CS/386 PROBLEM/SOLUTION

P52	ERROR P52 ON IPL AFTER SELECTING O/S & BEFORE PARTITIONING COMES UP. GOES AWAY IF EITHER 1 OF 2 MXE's REMOVED.	HAD 2 7715 W/ SW'S SET TO LEGAL SET ALL OFF. ADDR & OK.
SRAM 256KB DRA	FAILS IPL BEFORE MOUNT SYSTEM PLATTER W/ SRAM 256KB DRA	BAD SIMM IN LOC L10/L14/L27/L43
SRAM 256KB DRAM 4096KB	FAIL IPL BEFORE MOUNT SYSTEM PLATTER W/ SRAM 256KB DRAM 4096KB	BAD SIMM IN LOC L13/L25/L31/L45
BAND PRINTER	BAND PRINTER AT ADDRESS 204 DROPPING & ADDING CHARACTERS	O/S 1.0 FIX IN MAINT REL 1.03
NOT A DS CABINET - USING DS UTILITY	IF TRY TO DO TAPE BACKUP OR CHECK CONFIGURATION	6541-2. CHANGED CONTROLLER & OK.
A01	INTERMITTENT HANG W/ A01 ERROR	6541-2. USED 8824 & OK.
DS	INTERMITTENTLY WHEN VERIFY D61 LITE ON DRIVE D21 COMES ON & VICE VERSA.	6541-2. USED 8824 & OK.
A05	IF EDIT/RECALL LONG LINE.	R&D WORKING MULTIPLE OF SAME ADDR IN DEVICE TABLE. ADDR MAY APPEAR ONLY ONCE.
I92	TO DS IF KEY RESET FROM ANY TERMINAL WHILE ACCESSING.	
EDIT/RECALL GET GARBAGE -	BAD MXD	REPLACED W/ MXE & OK
I92	INTERMITTENT USING 6541-2	NO PROB W/ R3
HANGS LOADING O/S -	TRIPLE CONTROLLER WON'T WORK AS 1ST TERMINAL	FIXED W/ 1.0B
HANGS LOADING O/S -	CABLE TO TERMINAL 1 LOOSE	
DROPS POWER -	APPEARS TO LOOSE POWER AT 126V - REPLACED PS & 386 BRD & NO CHANGE	INSTALLED TOPAZ & OK
I92	INTERMITTENT DOING DISK COPIES	386 BOARD
INT HANGS -	I/O BOARDS NOT SEATING TOO DEEP PROPERLY / REPLACED CPU & OK	MBRD TOO FAR AWAY.
HANGS BOOTING W/ MXD	BEFORE CBOOT MENU WITH EITHER LOADING BLINKING OR BLANK SCREEN.	DATA LINES HAVE RESTRICTIONS IN LINE 9020 FOR SIZE. CMVP COULD NOT DO > 24 CHAR MSG.

2200 BASIC COMMANDS

SELECT T ON - ACTIVATES THE DATE/TIME STAMP FOR DISK FILES WHEN SAVING/RESAVING
SELECT T OFF - DEACTIVATES THE DATE/TIME STAMP

LIST SELECT - SHOWS ALL ACTIVE SELECTIONS

SELECT H ON - WILL HOG JUST ADDRESS SPECIFIED W/ $OPEN #dd + $CLOSE #dd
SELECT H OFF - DISABLES PLATTER HOG FUNCTION

SELECT NEW - ALLOWS ALL PROGRAMS SAVED TO BE PUT IN 386 FORMAT
SELECT OLD - ALL PROGRAMS SAVED PUT IN STANDARD 2200 FORMAT

SELECT DRIVER 204 - TURNS PRINTER DRIVER IF INSTALLED IN @GENPART ON
SELECT DRIVER 204 OFF - TURNS PRINTER DRIVER OFF

LOAD LOAD LOAD - TO ACCESS MXE COMMANDS

? RETURN
B SYSTEM # (TERM) BAUD RETURN } TO CHANGE BAUD RATE VIA S/W
Y RETURN

$OPEN!#dd - HOGS ONLY EXACT ADDRESS SPECIFIED
$CLOSE!#dd - DISABLES HOG TO ADDRESS SPECIFIED

INSTALLING AN O/S FIX FOR VLSI WITH MDU SYSTEM

① POWER UP:

