



**CTI VT2100-KLA1007**  
**Die Retest Software Programmer's Retrofit Notes**

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## Introduction

This document describes high level, step by step instructions for retrofitting the new "Die Retest" software onto existing VT2100-KLA tester-prober tools. As such, it has been written for someone with a programming/software support background in mind.

The "Die Retest" software retests bincodes defined in the planfile by shifting the test head over by one die, in order to (re)test with another test site.

Previous documentation describing the project, project management, and technical information can be found under the KXF series of memos. Simply look for any memo containing the words "Die Retest".

### Die Retest Modules - Quick Summary

| <b>Executable</b> | <b>Function</b>                     | <b>Source code lives in</b> | <b>Exe lives in</b>                    |
|-------------------|-------------------------------------|-----------------------------|--|
| DPRC.exe          | (common) data xfer and manipulation | c:\tcbld\dprc               | c:\v1000pcm.300\bin\dprc.exe           |
| RDPIO.exe         | for rdp probers                     | c:\tcbld\rdpio              | c:\v1000pcm.300\cy press.007\rdpio.exe |
| EGIO.exe          | for EG probers                      | c:\tcbld\egio               | c:\v1000pcm.300\cy press.007\egio.exe  |

## Step by Step Retrofitting Instructions

### Overview

These instructions assume the presence of "/home/summary/kxftemp2/vtmetro.zip" file on the cti server. This file contains the software referred to below.

It might be useful to instead install the ftp software from a diskette, so that the rest of the "vtmetro.zip" be downloaded

- or else use the existing f: drive mapping to get to the ../kxftemp2/vtmetro.zip file.

### ***New Directories for Die Retest:***

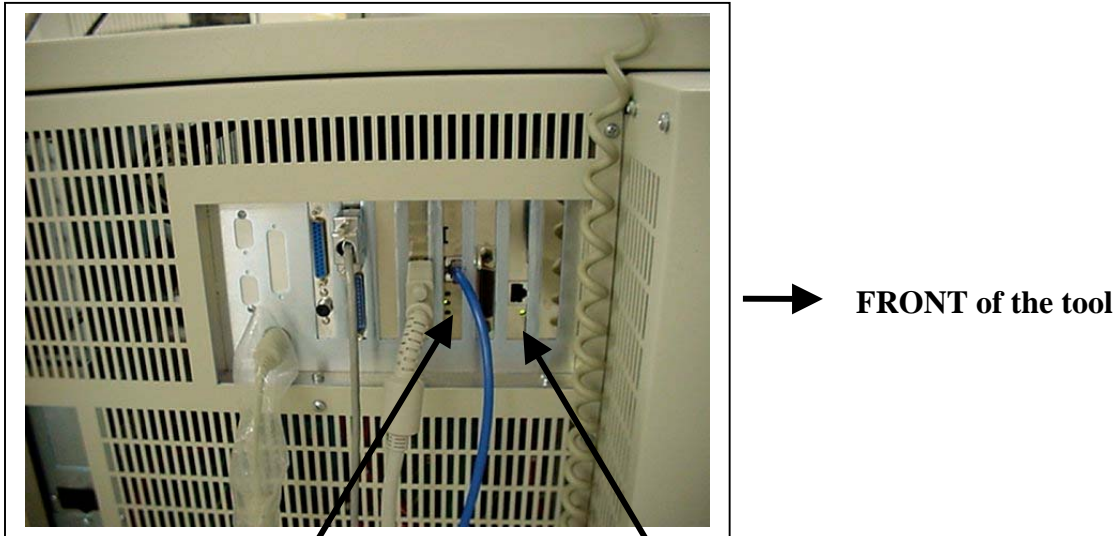
```
c:\
|
|---NCSAFTP      Dos ftp
|
|---TCBLD       Turbo C 3.0 source code
|   |---DPRC    Source code for c:\v1000pcm.300\bin\dprc.exe
|   |---RDPIO   Source code for c:\v1000pcm.300\cypress.007\rdpio.exe
|   +---TCU32   Source code and libraries for new Die Retest Dos screens
|
|---TC30        Borland Turbo C/C++ 3.0 Compiler
|
|---TASM        Borland Assembler
|
```

## Hardware Retrofit

Hardware retrofitting consists of putting in another:

