

.REM \_

IDENTIFICATION

PRODUCT CODE: AC-E857F-MC  
PRODUCT NAME: CXPABFO PA611 PUNCH MODULE  
PRODUCT DATE: SEPTEMBER 1978  
MAINTAINER: DEC/X11 SUPPORT GROUP

THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT CORPORATION. DIGITAL EQUIPMENT CORPORATION ASSUMES NO RESPONSIBILITY FOR ANY ERRORS THAT MAY APPEAR IN THIS MANUAL.

THE SOFTWARE DESCRIBED IN THIS DOCUMENT IS FURNISHED TO THE PURCHASER UNDER A LICENSE FOR USE ON A SINGLE COMPUTER SYSTEM AND CAN BE COPIED (WITH INCLUSION OF DIGITALS COPYRIGHT NOTICE) ONLY FOR USE IN SUCH SYSTEM, EXCEPT AS MAY OTHERWISE BE PROVIDED IN WRITING BY DIGITAL.

DIGITAL EQUIPMENT CORPORATION ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS SOFTWARE ON EQUIPMENT THAT IS NOT SUPPLIED BY DIGITAL.

COPYRIGHT (C) 1973,1978 DIGITAL EQUIPMENT CORPORATION

MAIN DEC CHANGE NOT  
MAY BE REQUIRED FOR  
PROGRAM TO OPERATE

1. ABSTRACT

PAB IS AN IOMOD THAT EXERCISES UP TO 16 HIGH SPEED PUNCHES BY PUNCHING A STANDARD BINARY COUNT PATTERN ON EACH PUNCH. IF REPORTS ANY ERRORS ON THE CONSOLE TTY. THE MODULE IS DESIGNED TO ACTIVATE AND RUN ALL SELECTED DEVICES CONCURRENTLY.

2. REQUIREMENTS:

HARDWARE: AT LEAST ONE PA-611-P CONTROL UNIT AND ONE PP67C/D PUNCH.

STORAGE:: PAB REQUIRES:

1. DECIMAL WORDS: 376
2. OCTAL WORDS: 0570
3. OCTAL BYTES: 1360

3. PASS DEFINITION:

ONE PASS OF THE PAB MODULE CONSISTS OF PUNCHING 2048. (TOTAL) CHARACTERS.

4. EXECUTION TIME:

THE PAB RUNNING ALONE ON A PDP11/05 SYSTEM TAKES APPROXIMATELY --- MINUTES PER PASS.

5. CONFIGURATION REQUIREMENTS:

DEFAULT PARAMETERS:

DEVADR: 172700, VECTOR: 300, BR1:4, DEVCNT:1

REQUIRED PARAMETERS:

AT CONFIGURATION TIME THE USER MUST MODIFY "VECTOR" IF ASSIGNED VALUE IS NOT 300.

6. DEVICE/OPTION SET-UP:

- A. INSURE ALL PUNCHES TO BE TESTED ARE LOADED WITH BLANK PAPER TAPE.
- B. TURN ON ALL PUNCHES TO BE TESTED.

7. MODULE OPERATION:

PABF DFC/Y11 SYSTEM EXERCISER MODULE MACY11 30A(1052) 12-OCT-78 16:55 PAGE 4  
XPABFC.P11 12-OCT-78 12:04

TEST SEQUENCE:

- A. CLEAR DEVICE AND DATA TABLES
- B. SET UP VECTORS FOR ALL ACTIVE DEVICES AND  
STORE DEVICE NO. FOR SELECTED DEVICES
- C. TURN ON INTERRUPT ENABLE FOR ALL ACTIVE DEVICES
- D. INTERRUPT SERVICE

1. TEST AND REPORT ANY ERROR BITS IN CSR
2. UPDATE AND OUTPUT NEXT CHARACTER IN PATTERN
3. WAIT FOR NEXT INTERRUPT
4. REPEAT 1 THROUGH 3 UNTIL 2096. (TOTAL)  
CHARACTERS HAVE BEEN PUNCHED

5. TURN OFF ALL ACTIVE DEVICES. REPORT END OF PASS  
AND RESTART AT C

#### JSR TABLE:

TO LINK THE INDIVIDUAL INTERRUPTS WITH THE SERVICE  
ROUTINES THERE IS A JSR TABLE CONTAINING 16 ENTRIES. EACH  
DEVICE VECTOR IS SET UP TO POINT TO A UNIQUE JSR WITHIN THE  
TABLE WHICH TRANSFERS CONTROL TO THE INTERRUPT SERVICE ROUTINE  
AND POINTS TO AN OFFSET THAT THE SERVICE ROUTINE USES TO  
GENERATE THE CORRECT REGISTER ADDRESS AND DATA TABLE ENTRY.

