



Use of the Test Results Command Processor

The information that follows pertains to: 5DX and MLW, Date: March 1999, Version: 5.x.

The Test Results Command Processor (TRCMDPRO) processes the results from the Agilent 5DX in a way that is specified by a command file. This file is, by default, TRCMDPRO.CMD. The command file allows for branching (doing a different series of commands) depending on some attribute of the current configuration, usually some attribute of the current test:

BOARDSERIALNUMBER

BOARDNAME

BOARDNUMBER

PANELNAME,

but it can also be something such as

OPERATORNAME.

If there are no matches to the KEYWORDS listed above, TRCMDPRO will do whatever is in the default block located at the bottom of the file. Each block consists of a BEGIN statement at the beginning and an END statement at the end of the block. Inside of the block can be a number of different commands that TRCMDPRO will execute. See the Example provided.

TRCMDPRO will always perform just one set of instructions located in a single BEGIN-END block, the first one that it comes to for which there is match. For the default block there is no KEYWORD, so that every result file matches this block.

If there is more than one block with no KEYWORD associated with it, it will do the last one listed in the file.

There are a number of commands using Agilent 5DX specific programs that will be discussed here, as well as some Agilent 5DX specific syntax. The wording "&TRFILE" shows up frequently. This means use the current results file (*.RES) in the directory specified by the environment variable RESROOT.

AUTORPT

autorpt - allows for different outputs for the defect results. The output can be printed, can be written to a file, or can be displayed in the Automatic Reporter window, or some combination of these options. These can be set

using Configure/Defect Reporting Options under System Access in the User Interface or by modifying `autorpt.cfg`, located in the CALIB directory of the current release. There are several switches that can be used with `autorpt`:

`-t` specifies the result file. This switch must be present. The default is `&TRFILE`.

There are several optional specifications:

`-c` allows for the optional specification of the configuration file that controls the output. If this switch is not present the program will use `autorpt.cfg` (which is the default).

`-f` allows for the specification of a filter (the default is no filter).

Among the other choices in `autorpt.cfg` are options to:

- allow for filtering. You can have TRCMDPRO provide defect data for a given joint type, subtype, defect location (layer, area of the board, slice number or slice zone), component, and so forth.
- allow for setup of a custom name table so that defect names can be changed to match the local language or some preferred naming scheme, (for example, call Short as Bridging).
- allow for joint level and component level classification of defects. Refer to the Agilent 5DX Reference Guide, Chapter 6 for more information on how to set up these options.
- allow for configuration of the header and body information.

If the report contains defect measurements, the units for those measurements can also be changed.

AUTODLNK

`autodlnk` - allows for extraction of data from the results file.

NOTE: This option is only available to users who have purchased the Datalink module.

Datalink was designed to run on a remote PC, running another copy of TRCMDPRO. Switches are the same as for `autorpt`. The default configuration file that controls what data is being collected and how it is output is `autodlnk.cfg`. Data can be either defect or measurement (or both if multiple instances of `autodlnk` are run using different `.cfg` files). Datalink outputs data to a file or a device, and allows the specification of the file format. It also allows the use of a custom name table, and joint and component level classification of defects.

TRCP

`trcp` - copies result files (and other information) to another location. It checks for the presence of the appropriate `rptcad` file `<hashname>.c#` at the destination and copies it there if not already present. The hashname of the `rptcad` file does not match the hashname for the panel, board, or any of the results files. The extension, `c#` begins at `.c0` and is incremented to `.c1`, `.c2`, and so forth each time the `rptcad` information for the panel changes (for example, the view list or the component list changes)

Switches available are:

-plr - copies the images and other information needed for use by the Paperless Repair Workstation. This information is stored in a directory within the results directory with the same hashname as the results file.

-def# only copies if number of defects found is equal to or greater than #. If it is desired to always copy the result file whether there are defects or not, omit the switch rather than specifying as -def0.

TRCP

Other DOS commands can be included as well. Some that are used regularly are:

```
CMD /CDEL /Q $(RESROOT)&TRNAME\*.*
```

```
RD $(RESROOT)&TRNAME
```

These two lines delete the plr image information that is stored temporarily on the local drive before being copied to the Paperless Repair Workstation.

Another command that is used frequently is echo. This displays the text that follows the echo command in the Automatic Reporter window.

Example

The following is an excerpt from a TRCMDPRO.CMD file. If the board serial number begins with TEST, then TRCMDPRO runs the first BEGIN-END loop. It just runs Automatic Reporter, using the autorpt.cfg file. If a serial number that doesn't begin with TEST was entered for the run, it drops to the second BEGIN-END loop. The result files and images are copied over to a Paperless Repair Workstation, which is mapped to the Agilent 5DX as drive letter K. The images and the image directory are then deleted from the local (Agilent 5DX) drive. Automatic Reporter is run using a different version of the configuration file labeled as autodef.cfg. This could be a scenario that is used to treat tests done during panel programming differently than tests done during production. Results generated during panel programming are not sent to the Paperless Repair Workstation, and are also processed differently by Automatic Reporter.

```
BOARDSERIALNUMBER=TEST*
```

```
BEGIN
```

```
autorpt -t&TRFILE
```

```
END
```

```
BEGIN
```

```

echo Sending Data to PLR...

trcp -plr &TRFILE K:\5DX\RES

CMD /CDEL /Q $(RESROOT)\&TRNAME\*. *

RD $(RESROOT)\&TRNAME

autorpt -cautodef.cfg -t&TRFILE

END

```

Other Functions

Once TRCMDPRO finishes processing a results file, it writes a file, LASTTR.DAT, in the directory where it is running. It then checks for other results files with a later time and date stamp, and processes them. TRCMDPRO running on the Agilent 5DX also manages files in the RESROOT directory in accordance with the settings in RESULTS.CFG. This specifies the number of results files to keep, and how often to delete files. For the example listed below, TRCMDPRO will always keep the latest 100 results files. It will perform results cleanup after every 25 tests, so there will be somewhere between 100 and 125 results files in the directory. (Actually there is a small additional buffer, so there may be 3 or 4 more).

```

MaxKeepTRTime    = 0      ; Max time in seconds
                  to keep result file.

MaxKeepTRNumber = 100    ; Max number of result
                  files to keep.

MinFreeDiskSpace =      ; Min free disk space in
                  4000000 bytes

NumTRCleanUp     = 25    ; Perform results
                  cleanup every so many
                  tests.

```