### 1. Network Card

Put in a (newer) 3COM 905B or 905C compatible network card



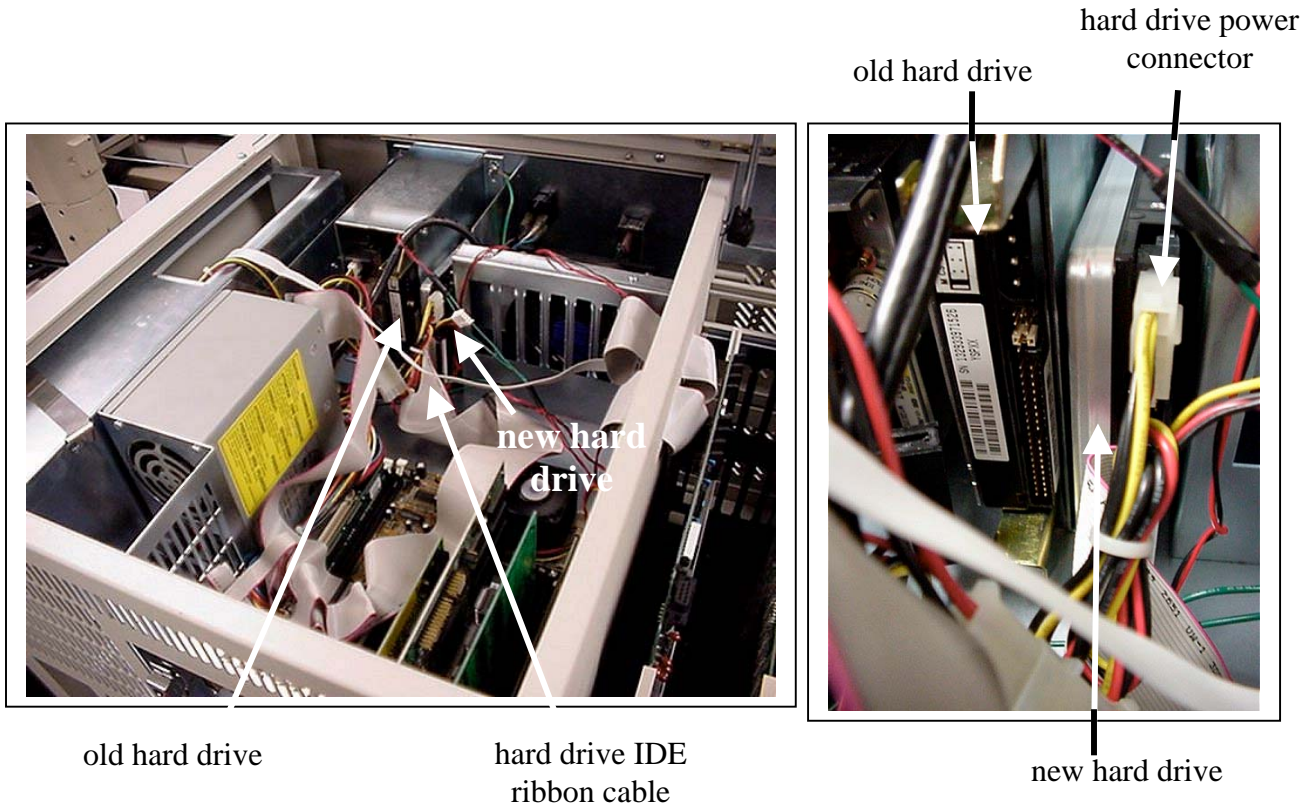
**new network card**  
(by convention, always put this  
in further towards the rear of the  
tool than the old network card)

**old network card**

## 2. Creating a Second Hard Drive

- a) Install a new (3COM 905B, 905C) network card.
  - While this is not essential, ghost image backups over the network will run faster with the new network cards.
- b) Back up (via Ghost) and image of the old/existing hard drive. Then transfer backed up image to the new hard drive and follow the software retrofit instructions described later in this document.
- c) There is room (under the VT hood) to place another hard drive (to hold the "Die Retest" retrofitted software) next to the existing hard drive. Move the
  - i) power connector (white, on top of the drive)
  - ii) IDE cable: from the old to new drive.

Pictures below show the power and IDE cable connected to the new drive (which holds the "Die Retest" retrofitted software):



## Software Retrofit

### 1. FTP installation

- a) create a diskette holding the ftp software:
  - create a temporary directory
  - download from cti /home/summary/kxftemp2/ncsaftp.zip into the temporary directory
  - goto the temporary directory
  - pkunzip -d ncsaftp.zip
  - move all of these files onto the diskette
- b) create directory c:\ncsaftp, copy the ncsaftp files into it.
  - e.g.: copy a:\ncsaftp\\*.\* c:\ncsaftp\\*.\*
- c) rename c:\autoexec.bat to c:\autoexec.ba1
- d) copy c:\ncsaftp\autoexec.bat to c:\

Towards the end of autoexec.bat the packet driver is loaded via:

c:\3c90xpd.com

or sometimes (after running c:\qemm\optimize):

c:\qemm\loadhi /rf c:\3c90xpd.com

The path is also updated to:

path c:;\c:\qemm;c:\dos;c:\ncsaftp;c:\tc30\bin;c:\tasm\bin

set DPMIMEM=MAXMEM 10240 *or else turboC grabs all the ems memory*

- e) move c:\ncsaftp\3c90xpd.com to c:\
- f) The existing (pre-retroift) ip address of the tool is in c:\net\protocol.ini
- g) edit c:\ncsaftp\config.tel for

```
myip=157.95.40.95           # Required: your IP number
myname=txvt27.texas.cypress.com # used in LPR to notify the LPR server
```

If not already done (i.e, if you got the c:\ncsaftp files from a diskette), following this you can ftp to the cti server to download the rest of the "vtretro.zip" file.