#### FIFO QUEUE:

TO ALLOW THE SERVICE ROUTINE TO USE THE SAME GPR'S FOR  
SERVICING UP TO 16 CONCURRENT INTERRUPTS THE REQUESTS MUST BE  
STORED IN A QUEUE AND SERVICED LATER. THIS IS ACCOMPLISHED BY  
USING A FIFO (FIRST-IN-FIRST-OUT) QUEUE. THE QUEUE HAS 16 BYTE  
ENTRIES AND THE INTERRUPT SERVICE STORES THE OFFSET IN THE  
QUEUE, UPDATES THE QUEUE POINTER, AND THEN EXECUTES A PIRQ TO  
CONTINUE SERVICING THE QUEUE AT A LOWER PRIORITY THAN THE  
INTERRUPTS REQUESTS.

#### ERROR RETURN QUEUES:

WHEN AN "ERROR" OR "DATERR" CALL IS EXECUTED, THE MONITOR  
QUEUES UP THE RETURN ADDRESS IN ITS "IQUEUE". SINCE IT IS  
POSSIBLE FOR ANOTHER LINE TO HAVE BEEN QUEUED UP AT A HIGH-  
ER PRIORITY, IT COULD GET CONTROL OF THE MODULE'S PIRQ SER-  
VICE ROUTINES AND CLOBBER THE REGISTER INFORMATION REQUIRED  
BY THE FIRST LINE WHEN IT RECEIVES CONTROL BACK AGAIN AFTER  
THE ERROR REPORT. TO PREVENT THIS FROM HAPPENING INFORMATION  
NECESSARY TO RESTORE THE APPROPRIATE REGISTERS (LINE OFFSET)  
IS SAVED IN AN ERROR RETURN QUEUE PRIOR TO THE ERROR CALL  
AND RESTORED FROM THE QUEUE WHEN CONTROL IS RETURNED AFTER  
THE ERROR CALL. THERE IS ONE 16 BYTE QUEUE (FIFO) RE-  
QUIRED TO ACCOMPLISH THIS TASK:

TEQ XMTR ERROR RETURN QUEUE

TO CONTROL THE OPERATION OF THE QUEUE TWO POINTERS ARE  
REQUIRED:

TEQP1 SAVES R1 IN THE XMTR QUEUE  
TEQP2 RETRIEVES R1 FROM THE XMTR QUEUE

#### 8. OPERATION OPTIONS:

-----  
A. LOCATION DVID1 (PAB14) MAY BE CHANGED TO SELECT ANY  
COMBINATION OF DEVICES TO BE TESTED. BIT0=DEV0,  
BIT1=DEV1 ..... BIT15=DEV15 IF DVID1=0 THE MODULE WILL BE  
DROPPED FROM TEST.

B. MEANING OF SRI BITS 7 THRU 0  
SET = DISABLE PUNCHING ON THAT DATA CHANNEL.  
CLEAR = ALLOW " " " " " "

9.

