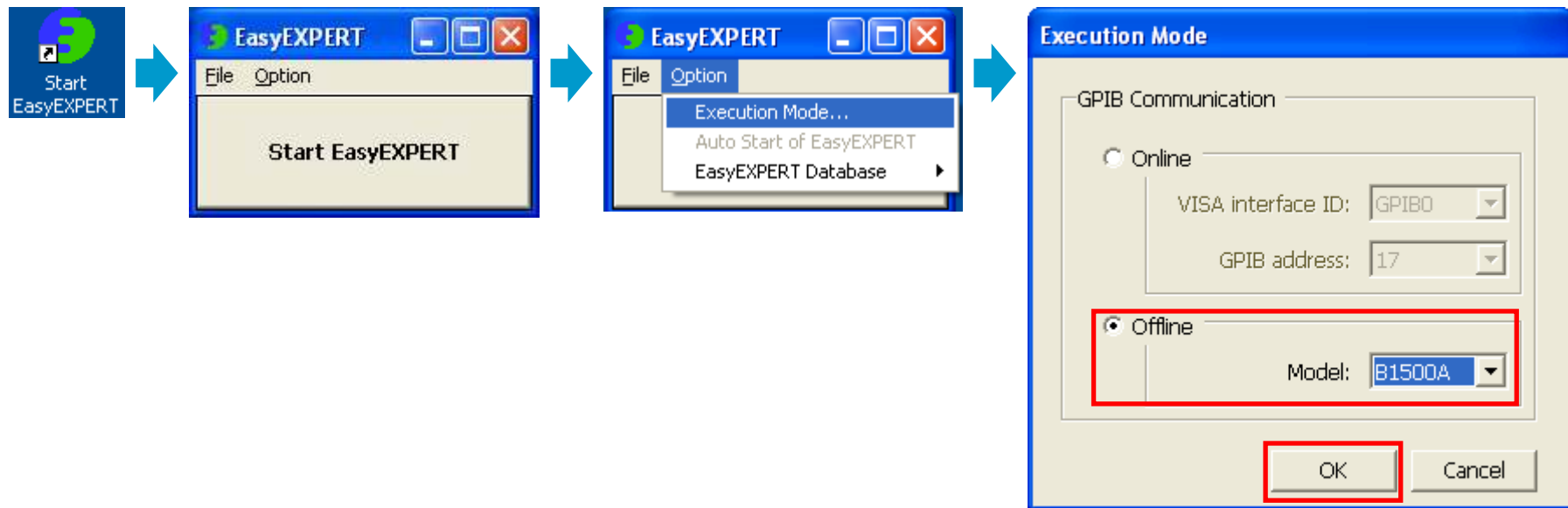


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- **FAQ**

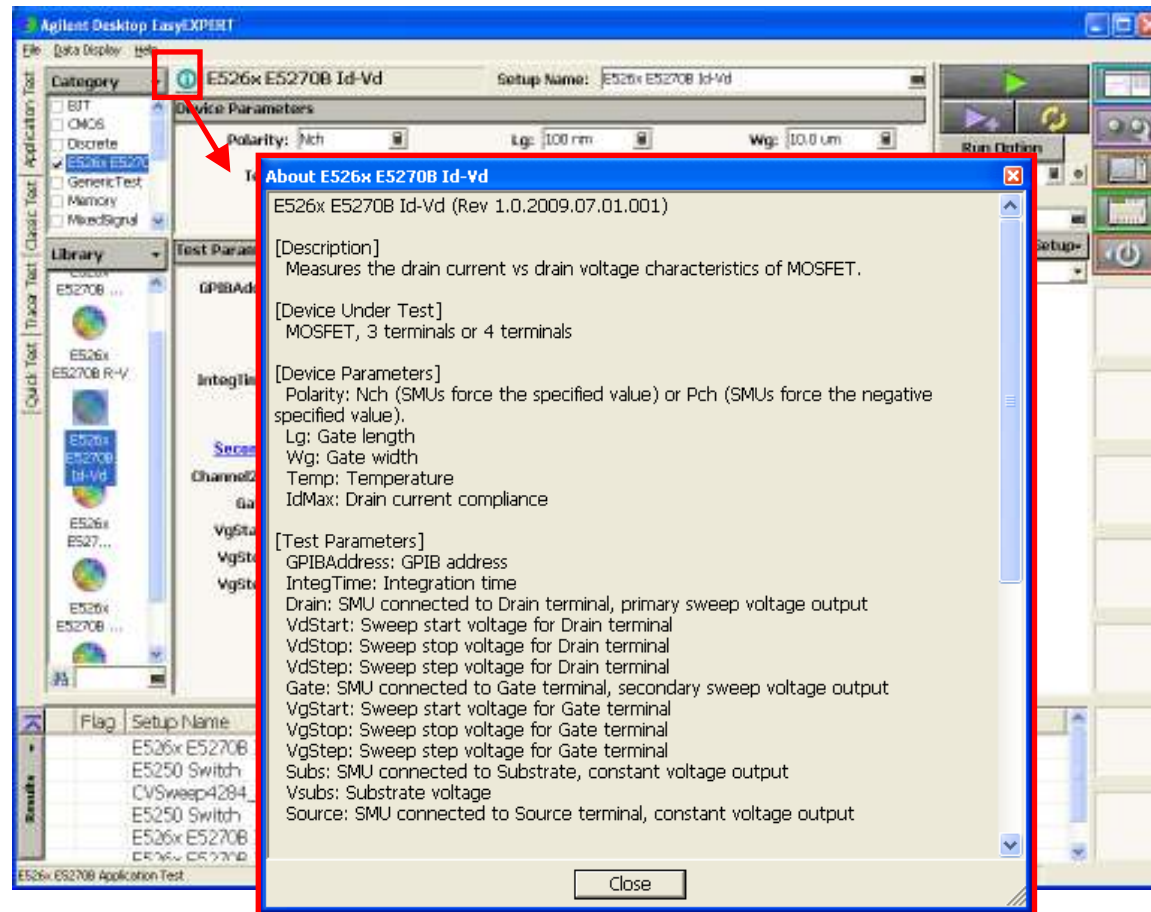
Q. How to start Desktop EasyEXPERT?