### 2. vtretro.zip

#### Get the Die Retest retrofit files

- a) mkdir c:\retro *This is just an arbitrary work directory*

- b) download the cti server file /home/summary/kxftemp2/vtretro.zip into c:\retro\vtretro.zip
- c) download the cti server file /home/summary/kxftemp2/dprc.zip into c:\retro\dprc.zip
- d) download the cti server file /home/summary/kxftemp2/rdpio.zip into c:\retro\rdpio.zip
- e) pkunzip vtretro.zip

### **Setup the software to build dprc.exe and rdpio.exe**

- f) mkdir c:\tcbl
- g) mkdir c:\tasm
- h) mkdir c:\tc30
  
- i) move c:\retro\tcbl.zip c:\tcbl
- j) cd c:\tcbl
- k) pkunzip -d tcbl.zip
  
- l) move c:\retro\tc30.zip c:\tc30
- m) cd c:\tc30
- n) pkunzip -d tc30.zip
  
- o) move c:\retro\tasm.zip c:\tasm
- p) cd c:\tasm
- q) pkunzip -d tasm.zip

### **Overlay the dprc and rdpio source code with the latest; i.e.:**

- r) cd c:\tcbl\dprc
- s) del \*.\*
- t) move c:\retro\dprc.zip c:\tcbl\dprc
- u) pkunzip dprc.zip
- v) del \*.zip
- w) copy c:\tcbl\dprc\dprc.exe c:\v1000pcm.300\bin\dprc.exe
- x) cd c:\tcbl\rdpio
- y) del \*.\*
- z) move c:\retro\rdpio.zip c:\tcbl\rdpio
- aa) pkunzip rdpio.zip
- bb) del \*.zip
- cc) copy c:\tcbl\rdpio\rdpio.exe c:\v1000pcm.300\cypress.007\rdpio.exe

### **Overlay Desqview Shortcuts**

- dd) cd \retro
- ee) pkunzip pif007.zip
- ff) move c:\vtretro\\*.dvp c:\v1000pcm.300\cypress.007
- gg) pkunzip pifbin.zip
- hh) move c:\vtretro\\*.dvp c:\v1000pcm.300\bin



- ii) pkunzip pifdv.zip
- jj) move c:\vtretro\\*.dvp c:\dv
- kk) delete the c:\vtretro firectory and all of its contents

### 3. *Edit c:\config.sys*

- a) PC name:

```
SET STATION_ID=VT99 (TX)  
SET NETBIOS_NAME=VT99
```

- b) Comment out debugging

```
REM SET DEBUG=ON
```

- c) the ftp ls function needs single wildcards \* rather than \*.\* , so edit the ends of the following lines:

```
SET PLAN_PATH=G:\VTONLINE\PLANS\*  
SET PLAN_PATH1=PRODUCTION G:\VTONLINE\PLANS\*  
SET PLAN_PATH2=ENGINEERING G:\VTONLINE\ENG\*  
SET PLAN_PATH3=LOCAL p:\pln\*
```

- Note that the above definitions might appear in more than one place in the cypress.cfg file.

#### 4. **Edit c:\lv1000pcm.300\cypress.007\cypress.cfg**

a) Comment these all out:

```
#if ( %DEBUG% != DEBUG)
{
//DEBUG_MAIL           // Print Mail debug messages
//DEBUG_IO             // Print IO debug messages
//DEBUG_DLOG          // Print Datalog data
//DEBUG_DPRC          // Print Data process messages
//ERROR_LOG <path>    // Send messages / error windows to file.
}
```

b) Change the Desqview "dd" shortcut to a "d1" shortcut

```
//AUTO_START $S:\dd-pif.dvp           // Cypress data process
AUTO_START $S:\d1-pif.dvp           // Cypress data process
```

c) Make sure that these parms have these settings:

```
RDPIO_COMMAND_TIMEOUT 200
RDPIO_ACK_TIMEOUT      600
```

## Debugging

### Running the Debugger on DPRC.EXE

Comment out the line in c:\v1000pcm.300\cypress.007\cypress.cfg which loads dprc.exe

```
//AUTO_START $S:\d1-pif.dvp // Cypress data process
```

Load Turbo C and run dprc code.

### Running the Debugger on RDPIO.EXE

1. Backup the rd shortcut via:

```
copy c:\v1000pcm.300\cypress.007\rd-pif.dvp c:\dv
```

2. Copy the turbo C shortcut over the rd shortcut

```
copy c:\dv\tc-pif.dvp c:\v1000pcm.300\cypress.007\rd-pif.dvp
```

### General Debug Notes

1. When the system winds up putting you in the debugger -- you are not really there. you must:
  - a) Use alt to escape out and then vector to the Desqview debugging session
  - b) Use F6 (assuming TurboC is set up to use CUA) or other various keys to repaint the screen.
    - This is usually not a problem. All it usually takes is a few keystrokes to get the screen back

## Reference Information

### New Die Retest Software Summary

| Module                                 | Purpose   | Notes   |
|--|---|---|
| c:\v1000pcm.300\bin\dprc.exe           | rewritten data handler  | Old netbeui networking removing and retrofitted with ftp file transfer.   |
| c:\v1000pcm.300\cypress.007\rdpio.exe  | rewritten kla prober driver   | All of the die retest code is in the executable   |
|  |   |   |
| c:\v1000pcm.300\bin\d1-pif.dvp         | revised dprc.exe Desqview shortcut. Note this was formerly "dd-pif.dvp" | Using desqview, the shortcuts are created in the c:\dv directory. After creation, they can be copied elsewhere.   |
| c:\v1000pcm.300\cypress.007\rd-pif.dvp | revised rdpio.exe Desqview shortcut                                     | ”   |
|  |   |   |
| c:\dv\dc-pif.dvp                       | new Desqview shortcut   | Enables a "system" like command from dprc.exe via c:\\dprccmd.bat batch file  |
| c:\dv\ft-pif.dvp                       | new Desqview shortcut   | Shortcut for ftp transfer commands. Note that c:\\ncaftp\ftpcmd.txt is created on the fly by dprc.exe, which the shortcut references.   |
| c:\dv\rc-pif.dvp                       | new Desqview shortcut   | Enables a "system" like command from dprc.exe via c:\\rdpiocmd.bat batch file   |
|  |   |   |
| c:\ncaftp\*                            | Dos ftp code  | downloaded from NCSA PC Telnet located at:<br><a href="http://archive.ncsa.uiuc.edu/SDG/Software/PCTelnet/">http://archive.ncsa.uiuc.edu/SDG/Software/PCTelnet/</a><br>We only need:<br>config.tel<br>ftp.bat<br>ftpbin.exe |
| c:\3c90xpd.com                         | Dos:  | Load via autoexec.bat line:   |