NON-STANDARD PRINTOUTS  
-----

NONE: ALL PRINTOUTS HAVE THE SAME FORMATS DESCRIBED  
IN THE DEC/X11 DOCUMENT.

```

PABF DEC/X11 SYSTEM EXERCISER MODULE
XPABFO.P11 12-OCT-78 12:54

PABF DEC/X11 SYSTEM EXERCISER MODULE
000000 IDNUM <PARF > 172700, 0, 4, 2048, 54
000000 MODULE 140000, PARF, 172700, 0, 4, 2048, 54
; TITLE PABF DEC/X11 SYSTEM EXERCISER MODULE
; DRXCOM VERSION 6 23-MAY-78
***** LIST BIN *****
000000 REGIN:
000000 040520 043102 J40 MODNAM: .ASCIT /PARF / ;MODULE NAME
000000 XFLAG: .PVTE OPEN ;USED TO KEEP TRACK OF WBUF USAGE
000000 ADDR: 172700+0 ;1ST DEVICE ADDR
000010 VECTOR: 048 ;1ST DEVICE VECTOR.
000012 BR1: .BVTE PRTV+0 ;1ST RR LEVEL.
000013 PR2: .BVTE PPTV+0 ;2ND RR LEVEL.
000014 DVID1: +1 ;DEVICE INDICATOR 1.
000016 SR1: OPEN ;SWITCH REGISTER 1
000020 SR2: OPEN ;SWITCH REGISTER 2
000022 SR3: OPEN ;SWITCH REGISTER 3
000024 SR4: OPEN ;SWITCH REGISTER 4
*****
000026 STAT: 140000 ;STATUS WORD
000030 INIT: START ;MODULE START ADDR.
000032 SPOINT: MODSP ;MODULE STACK POINTER.
000034 PASCNT: 0 ;PASS COUNTER.
000036 ICOUNT: 2048. ;# OF ITERATIONS PER PASS=2048.
000042 SOFCNT: 0 ;LOC TO COUNT ITERATIONS
000044 HRDCNT: 0 ;LOC TO SAVE TOTAL SOFT ERRORS
000046 SDPPAS: 0 ;LOC TO SAVE TOTAL HARD ERRORS
000050 HRDPAS: 0 ;LOC TO SAVE SOFT ERRORS PER PASS
000052 SYSCNT: 0 ;LOC TO SAVE HARD ERRORS PER PASS
000054 RANDUM: 0 ;# OF SYS ERRORS ACCUMULATED
000056 CONFIG: 0 ;HOLDS RANDUM # WHEN RAND MACRO IS CALLED
000058 RES1: 0 ;RESERVED FOR MONITOR USE
000060 SVR0: OPEN ;RESERVED FOR MONITOR USE
000064 SVR1: OPEN ;LOC TO SAVE R0.
000066 SVR2: OPEN ;LOC TO SAVE R1.
000070 SVR3: OPEN ;LOC TO SAVE R2.
000074 SVR4: OPEN ;LOC TO SAVE R3.
000076 SVR5: OPEN ;LOC TO SAVE R4.
000100 CSRA: OPEN ;LOC TO SAVE R5.
000102 SRADR: 0 ;ADDR OF CURRENT CSR.
000104 AWASDR: OPEN ;ADDR OF GOOD DATA, OR
000106 ASTAT: OPEN ;CONTENTS OF CSR.
000108 ERRTYP: 0 ;ADDR OF BAD DATA, OR
000110 ASR: OPEN ;STATUS REG CONTENTS.
000112 AWAS: OPEN ;TYPE OF ERROR
000114 WPTO: OPEN ;EXPECTED DATA.
000115 WOPF: OPEN ;ACTUAL DATA.
000120 INTR: OPEN ;RESTART ADDRESS AFTER END OF PASS
;WORDS TO MEMORY PER ITERATION
;WORDS FROM MEMORY PER ITERATION
;# OF INTERRUPTS PER ITERATION