MDU CPU	POWER ON
MOUNT SYSTEM PLATTER	
PRESS RESET	RESET
KEY SF?	@MDU SF'2 (ADDR 320)
MDU UTILITY 7/13/81	

DEVELOPMENT CPU	POWER ON
MOUNT SYSTEM PLATTER	
PRESS RESET	RESET SF'2 (ADDR D21)
MULTIUSER BASIC-2	RUN (3.4 O/S)
STANDARD @GENPART	(DEVELOPMENT PARTITION MUST BE 56K)
READY (BASIC-2) PART 1	LOAD RUN RET
MASTER START UP MENU	

② INITIALIZING THE SYSTEM

MASTER START UP MENU	SELECT `MICRO-CODE DEVELOPMENT'	RUN
MICRO-CODE DEVELOPMENT UTIL	SELECT `2600 MICRO-CODE UTIL'	RUN
2600 DEVELOPMENT UTIL	SELECT `2600 MDU'	RUN
"2600 EXECUTING"	KEY SF'15 (STEP) IF WON'T STEP REBOOT SYS.	
SCREEN WITH STEP AT TOP LEFT & AUX REG 00-1F SHOWN		
DEBUG COMMAND?	KEY SF'15 (STEP)	
(USUALLY WILL HANG HERE)	RESET (IF NOT HUNG GOTO ★)	
READY (BASIC-2)	CLEARV RET	
:_	RUN RET	
BACK TO SCREEN WITH STEP AT TOP LEFT & AUX REG 00-1F SHOWN		
DEBUG COMMAND?	KEY SF'15 (STEP) TO VERIFY NOT HUNG	
★ DEBUG COMMAND?	SF'23 (II INITIALIZE INSTRUCTIONS) CLEAR CM	
DEBUG CMMD? II		
START ADDRESS: 0000	RET	
END ADDRESS: 0000	7DFF RET (CODE IN MDU CPU STARTS AT 7E00)	

(ADDRESS 7EØØ SPECIFIED BY SWITCHES ON MDU BOARD)

INITIALIZE VALUE: 8ØØØØØ — RET (WRITES Øs FROM Ø-7EØØ)

DEBUG COMMAND? — SF'19 (ID INITIALIZE DATA) CLEAR DM

DEBUG COMMAND? ID

START ADDRESS: 0000 — RET

END ADDRESS: 0000 — FFFF RET (FIRST 64K USER MEM)

INITIALIZE VALUE: 00 — RET

DEBUG COMMAND? — SF'8 (LD LOAD FROM DISK)

DISK ADDRESS: 320 — D21 RET (ADDRESS WHERE O/S TO EDIT IS)

FILENAME: @@ — @MVP RET

LOADING MULTI-USER BASIC-2 REL 3.4

COPYWRIGHT WANG LABS ∴ EOF -LD- DISK ADDR D21

SF'30 (IC SETTING INSTRUCT COUNTER)

DEBUG COMMAND? IC

IC: ØØØ3 — RET

BACK TO AUX REG SCREEN WITH IC AT TOP LEFT

DEBUG COMMAND?

SEE ** BELOW TO CHANGE ADDR IF WRONG

** CHECK AUX REG 1A (WITHIN AUX 18-1F)

SHOULD BE BOOT ADDR OF MDU CPU (320 IN THIS CASE)

"AUX 18-1F 2000 FFCF (0320) 6000 0018 0000 2001 0000"

*** DEBUG COMMAND? — SF'31 (GO GENPART UP ON MDU CPU)

"2600 EXECUTING"

MDU CPU VERIFY MDU CPU RUNNING BY BRINGING UP TO READY

** TO CHANGE ADDR OF AUX REG 1A (DEVELOPMENT CPU)

DEBUG COMMAND? — SF'1 (CR CHANGE REGISTER)

DEBUG COMMAND? CR

REG (CR IF DONE)? — 1A RET

VALUE: XXXX — 0320 RET (BOOT ADDR OF MDU CPU)

REG (CR IF DONE)? — RET (IF CORRECT)

VERIFY AUX REG 1A IS SET TO CORRECT ADDR (320 IN THIS CASE)

DEBUG COMMAND? RETURN TO *** ABOVE

③ FINDING MODULE IN O/S LISTING WHERE CHANGE WAS MADE

IDENTIFY FILE WHERE CHANGE MADE

IN THIS CASE BPMVP43

FIRST IN BOOK 1 IS A LISTING BY MEMORY LOCATION

SECOND LISTING IN BOOK 1 SHOWS ORDER FILES FOUND IN FIND BPMVP43 BY USING ORDER IN 2ND LISTING

COMPARE CODE CHANGE WITH LISTING (SHOULD COMPARE EXCLUDING CHANGES)