| Module | Purpose   | Notes   |
|--------|---|---|
|        | EtherLink 10/100<br>PCI Packet Driver<br>for dos ftping | c:\qemm\loadhi /rf<br>c:\3c90xpd.com<br>Downloaded from:<br><a href="http://list.driverguide.com/list/DOS/company2/index.html">http://list.driverguide.com/list/DOS/company2/index.html</a><br>After expanding the<br>download, the packet driver is<br>under directory:<br>3c905c\pktdvr\packet.txt<br>3c905c\pktdvr\3c90xpd.com |
|        |   |   |

## Die Retest Build Software

The items need for building the dprc.exe and rdpio.exe executables are summarized in the following table:

| Module         | Purpose   | Notes   |
|----------------|---|---|
| c:\tc30        | Borland Turbo C++ 3.0 compiler  | We do not use C++, we only use C.<br><br>Used an old version of Borland Turbo C++ v3.0 that I had at home.<br><br>Previous versions of Borland Turbo C (which should work but have not been tried) are available from the Borland antique website:<br><a href="http://community.borland.com/museum/">http://community.borland.com/museum/</a> |
| c:\tasm        | Borland Turbo Assembler and Tools 5.0   | Available from:<br><a href="http://info.borland.com/borlandcpp/cppcomp/tasmfact.html">http://info.borland.com/borlandcpp/cppcomp/tasmfact.html</a>  |
| c:\tcbld\tcu32 | TCU_32A screens for Borland Turbo C<br><br>TCU_32A<br>Summary: Turbo-C flexible menus, windows & forms entry<br><br>Download: tcu_32a.zip (Mar 25 1991, 398.1K) | Downloaded from:<br><a href="http://www.bookcase.com/library/software/msdos.devel.apps.turbo-c.html">http://www.bookcase.com/library/software/msdos.devel.apps.turbo-c.html</a><br><br>TCU_32 libraries and include files must be included in the build   |
|                |   |   |
| c:\tcbld\dprc  | dprc.exe source code  |   |
| c:\tcbld\rdpio | rdpio.exe source code   |   |
|                |   |   |
| c:\dvc         | Desqview panel editor<br><br>DV API Disk 1 (2,275) Disk 2 (80,637) Disk 3 (18,173)  | Not necessary, but useful for reverse engineering.<br><br>Desqview utilities downloaded from:<br><a href="http://www.chsoft.com/dv.html">http://www.chsoft.com/dv.html</a>  |

## Die Retest Software Version Information

Programs dprc.exe and rdpio.exe log their software versions to their respective (c:\dprc.log, c:\rdpio.log) logfiles every time they are started up; e.g.:

```
***** starting DPRC.EXE CTI Version 14Dec05 built Dec 14 2005
```

```
***** starting RDPIO.EXE CTI 14Dec05 release built Dec 14 2005
```

This information is contained on strings at the top of dprc.c and rdpio.c modules.

## Disk Substitutes/Mounts

| Source File   | Symbols  |
|---------------|--|
| c:\Recon.bat  | n: c:\%pcmdir% (n: is c:\v1000pcm.300)<br><b>subst p: c:\PROGRAM</b><br><b>subst o: c:\d-drive</b><br><b>subst d: c:\d-drive</b>   |
| c:\config.sys | SET PCMDIR=V1000PCM.300<br>SET STATION_PATH=N:\cypress.007<br>SET STATION_CFG=N:\cypress.007\CYPRESS.CFG<br>SET HARDWARE_PATH=N:\V2100C.285<br>SET HARDWARE_CFG=N:\V2100C.285\50P1.CFG<br><br>SET PROBER=KLA_RDP |

## DESVIEW Setup

via program c:\dv\setup.exe

Task Processing Time (in clock ticks):

```
foreground:      6
background:     4
memory usage:   25
dos for ems:    4
optimize com:   Y
manage printer contention: N
```