A. Select “Offline B1500A” mode in Execution Mode, then Click Start EasyEXPERT.



Q. How to check the Application Test Description?

A. Click the (i) icon. This icon displays the message box that explains the application test definition.



Q. Where to find the detailed operation of Desktop EasyEXPERT?

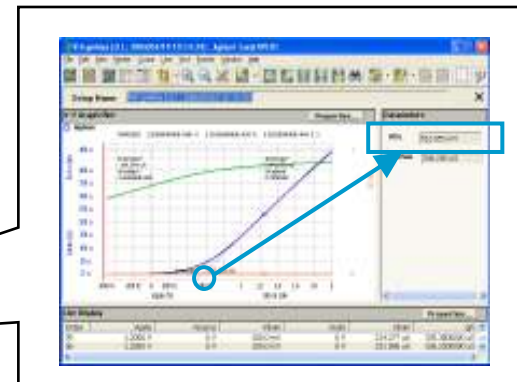
A. Please check the Agilent EasyEXPERT User's Guide.

<http://www.agilent.com/find/easyexpert>

Q. Can I use all functions of EasyEXPERT with E526x/E5270B?

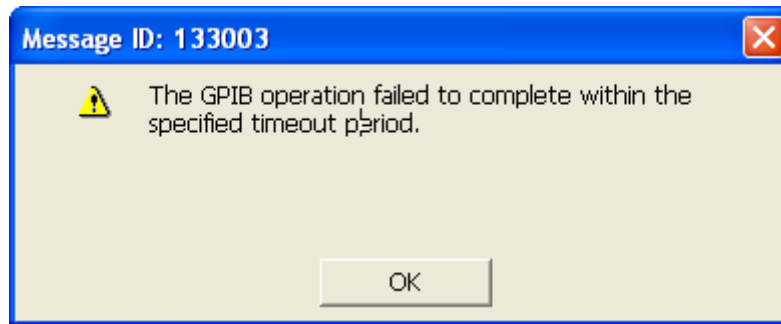
A. No, the following functions are not supported.

- ❌ Classic Test
- ❌ Tracer Test
- ❌ Application Test except in supported Application Tests in E526x E5270B and Utility categories.
- ❌ Calibration
- ❌ Configuration
- ❌ Switching Matrix Operation
- ❌ Standby
- ❌ ReadOut Function
- ❌ Data status (Compliance, Oscillation, Overflow) is not recorded.



Q. I got an error Message ID: 133003 at running the application test.

A. The GPIB communication is failed.
Check GPIB Address of E526x/E5270B.



Q. I got an error Message at running the application test.

Message

Error: (Error Code: 153) CN 3 : No module for the specified channel.
: Check Channel1 settings.

OK

Temp: 50.00

Test Parameters

GPBAddress: []

IntegTime: []

Primary Sweep

Channel1: []

Gate: []

VgStart: []

VgStop: []

VgStep: []

Channel3:

Drain: []

Vd: []

IdMax: []

Secondary Sweep

Channel2:

Subs: []

VsubsStart: []

VsubsStop: []

VsubsStep: []

Channel4:

Source: []

Run Option

Count: []

Device ID: []

My Favorite Setup

Demo

E526x
E527 ...

E526x
E527 ...

E5250
Switch

CVSweep...