COMPARE DOCUMENTED CODE WITH CODE IN DEVELOPMENT SYSTEM

DEBUG COMMAND? GO — SF'15 (STEP)

DEBUG COMMAND? — SF'6 (LI LIST INSTRUCTION)

DEBUG COMMAND? LI

ADDRESS: ØØØØ — 3731 RET (ADDR FROM LISTING WHERE CHANGE IS)

CODE IS NOT THE SAME, DOES NOT COMPARE

- IF CODE DID COMPARE WHICH IT SHOULD OF THE CHANGE SHOULD BE TESTED BEFORE GOING ON TO INSURE FIX CORRECTS PROBLEM
- WOULD NEED TO SHUT OFF CHECKSUM TO PREVENT ERRORS WHEN PUTTING CHANGE IN
- IF CHECKSUM OK & CODE COMPARES THOUGH LISTING DIFFERENT CODE CAN BE EDITED & ASSEMBLED & SHOULD WORK

⑤ EDITING THE CODE FOR ASSEMBLY
DEBUG COMMAND? RESET, CLEARV, CLEAR, LOAD RUN

MASTER START UP MENU — SELECT 'MICRO-CODE DEVELOPMENT' RUN
MICRO-CODE DEVELOPMENT UTIL — SELECT 'EDITOR' RUN
SOURCE EDITOR, START UP
INITIALS — INPUT 2 INITIALS RET (MB)
WORK DISK DZ1 — D61 (ADDRESS OF SOURCE CODE) RET
NAME FOR LOGON FILE MBAØE201
DATE 04/22/91 — RET
CODE Z80 — BLANK OUT W/ SPACE BAR RET
SOURCE EDIT FILE MB.QDPUØØ BP.MVP43 (FILE WHERE CHANGE IS) RET
MUST ADD PERIOD BETWEEN BP & MVP43 NOT FOUND IN ACTUAL FILE
4/22/91 DISK DZ5 — D61 RET (ADDRESS OF SOURCE CODE)
LOAD Y — RET (LOADS FILE)
FIRST SCREEN OF FILE LOADS IN KEY NEXT KEY UNTIL GET TO LINE WHERE CHANGES ARE TO BE MADE (LINE NUMBER AT BOTTOM)

EDITING

USE SPACE BAR TO MOVE CURSOR TO LINE [redacted]
EXECUTE KEY WILL ADD NEW LINE FOLLOWING LINE CURSOR WAS ON
* KEYED IN 1ST POSITION FOR A COMMENT
MAKE LINE CHANGE
SF'Ø LIST OF COMMANDS

SF'1 (ALLOWS OPTIONS TO SAVE, LOAD, CREATE)
(S)SAVE, (L)LOAD, (C)CREATE S — S RET (TO SAVE CHANGE)
DISK D61 BP.MVP43 (IN THIS CASE) — CHECK FILENAME IS CORRECT
OVER WHAT FILE — RET
REPEAT THESE STEPS UNTIL ALL CHANGES MADE
SF'16 (TO EXIT)
DO YOU WANT TO LOG OFF Y — RET
MASTER START UP MENU (CHANGE HAS BEEN MADE, NOW MUST BE ASSEMBLED)

⑥ Assembling the Code with the Changes Made

Master Start Up Menu	select 'Micro-Code Development' RUN
Micro-code Development Util	select '2600 Micro-Code Util' RUN
2600 Development Util	select 'Block Assembler' RUN
Operator's Initials	input 2 initials ret MB
Assembler Output	000 ret (printer addr if want hard copy)
Source Edit File B60	D61 ret (address of source code)
External Symbol Files	D61 ret
Object File	D61 ret
Block Work File	D61 ret
File Names:	
Object File MBOBJCTC	MVPC (must already exist & be approximately 500 sectors) ret
Block Work File MBWK.TMP	
Starting Module Name MBLIST	22MVP ret (all instructs to do compile)
Date & Title: 4/22/91	add release number & patch made ret
Do You Want the Code in Order? Y N	ret (faster & works)

TAKES 3 to 4 HOURS TO ASSEMBLE

When finished will come back with message:

1 Disk Errors This Assembly (in this case had 1 soft disk error)
No Errors or Warnings
STOP - End of Assembly

GO BACK TO STEP ② & INITIALIZE MEMORY & RELOAD NEW CODE

⑦ Calculate Check Sum

Debug Command ?	SF'15 (step)
Debug Command ?	SF'4 (calculate checksum)
Debug Command ?	SF'35 (go MDU CPU running)

2600 EXECUTING... (AT TOP OF SCREEN)

⑧ TEST FIX ON MDU CPU

- AFTER KEYING SF'31 AS LAST STEP OF ⑦, GENPART SHOULD HAVE COME UP ON MDU CPU
- BRING CPU UP FROM THIS GENPART AND VERIFY FIX TO O/S THAT WAS EDITED IN AND ASSEMBLED (⑤ + ⑥) CORRECTS THE PROBLEM IT WAS EXPECTED TO FIX.

⑨ IF FIX IS GOOD, SAVE IN STANDARD O/S FORMAT

DEVELOP CPU
DEBUG COMMAND? SF'15 (STEP)
DEBUG COMMAND? SF'24 (SAVE DATA) SD
DEBUG COMMAND? SD
DISK ADDRESS: D21 D61 RET (ADDRESS OF WORK DISK)
CMEB FILE NAME: @MVP (4 CHAR MAX) @MVP RET (WILL WIPEOUT FILE OF SAME NAME IF EXISTS, MAY USE DIFFERENT NAME)

IF FILE DOES NOT EXIST WILL TELL YOU.
SIZE OF NEW FILE: 500 RET (500 SECTORS ALLOTTED)
m = 32K MVP (D:ØØØØ-ØBFF, I:ØØØØ-7DFF) V = VP
M = MVP (D:ØØØØ-ØBFF, I:ØØØØ-65FF) b = 64K BASBOL
c = EDIT COMMENT C = COMMENT I = INSTRUCTIONS D = DATA E = EOF
SAVE WHAT? C RET (ALLOWS COMMENT TO BE MADE)
COMMENT: (C) COPYWRIGHT, WANG LABORATORIES, DATE RET
SAVE WHAT? C D RET
... RECORDING DATA.
START ADDRESS: ØØØØ RET
END ADDRESS: ØØØØ 0BFF RET (SAME AS DEFAULT)
SAVE WHAT? C I RET
... RECORDING INSTRUCTIONS.
START ADDRESS: ØØØØ RET

END ADDRESS: ØØØØ 66FF RET (CHANGE FROM DEFAULT OF 65FF, NO LONGER BIG ENOUGH)

IF INSTRUCTION END ADDRESS NOT LARGE ENOUGH, THE SAVE WILL APPEAR TO WORK OK, BUT WILL GET PECM ERROR WHEN TRY TO BOOT FROM THIS CODE.

SAVE WHAT? C E RET

... RECORDING EOF.

*** FILE COMPLETE ***

-SD- DISK ADDRESS: D61 SF' 31 (GO COMMAND)

2600 EXECUTING...

DEBUG COMMAND? RESET

READY (BASIC-2)

⑩ MOVE NEW CMVP FILE TO O/S DISK TO TEST ON MDU SYS
MOVE NEW CMVP FILE TO DISK TO BOOT MDU SYSTEM FROM

- IF IN STEP ⑨ NEW FILE CALLED CMVP WILL NEED TO RENAME CURRENT CMVP ON BOOT DISK OR USE CMOVFIL UTILITY
- IF GAVE NEW FILE UNIQUE NAME CAN MOVE TO BOOT DISK WITH MOVE + TYPE IN 4 CHARACTER NAME AT "KEY SF?" SCREEN, THEN SF' KEY CORRESPONDING TO DISK ADDRESS.

TEST MACHINE WHERE CODE RUNS (MDU CARD)
POOL = MOUNT SYSTEM PL

KEY SF @MDU PF 2 (320)

TO CHANGE ADDR. (CAME UP AS 0006) 2ND TIME
DEBUG CMMD SF'1 CR^ACC^00
REG ? 1A
VALUE: 0320 RET
RET AGAIN IF CORRECT
VERIFY NOW = 320