## Desqview Shortcut Setup

### v1000.exe

| Standard Options                     |  |
|--------------------------------------|--|
| Program Name .....                   | [V1000 Monitor]                          |
| Keys to Use on Open Menu [S9]        | Memory Size (in K):[275]                 |
| Program ...:                         | [n:\bin\v1000.exe]                       |
| Parameters :                         | [ ]                                      |
| Directory :                          | [c:\]                                    |
| Options:                             |  |
| Writes text directly to screen ..... | [N]                                      |
| Displays graphics information        | [N]                                      |
| Virtualize text/graphics (Y,N,T)     | [N]                                      |
| Uses serial ports (Y,N,1,2)          | [N]                                      |
| Requires floppy diskette             | [N]                                      |
| Advanced Options                     |  |
| System Memory(in K)[55 ]             | Maximum Program Memory Size(in K)[275]   |
| Script Buffer Size [256]             | Maximum EMS/XMS/VCPI/DPMI (in K) [ ]     |
| Text Pages [1 ]                      | Graphics Pages [0 ]                      |
| Initial Video Mode [ ]               |  |
| Window Position                      |  |
| Maximum Height [10]                  | Starting Height [10] Starting Row [10]   |
| Maximum Width [40]                   | Starting Width [40] Starting Column [15] |
| Shared Program                       |  |
| Pathname [* ]                        |  |
| Data [ ]                             |  |
| Close on exit (Y,N,blank):           | [Y] Uses its own colors [Y]              |
| Allow Window Close command           | [Y] Can be run in background [Y]         |
| Uses math coprocessor                | [N] Keyboard conflict (0-F) [0]          |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]            |
| Can be swapped out (Y,N,blank)       | [N] Protection level (0-3) [0]           |



**rdpio.exe (original)**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [V1000 RDP IO Process]                    |
| Keys to Use on Open Menu [RD]        | Memory Size (in K):[300]                  |
| Program ...:                         | [\$S:\rdpio.exe]                          |
| Parameters :                         | [ ]                                       |
| Directory :                          | [c:\]                                     |
| Options:                             |   |
| Writes text directly to screen ..... | [N]                                       |
| Displays graphics information        | [N]                                       |
| Virtualize text/graphics (Y,N,T)     | [N]                                       |
| Uses serial ports (Y,N,1,2)          | [1]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[35]              | Maximum Program Memory Size(in K)[ ]      |
| Script Buffer Size [ 0]              | Maximum EMS/XMS/VCPI/DPMI (in K) [ ]      |
| Text Pages [1]                       | Graphics Pages [0] Initial Video Mode [ ] |
| Window Position                      |   |
| Maximum Height [20]                  | Starting Height [ ] Starting Row [ ]      |
| Maximum Width [80]                   | Starting Width [ ] Starting Column [ ]    |
| Shared Program                       |   |
| Pathname [* ]                        |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [ ] Uses its own colors [Y]               |
| Allow Window Close command           | [Y] Can be run in background [Y]          |
| Uses math coprocessor                | [N] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]             |
| Can be swapped out (Y,N,blank)       | [N] Protection level (0-3) [0]            |

**rdpio.exe (for die retestl)**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [V1000 RDP IO Process]                    |
| Keys to Use on Open Menu [RD]        | Memory Size (in K):[400]                  |
| Program ...:                         | [\$S:\rdpio.exe]                          |
| Parameters :                         | [ ]                                       |
| Directory :                          | [c:\]                                     |
| Options:                             |   |
| Writes text directly to screen ..... | [Y]                                       |
| Displays graphics information        | [Y]                                       |
| Virtualize text/graphics (Y,N,T)     | [Y]                                       |
| Uses serial ports (Y,N,1,2)          | [1]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[35]              | Maximum Program Memory Size(in K)[ ]      |
| Script Buffer Size [ 0]              | Maximum EMS/XMS/VCPI/DPMI (in K) [ ]      |
| Text Pages [1]                       | Graphics Pages [1] Initial Video Mode [ ] |
| Window Position                      |   |
| Maximum Height [25]                  | Starting Height [25] Starting Row [ 1]    |
| Maximum Width [80]                   | Starting Width [80] Starting Column [ 1]  |
| Shared Program                       |   |
| Pathname [* ]                        |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [ ] Uses its own colors [Y]               |
| Allow Window Close command           | [Y] Can be run in background [Y]          |
| Uses math coprocessor                | [N] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]             |
| Can be swapped out (Y,N,blank)       | [N] Protection level (0-3) [0]            |

**dprc.exe (original)**

| Standard Options   |  |
|--|--|
| Program Name .....                                       | [V1000 Data Process]                     |
| Keys to Use on Open Menu [DD]                            | Memory Size (in K):[275]                 |
| Program ...: [n:\bin\dprc.exe]                           |  |
| Parameters : [ ]   |  |
| Directory : [n:\bin]                                     |  |
| Options:   |  |
| Writes text directly to screen .....                     | [N]                                      |
| Displays graphics information                            | [N]                                      |
| Virtualize text/graphics (Y,N,T)                         | [N]                                      |
| Uses serial ports (Y,N,1,2)                              | [N]                                      |
| Requires floppy diskette                                 | [N]                                      |
| Advanced Options   |  |
| System Memory(in K)[10]                                  | Maximum Program Memory Size(in K)[275]   |
| Script Buffer Size [256]                                 | Maximum EMS/XMS/VCPI/DPMI (in K) [ ]     |
| Text Pages [1] Graphics Pages [0] Initial Video Mode [ ] |  |
| Window Position  |  |
| Maximum Height [60]                                      | Starting Height [10] Starting Row [20]   |
| Maximum Width [80]                                       | Starting Width [40] Starting Column [20] |
| Shared Program   |  |
| Pathname [* ]  |  |
| Data [ ]   |  |
| Close on exit (Y,N,blank):                               | [ ] Uses its own colors [Y]              |
| Allow Window Close command                               | [Y] Can be run in background [Y]         |
| Uses math coprocessor                                    | [Y] Keyboard conflict (0-F) [0]          |
| Share CPU when foreground                                | [Y] Share EGA when zoomed [Y]            |
| Can be swapped out (Y,N,blank)                           | [N] Protection level (0-3) [0]           |

