

Virtual Comparator

Integrating IEEE-488 Instruments

A software capability allowing integration of instrumentation through IEEE-488 compliant devices. The control, measured results and pass/fail decisions are integrated into the TestExecutive®. Conditional testing can be used as if the standard DIT-MCO instrument performed the test. Additionally, GPIB commands can be embedded directly into the test program for controlling simple devices.

- Seamless integration of instruments.
 - Facilitates addition of programmable power supplies.
 - Controlled through the test program or ASCII macro and configuration files.
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VIRTCOMP is a stand-alone program that allows the operation of IEEE 488 instruments from within the TestExecutive. VIRTCOMP does not contain any device specific information. All device specific information is stored in ASCII text files called Device Configuration Files that have a file name extension of .DCF. This allows new devices to be added without modifying VIRTCOMP. All the devices used by VIRTCOMP must be declared in the GPIB system configuration file, GPIBSYS.CFG.

VIRTCOMP.EXE and all its associated files must reside in the Global directory. The the TestExecutive directives for external device access (DDA, DDP, CDP, and STD) are used to program the information that the TestExecutive writes into the input file. These directives were introduced in T81 version 5.303.

A device name has to be associated with the Virtual Instrument before it can be used in a test program. This is done by the Define Device Access (DDA) directive.

DDA,DEVICE NAME,ACCESS

DEVICE NAME is the three or four alphabetic-character device name that the TestExecutive will associate with the program listed as *ACCESS*. The *ACCESS* string normally will be VIRTCOMP.EXE.

There are two ways to send commands to VIRTCOMP from the TestExecutive.

- Send To Device (STD) sends a block of commands
- Define Device Parameter (DDP) assigns commands to a parameter tag

Of the two methods for sending commands to VIRTCOMP from the TestExecutive, using the STD (Send to Device) directive is more direct. The commands must be device literal commands or device macros defined in a device configuration file.

STD, DEVICE NAME,{



COMMAND LINE

.

.

COMMAND LINE}

The DDP (Define Device Parameters) directive is used to associate commands with a parameter tag. The tag then can be used in the TestExecutive test commands to send commands to VIRTCOMP.

DDP,PARAMETER TAG,DEVICE NAME,{

COMMAND LINE

.

.

COMMAND LINE}

In the following example, an AC Hipot test is assigned to the F parameter code. When the F 1000 test command is executed, the ACHP device is utilized.

DDA,ACHP,VIRTCOMP.EXE

DDP,F,ACHP,{

ARC1|SETVAC(1000)

ARC1|SETCURR(1)

ARC1|SETRAMP(500)

ARC1|SETDWELL(6)

ARC1|TRIG|?|0|1

}

F1000

With the Virtual Comparator, you gain the *power of available instruments without the hassle of integration*. Talk to your DIT-MCO regional sales manager or corporate sales department for information on your particular configuration.