DEVELOPMENT SYS MICRO-CODE DEVELOPMENT
2600 MICRO-CODE UTILITIES
2600 MDU
2600 EXECUTING"
KEY SF 15 (STEP)
DEBUG CMMD '15(STEP) (USUALLY WILL HANG HERE)
RESET
CLEARV
RUN
DEBUG CMMD SF'23 (INITIALIZE INSTRUCTION) CLEAR CM
START ADDR 0000
END ADDR 7DFF CODE IN MDU MACH STARTS AT 7E00 (SPECIFIED BY SW'S ON MDU)
INIT VAL 800000 (DEFAULT) RET
DEBUG CMMD SF'19 (INITIALIZE DATA) CLEAR DM
START ADDR 0000
END ADDR FFFF (1ST 64K USER MEM)
INIT VALUE 00 RET (DEFAULT)
DEBUG CMMD SF'8 (LOAD FROM DISK) (LD)
DISK ADDR D21 (ADDRESS WHERE 3.4 RESIDES) WILL SHOW LOADING REL 3.4 .. SCREEN
FILE NAME @MVP (RET)
SF'30 IC SETTING INSTRUCTION COUNTER (SHOULD BE 0003)
IC 0003 CHECK AUX REG 1A (WITHIN 18-1F) SHOULD BE BOOT ADDR OF MDU LOW (0320) ACTIVE DEVICE
DEBUG CMMD SF'31 GO

GENPART SCREEN SHOULD NOW RESIDE ON W/S 1 OF MDU MACHINE
VERIFY MDU MACHINE RUNNING (BLINK UP TO READY BY LOADING A CONFIG)

TEST MACRO 2600 EXECUTING AT TOP ON SCREEN IF ALL OK

FIND MODULE WHERE CHANGE IS TO BE MADE

FILE = BPMVP43 = MODULE 43

WITHIN MODULE BOOK FOR LIMITS!

TEST PATCH FIRST

DEBUG CMND SF6 (LI) LIST INSTRUCT

ADDR 3739 (FROM LISTINGS)

VERIFY CODE MATCHES LISTING (CODE DID NOT MATCH LISTINGS)

D8 COMPARE WOULD NEED TO SHUT OFF CHECKSUM TO PREVENT ERROR

EDITING CODE

2600 MICRO CODE UTILITIES

EDITOR

INITIALS (ANY INITIALS)

WORK DISK D61 (ADDRESS OF SOURCE CODE)

COMES UP WITH START UP

" "

DATE XX/X-/XX

CODE LEAVE BLANK RET

SOURCE EDIT FILE BP.MVP43 (FILE TO BE EDITED) • AFTER BP MUST BE THERE NOT IN ACTUAL FILE

CHECK ADDR D61 RET

LOAD Y RET (LOADS FILE)

KEY NEXT KEY TIL GET TO LINE WHERE CHANGE NEED TO BE MADE

EDITING EXEC DOES INSERT FOR EACH NEW LINE

* USED FOR COMMENT LINE

SF1 TO GIVES YOU OPTION OF SAVE, LOAD, CREATE

S FOR SAVE

GIVES FILENAME TO BE SAVED KEY RET FILE USUALLY SAME

SF16 TO EXIT

DO YOU WANT TO LOG OFF (RET)

CHANGE MADE (NOW MUST BE ASSEMBLED)

2600 Micro Code Util
Block Assembler

Oper Init ANY INITIALS RET

Assem Out	000
Source Edit	D61
Ext Sym File	D61
Obj File	D61
Blk Work File	D61

215 can be used for printout

Obj File MVPC (must already existing & be approx 500 sects)
Blk Work File BPWK.TMP
Start Module Name 22MVP (all instructions to do compile)

Date & Title 4/22/1991 Rel 3.4 & Limits Patch RET
Do you want code in order? N faster & works RET
Takes 3-4 hours to compile

Message (when completed). 1 Disk Errors This Assembly (Assumed to be soft error)
No Errors or Warnings

STOP - End of Assembly

INITIALIZE MEMORY & RELOAD NEW CODE
same as beginning

Calculate Check Sum
Debug Cmnd SF'4

Try It
Test Fix on MDU CPU

If OK now will SAVE in Standard O/S format
** SF'15 to put in STEP
Debug Cmnd SD SF'24 save data

DISK ADDRESS D61 WORK DISK
FILE CNDA WILL WIPE OUT EXISTING FILE IF ALREADY EXISTS
SIZE OF FILE 500 SHOULD VERIFY SIZE (500) OK
SAVE WHAT? C COMMENT
COMMENT CS/2200 O/S SYS 3.4 + LIMITS (SEEN WHEN LOADING) RET
SAVE WHAT? C
COMMENT COPYWRIGHT ETC WANG RET
SAVE WHAT M FOR MVP (SAVE CONSTANTS + INSTRUCTIONS) DEFAULT FOR STANDARD MVP BUT NO LONGER BIG ENOUGH.
SAVING MVP
RECORDING
" "
" "
" "