**dprc.exe (for die retest)**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [dprc (cti build)]                        |
| Keys to Use on Open Menu [D1]        | Memory Size (in K):[375]                  |
| Program ...:                         | [n:\bin\dprc.exe]                         |
| Parameters :                         | [ ]                                       |
| Directory :                          | [c:\]                                     |
| Options:                             |   |
| Writes text directly to screen ..... | [Y]                                       |
| Displays graphics information        | [Y]                                       |
| Virtualize text/graphics (Y,N,T)     | [Y]                                       |
| Uses serial ports (Y,N,1,2)          | [N]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[10]              | Maximum Program Memory Size(in K) [ ]     |
| Script Buffer Size [ 0]              | Maximum EMS/XMS/VCPI/DPMI (in K) [ ]      |
| Text Pages [1]                       | Graphics Pages [1] Initial Video Mode [ ] |
| Window Position                      |   |
| Maximum Height [25]                  | Starting Height [25] Starting Row [ 1]    |
| Maximum Width [80]                   | Starting Width [80] Starting Column [ 1]  |
| Shared Program                       |   |
| Pathname [* ]                        |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [ ] Uses its own colors [Y]               |
| Allow Window Close command           | [Y] Can be run in background [Y]          |
| Uses math coprocessor                | [Y] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]             |
| Can be swapped out (Y,N,blank)       | [N] Protection level (0-3) [0]            |

**dprc cmd (dprccmd.bat)**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [dprc cmd (dprccmd.bat)]                  |
| Keys to Use on Open Menu [DC]        | Memory Size (in K):[325]                  |
| Program ...:                         | [c:\dprccmd.bat]                          |
| Parameters :                         | [ ]                                       |
| Directory :                          | [c:\]                                     |
| Options:                             |   |
| Writes text directly to screen ..... | [N]                                       |
| Displays graphics information        | [N]                                       |
| Virtualize text/graphics (Y,N,T)     | [N]                                       |
| Uses serial ports (Y,N,1,2)          | [N]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[0]               | Maximum Program Memory Size(in K)[350]    |
| Script Buffer Size [128]             | Maximum EMS/XMS/VCPI/DPMI (in K)[ ]       |
| Text Pages [1]                       | Graphics Pages [0] Initial Video Mode [4] |
| Window Position                      |   |
| Maximum Height [12]                  | Starting Height [12] Starting Row [ 1]    |
| Maximum Width [60]                   | Starting Width [60] Starting Column [ 1]  |
| Shared Program                       |   |
| Pathname [ ]                         |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [Y] Uses its own colors [Y]               |
| Allow Window Close command           | [N] Can be run in background [N]          |
| Uses math coprocessor                | [N] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [N] Share EGA when zoomed [N]             |
| Can be swapped out (Y,N,blank)       | [N] Protection level (0-3) [0]            |

**ftp directory listing**

|  |  |
|--|--|
| <b>Standard Options</b>                      |  |
| Program Name .....: [ftp ls]                 |  |
| Keys to Use on Open Menu [FT]                | Memory Size (in K):[325]               |
| Program ...: [ftp.bat]                       |  |
| Parameters : [ -i -f ftpcmd.txt 157.95.4.3 ] |  |
| Directory : [c:\ncsaftp]                     |  |
| Options:                                     |  |
| Writes text directly to screen .....         | [N]                                    |
| Displays graphics information                | [N]                                    |
| Virtualize text/graphics (Y,N,T)             | [Y]                                    |
| Uses serial ports (Y,N,1,2)                  | [N]                                    |
| Requires floppy diskette                     | [N]                                    |
| <b>Advanced Options</b>                      |  |
| System Memory(in K)[0]                       | Maximum Program Memory Size(in K)[800] |
| Script Buffer Size [256]                     | Maximum EMS/XMS/VCPI/DPMI (in K)[ ]    |
| Text Pages [1]                               | Graphics Pages [0]                     |
| Initial Video Mode [4]                       |  |
| Window Position                              |  |
| Maximum Height [12]                          | Starting Height [12]                   |
| Maximum Width [60]                           | Starting Width [60]                    |
|  | Starting Row [ 5]                      |
|  | Starting Column [ 5]                   |
| Shared Program                               |  |
| Pathname [ ]                                 |  |
| Data [ ]                                     |  |
| Close on exit (Y,N,blank):                   | [Y] Uses its own colors [Y]            |
| Allow Window Close command                   | [N] Can be run in background [N]       |
| Uses math coprocessor                        | [N] Keyboard conflict (0-F) [0]        |
| Share CPU when foreground                    | [N] Share EGA when zoomed [N]          |
| Can be swapped out (Y,N,blank)               | [N] Protection level (0-3) [0]         |

