Technical Support Knowledge Center Open

Test-System Development Guide: Frequently Asked Questions



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Notices

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What are other system developers and test engineers asking? View recently submitted FAQs from your peers and suggested solutions. Each section below follows the Test-System Development Guide series of application notes.

Using LAN in Test Systems

- What does it take to convert 12,000 lines of code in HP-Basic (Viper card) to standard Basic running on a modern PC?
- I am using PC Control Keysight instruments by LAN and GPIB. Could you send me some example code?
- In many of our applications we use the GPIB interface. If we were to switch to the LAN configuration, would there be a monetary cost savings? Right now we spend \$500 per card and about \$90 a cable. Sometimes we use as many as 12 cables
- Can I make a toolbar (including menu with each item) in my VEE program?
- If I create a run time version in VEE, every time I run the program I want it to run with its size maximized.
- Are there Keysight instruments that have adapters for wireless LAN (802.11 a/b/g)?
- What are the various programming languages that can be used to control an instrument via the LAN connection? Maybe Visual Basic? Can it be controlled directly from an Excel spreadsheet?
- Would you give a quote on an E5810A LAN/GPIB gateway?
- We are using HP8753C on cable production. Which software for testing and data collection do you recommend?
- Can we convert GPIB test system to LAN test system or [can you tell me about] any device that convert GPIB to LAN?
- What is meant by VCIP protocol; how is it different from TCPIP? I tried to control a LeCroy oscillator 6030 waverunner with VEE7 Pro over LAN but failed; however all the VEE and network settings are right.

Test System Design

• What's the biggest source of aggravation in a test system?

Hardware solutions

- I have a Universal counter (HP53131A) I am using to collect time between two positive slope signals. I am interested in setting up a delay time where the counter will ignore any signal until this delay time is elapsed. Can this be done, and how?
- Does the (E1852B) software interface to the instrument come with the E1852B or does it need to be purchased separately?
- One of the things we see missing on power supplies is the capability to ramp the voltage up to the set point in a sequence. We have the need to turn 12 supplies on in a ramping controlled manner in a prescribed sequence.
- Can I utilize a Keysight E8491B (PC to 1394 VXI I/O card) as a non-slot 0 controller working in the same card cage as a MXI slot 0 controller?

Software solutions

- All I want to do is to get a few readings from my DMM to my PC. Do I really have to create a test system and learn a software language?
- Where can I get information about Intuilink connectivity software?
- How long has the basic "intuilink" software been included with test instruments? Does this software work with HPIB instruments? If so, what basic drivers are required in the PC to link to excel?
- What is the advantage of using the N4019A bluetooth wireless test manager software?

• I am going to use Visual Basic to write our test software. Does Visual Basic.net fully support COM Port/GPIB Port communications? I also need to write to & read from SQL databases and create a web page front end, does Visual Basic.net fully support this as well?

Connectivity solutions

- We have a 3458A and bought software written in VEE to do peak calibrations. We use a National Instruments GPIB-PCI card but have trouble with the communication. Should a 3458A be able to communicate with a NI card?
- GPIB has been around for 30 years. Why do people still use it?
- I thought LAN had poor latency. Why are you using it for the instrument interface?
- Is GPIB/IEEE 488 on the way out? If so, what will replace or compete with it?
- What's the easiest way to run a test system from my laptop PC?
- When I want to connect an HP 3458A to a computer to download data, what additional tools do I need?

Instrument Racks & accessories

- Where can I find part numbers and information about racks?
- What is a "lock link kit"?