MUST DO INDIVIDUALLY AS BELOW
SAVE DATA :.
SAVE INSTRUCT
& INCREASE INSTRUCT SIZE

MOVE NEW O/S FILE TO MDU CPU
MOVET/D61,"

PROGRAM THAT USED TO SAVE CHANGE
LOAD "2600SD
LINE 404
CHANGE
E# = HEX(65FF)
TO
E# = HEX(66FF)
RESAVE T "2600SD"

GOT PECM ERROR TRYING TO LOAD CNDA
DEFAULTS WERE NOT BIG ENOUGH FOR FILE DOES NOT TELL YOU WHEN SAVING CHANGES NOT BIG ENOUGH
REPEAT FROM ** (BOTTOM OF PREVIOUS PAGE)
SAVE WHAT? D (DATA)
START ADDR 0000
END 0BFF (SAME AS BEFORE)
SAVE WHAT? I
START ADDR. 0000
END ADDR. 66FF (CHANGE FROM DEFLT OF 65FF) RET
SAVE WHAT? E (END OF FILE)
FILE COMPLETE
DEBUG CMND? GO SF'31
2600 EXECUTING

MOVE T/D61, "CNDA" TO T/D21,

6.5 Procedure to Convert 2200 PROM Data Files to the PC MS-DOS File Format

A 2200 PROM data file is formatted in 240-byte records. Many of the files include 16 "space" filler characters. Each record identifies the record type (comment or data) and includes a record byte count, record checksum, record start address, and record data. This particular record format is dictated by the way that the 2200 programming system handles files. In order to be acceptable to the PC PROM programming system, this data must be reorganized into a different file format.

The following procedure describes the specific method which may be used to translate 2200 PROM data files which are loaded on 8-inch floppy diskettes in the VS file format to the PC MS-DOS file format:

6.5.1. Log on VS system at an archive workstation.

6.5.2. Run the COPY2200 program.

6.5.3. Press function key PF1 to select the function to create VS files from a 2200 diskette.

6.5.4. Press function key PF4 to mount the 2200 diskette. A suggestion for the diskette name, which serves to identify its contents, is to use either NL0001 or the last 5 digits of the data file part number of the file resident in the diskette. For example, 378-9037 gives "89037" for the name of the diskette.

6.5.4.1 Specify the device number (for the floppy disk drive).

6.5.4.2 Select mode L and select the appropriate file(s), then press RETURN.

6.5.5. Respond to the queries for the library and volume on the VS system where the 2200 files are to be loaded.

6.5.5.1 Specify the type of file (type "F", consecutive fixed-length) and the size of the records (256 bytes), then press RETURN.

6.5.6. Specify the output format for 2200 numeric values as type "D" (decimal) and press RETURN.

The system then reads the file and converts it to a VS file.

6.5.7. Dismount the diskette, then logoff.

6.5.8. Log off the archive workstation on the VS system after the files have been transferred from the 2200 diskette to the VS system.

6.5.9. Run the terminal emulation software to log on the VS system from your PC.

6.5.10A. If the Data Exchange Utility (DATACON.EXE) is on a virtual file, mount the PC virtual file resident on the VS system using the PC/VS Server Utility (VSACCESS). Indicate the VS file, library, volume, and mode (READONLY) for the PC/VS Data Exchange Utility (datacon) and suspend emulation.

6.5.10B. If the Data Exchange Utility (DATACON.EXE) is on your hard drive, leave all VSACCESS fields blank and suspend emulation to leave VSACCESS active.

6.5.11. Run the datacon program from the BIN subdirectory of your PC virtual disk or from the directory on your hard disk. Specify the source data file as a "VS Consecutive File" and the destination data file as a "PC Stream File" and press EXECute. Enter the pathname of the source file on the VS system and the pathname of the destination file on the PC and press EXECute. The file will be transferred and converted to a PC stream file.

6.5.12. Dismount the PC virtual disk when you are done.

6.5.13. Run File Formatter which is a menu pick found under PC PLD Programming Utilities by running run_pps.bat.

6.5.14. After running File Formatter, select FORMAT and 2200.

6.5.15. Continue at section 5.1.2 in this document.