**TurboC**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [turboC]                                  |
| Keys to Use on Open Menu [TC]        | Memory Size (in K):[325]                  |
| Program ...:                         | [c:\tc\bin\tc\tc.exe]                     |
| Parameters :                         | [ ]                                       |
| Directory :                          | [c:\tcbld\dprc]                           |
| Options:                             |   |
| Writes text directly to screen ..... | [Y]                                       |
| Displays graphics information        | [Y]                                       |
| Virtualize text/graphics (Y,N,T)     | [N]                                       |
| Uses serial ports (Y,N,1,2)          | [N]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[10]              | Maximum Program Memory Size(in K)[ ]      |
| Script Buffer Size [256]             | Maximum EMS/XMS/VCPI/DPMI (in K)[8192]    |
| Text Pages [1]                       | Graphics Pages [2] Initial Video Mode [ ] |
| Window Position                      |   |
| Maximum Height [25]                  | Starting Height [25] Starting Row [ 0]    |
| Maximum Width [80]                   | Starting Width [80] Starting Column [ 0]  |
| Shared Program                       |   |
| Pathname [* ]                        |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [N] Uses its own colors [Y]               |
| Allow Window Close command           | [Y] Can be run in background [Y]          |
| Uses math coprocessor                | [Y] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]             |
| Can be swapped out (Y,N,blank)[Y]    | Protection level (0-3) [0]                |

**lotsum.exe**

| Standard Options                     |   |
|--------------------------------------|---|
| Program Name .....                   | [Cypress Lot Summary]                     |
| Keys to Use on Open Menu [LS]        | Memory Size (in K):[200]                  |
| Program ...:                         | [\$S:\lotsum.exe]                         |
| Parameters :                         | [\wf o:\\log\\lotsum.bin ]                |
| Directory :                          | [o:\log]                                  |
| Options:                             |   |
| Writes text directly to screen ..... | [N]                                       |
| Displays graphics information        | [N]                                       |
| Virtualize text/graphics (Y,N,T)     | [T]                                       |
| Uses serial ports (Y,N,1,2)          | [N]                                       |
| Requires floppy diskette             | [N]                                       |
| Advanced Options                     |   |
| System Memory(in K)[0]               | Maximum Program Memory Size(in K)[800]    |
| Script Buffer Size [256]             | Maximum EMS/XMS/VCPI/DPMI (in K)[ ]       |
| Text Pages [1]                       | Graphics Pages [0] Initial Video Mode [4] |
| Window Position                      |   |
| Maximum Height [25]                  | Starting Height [25] Starting Row [ 1]    |
| Maximum Width [80]                   | Starting Width [80] Starting Column [ 1]  |
| Shared Program                       |   |
| Pathname [ ]                         |   |
| Data [ ]                             |   |
| Close on exit (Y,N,blank):           | [Y] Uses its own colors [Y]               |
| Allow Window Close command           | [Y] Can be run in background [Y]          |
| Uses math coprocessor                | [Y] Keyboard conflict (0-F) [0]           |
| Share CPU when foreground            | [Y] Share EGA when zoomed [Y]             |
| Can be swapped out (Y,N,blank)       | [Y] Protection level (0-3) [0]            |



**Panel Design Tool**

|  |  |
|--|--|
| <b>Standard Options</b>                                  |  |
| Program Name .....: [Panel Design Tool]                  |  |
| Keys to Use on Open Menu [PD]                            | Memory Size (in K):[170]                 |
| Program ...: [pdt.exe]                                   |  |
| Parameters : [ ]   |  |
| Directory : [c:\dvc\pdt]                                 |  |
| Options:   |  |
| Writes text directly to screen .....                     | [N]                                      |
| Displays graphics information                            | [N]                                      |
| Virtualize text/graphics (Y,N,T)                         | [N]                                      |
| Uses serial ports (Y,N,1,2)                              | [N]                                      |
| Requires floppy diskette                                 | [N]                                      |
| <b>Advanced Options</b>                                  |  |
| System Memory(in K)[64]                                  | Maximum Program Memory Size(in K) [ ]    |
| Script Buffer Size [1000]                                | Maximum EMS/XMS/VCPI/DPMI (in K)[ ]      |
| Text Pages [1] Graphics Pages [0] Initial Video Mode [ ] |  |
| Window Position  |  |
| Maximum Height [25]                                      | Starting Height [ 7] Starting Row [ 6]   |
| Maximum Width [80]                                       | Starting Width [54] Starting Column [13] |
| <b>Shared Program</b>                                    |  |
| Pathname [ ]   |  |
| Data [ ]   |  |
| Close on exit (Y,N,blank):                               | [ ] Uses its own colors [Y]              |
| Allow Window Close command                               | [Y] Can be run in background [ ]         |
| Uses math coprocessor                                    | [Y] Keyboard conflict (0-F) [0]          |
| Share CPU when foreground                                | [Y] Share EGA when zoomed [Y]            |
| Can be swapped out (Y,N,blank)[ ]                        | Protection level (0-3) [0]               |

## Old Network Setup

```
cd c:\net
```

```
net use
```

| Status | Local name | Remote name    |
|--------|------------|----------------|
| OK     | G:         | \\CTI\CHECKOUT |
| OK     | F:         | \\CTI\SUMMARY  |

The command completed successfully.

*These drives are mounted via a manual*

*net use G: \\CTI\CHECKOUT /PERSISTENT:YES  
command*

```
net config
```

|                            |          |
|----------------------------|----------|
| Computer name              | \\TXPC88 |
| User name                  | SUMMARY  |
| Software version           | 3.11     |
| Redirector version         | 1.01     |
| Workstation root directory | C:\NET   |
| Workgroup                  | TXSORT   |

The command completed successfully.

### c:\net\system.ini

```
autologon=yes
computername=TXVT14
lanroot=C:\NET
username=SUMMARY
workgroup=TXSORT
[network drivers]
netcard=elnk3.dos
transport=ndishlp.sys,*netbeui,tcpdrv.dos,nemm.dos
devdir=C:\NET
[Password Lists]
SUMMARY=C:\NET\SUMMARY.PWL
```

### c:\config.sys

```
SET STATION_ID=VT14 (TX)
SET NETBIOS_NAME=VT14
SET NETWORK_COPY_PATH=G:\VTONLINE

SET PLAN_PATH=G:\VTONLINE\PLANS2\*.*
```

### c:\net\protocol.ini

```
transport=tcpip,TCPIP
iana0=ms$elnk3,1,tcpip
iana1=ms$elnk3,1,ms$netbeui
[TCPIP]
DefaultGateway0=157 95 44 250
NBSSessions=6
SubNetMask0=255 255 255 0
IPAddress0=157 95 45 114
DisableDHCP=1
[MSS$NETBEUI]
DriverName=netbeui$
```

## State Information Files

Vos gets initial status info upon bootup from:

where: p: = c:\program

|          |                     |
|----------|---------------------|
| program: | p:\tpg\testtape.cof |
| option:  | p:\opt\testtape.opt |
| plan:    | p:\pln\testtape.pln |
| vector:  | p:\vec\testtape.vec |

Files hold the results of the last test are located under

where o: = c:\d-drive

o:\log\lotsum.bin

o:\log\wafermap.bin

o:\log\datalog.bin

completed wafers are in the same directory with hashed filenames; e.g.:

|                    |   |
|--------------------|---|
| o:\log\wmqsfni.173 | wm* = wafer map   |
| o:\log\plqsfni.173 | pl* = plan file   |
| o:\log\dlqsfni.173 | dl* = datalog   |
| o:\log\mpqsfni.173 | mp* = mospro binary file<br>(this is what gets sent to the<br>summary system) |

## Original (pre Die Retest) Directory Structure

Directory PATH listing for Volume VT-14

Volume Serial Number is 234A-1201

C:.

```

|---BITMAP
|   |---PARTS
|   +---BIN
|---CEC       GPIB interface w/Capital Equipment Corp (CEC) Boards
|   |---C
|   |---CECDRIVE
|   |---CECHP
|   |---DOC
|   |---INT
|   |---UTILITY
|   +---WINDOWS
|---COMP       for compiling test programs
|---COMP.301   redunant with COMP
|   +---COMP
|---CYP
|---D-DRIVE    subst o: c:\d-drive      subst d: c:\d-drive
|   |---LOG    summary files that HAVE been sent to the server
|   |---CAL
|   |   |---V2100E
|   |   +---V2100G3
|   |---BMTEMP
|   |---PENDING  summary files that failed send to server
|   |---7B923
|   |---C37K
|   +---BRT
|---DOS
|---DV       DESQVIEW dos multitasker
|   +---OLD
|---EDT       editor
|---INSTALL
|---LAN       David McDonald did changes in here AppleTops->TCPIP
|---MPTEMP
|---NETWORK   David McDonald did changes in here AppleTops->TCPIP
|   +---OLD
|---PCM
|---PROGRAM
|   |---MFG
|   |   |---DOCS
|   |   |   |---CAL
|   |   |   |---DIAGS
|   |   |   +---MISC
|   |   |---SETUPS
|   |   |---TOOLS
|   |   |   |---LCADEBUG
|   |   |   +---SCOPESET
|   |---SRC
|   |   |---28F010DS
|   |   |---BOARDCFG
|   |   |---BOARDINF
|   |   |---C010

```

```

| | | ---FBIN
| | | ---MISC
| | | ---SHELL
| | | ---7C201AT
| | +---CURRENT
| | ---CURRENT
| +---VTONLINE      load programs, might be p: drive ?
| | | ---LOADDIR
| | | ---WORK
| | +---LRN
---QEMM            Quarterdeck memory expander
| ---TECHNOTE
+---Q_BACKUP
---SETUP
| ---AMI50
| ---AMI50A
| ---DV
| ---INTELP90
| ---LOG
| ---MICR66
| ---MICR66A
| ---MICR66G
| ---MICR66GA
| ---OAMI
| ---OAMIA
| ---REVDOC
| ---ROOT
+---SETUP
---SETUPS
---TMP
---TOOL
| ---REVDOC
+---LIST90
---UTIL
---V1000PCM.300   n: drive This is the VOS layer executables
| ---BIN          dprc.exe is in here
| ---COMP         some VOS compile stuff, but incomplete
| ---COMP.301
| ---V2100E.295
| ---V2000C.285
| ---V2100C.285   SET HARDWARE_PATH=N:\V2100C.285 (config.sys)
| ---V2000A.285
| ---V2100A.285
| ---V2000A.244
| ---V2100E.301
| ---V2100G3.394
+---V2100G8.402
| ---CYPRESS.005
| | ---CURRENT
| | ---VTONLINE
| | | ---LOADDIR
| | | +---WORK
| | +---OLD
| ---CYPRESS.007  SET STATION_PATH=N:\cypress.007 (config.sys)
---VTBITMAP
| ---PARTS
+---BIN

```