```

```

PABF DEC/X11 SYSTEM EXERCISER MODULE
XPABFO.P11 12-OCT-78 12:54

000122 IDNUM: 54 ;MODULE IDENTIFICATION NUMBER=54
000124 ;MODULE STACK STARTS HERE.
;PEPT SPSIZ
;NEST
;WORD
;LIST
;ENDR
MODSP:
*****
;MODULE INITIALIZATION ROUTINES
244
245
246
247 000224 012767 022900 177662 START: MOV #1024, WPTO ;1024 WORDS TO MEM
248 000232 012767 084999 177660 MOV #2048, INTR ;2048 INTERRUPTS
249 000240 064767 060752 JSP PC, STRT1 ;GO INITIALIZE MODULE VARIABLES
;ROUTINE TO CLEAR DEVICE AND DATA TABLES (32 BYTES TOTAL)
250
251
252
253 000244 012767 000426* 1S: MOV #DEVTAB, PC ;INITIALIZE TABLE POINTER
254 000252 020927 000466* CLP R0, #DEVTAB+40
255 000256 061374 BNE 1S ;RR IF NOT FINISHED 32 BYTES
256
257
258
259
260
261 000260 016700 177530 STI: MOV DVID1, R0 ;GET DEVICE SELECTION PARAMETERS
262 000264 061374 BNE 1S ;RR IF ANY SELECTED FOR TEST
263 000268 104810 000000* 1S: FMSB, REG1R ;
264 000272 005001 CLR R1 ;SET UP R1, R0 TO START AT ZERO
265 000274 005101 CLR R2
266 000276 005201 CLR R3
267 000300 005102 COM R2
268 000302 016703 MOV VECTOR, R3 ;START AT BEGINNING OF VECTOR AREA
269 000304 061374 JSP PC, STRT1 ;START AT BEGINNING OF JSRTABLE
270 000308 065201 2S: INC R1 ;COUNT THE DEVICE
271 000314 006200 ASK PC ;SHIFT SELECT BIT INTO "C"
272 000316 103410 BCS 4S ;GO SET IT UP
273 000320 062763 000034 ADD #4, R3 ;UPDATE THE VECTOR AND JSRTAB PTRS.
274 000324 062763 000034 ADD #4, R4
275 000330 022701 000017 3S: CMP #9, R1 ;LAST POSSIBLE DEVICE?
276 000334 061366 BNE 5S ;RR IF NOT
277 000336 000407 BR ;GO START UP ALL ACTIVE DEVICES
278 000340 010423 177444 4S: MOV R4, (R3)+ ;LOAD PTR IN VECTOR
279 000344 005201 BR1, (R3)+ ;LOAD PRIORITY LEVEL IN VECTOR
280 000346 005201 INC R1 ;COUNT ACTIVE DEVICES
281 000350 110422 000426* MOVB R1, DEVTAB(R2) ;STORE ACTIVE DEVICE NO. IN
282 000354 000763 BR 3S ;GO CHECK FOR END
283 000356 116767 177434 000711 5S: MOVB SR1, DATMSK ;SET UP PUNCH MASK
284 000364 000400 RR ;START UP INTERRUPTS TO GO
285
286
287 000366 010267 000724* ;ROUTINE TO INITIALLY START UP ALL ACTIVE DEVICES
288 000372 116700 000426* 1S: MOV R2, ACTDEV ;SAVE NO. OF ACTIVE DEVICES
289 000376 006800 MOVB DEVTAB(R2), R0 ;GET ACTIVE DEVICE NO.
290 000380 006800 ASL R0 ;GENERATE REG. OFFSET
291 000402 066800 ADD ADDR, R0 ;GEN. CSR ADDRESS

```



```

404 001136 001003 001340 000142 BNE 2S ;BR IF NOT
405 001146 012767 001340 000142 MOV #TEQ,TEQP2 ;RESET THE QUEUE POINTER
406 001150 068700 176632 000132 2S: ADD ADDR,R0 ;DUPLICATE THE OFFSET IN R0
407 001154 000177 000132 JMP @FORK ;REBUILD THE CSR ADDRESS
408 ;RETURN TO CALLER
409 ;END OF PASS ROUTINE TO DISABLE ALL ACTIVE DEVICES
410
411 ENPS: MOV ACTDEV,R1 ;GET NO. OF ACTIVE DEVICES
412 001160 016701 000132 ;GET A DEVICE NO. FROM DEV. TABLE
413 001164 116100 00042A IS: MOVR DEVTAR(R1),R0 ;GENERATE CSR ADDRESS
414 001170 066300
415 001174 006300
416 001177 066300 176606
417 001200 005010
418 001202 0053C1 ;TURN OFF ONE ACTIVE READER
419 001204 102367 ;COUNT IT
420 001206 004767 ;RRT TIL THEY ARE ALL OFF
421 001212 104413 000004 BPL IS ;GO REINITIALIZE THE MODULE VARIABLES
422 ;SIGNAL END OF ITERATION.
423 ;MONITOR SHALL TEST END OF PASS
424
425 001216 016767 176614 000052 STRT1: MOV ICONT,COUNT ;SET UP FOR 2048 INTRS. PER PASS
426 001224 012767 004000 000046 MOV #2048,COUNTC ;SET UP FOR 2048 PUNCHES
427 001240 012767 001320 000042 ;SET UP FIF0 SERVICE QUEUE POINTERS
428 001246 012767 001340 000036 MOV #0,OPTR2
429 001252 012767 001340 000032 MOV #TEQ,TEQP1 ;SET UP THE ERROR RETURN QUEE POINTERS
430 001252 005767 000326 MOV #TEQ,TEQP2
431 001266 016702 000024 CLR GETOUT ;INITIALIZE END OF PASS FLAG
432 001272 0002C7 MOV ACTDEV,R2 ;LOAD R2 WITH NO. OF ACTIVE DEVICES
433 ;RETURN TO CALLING ROUTINE
434
435 ;SOME MODULE VARIABLES
436
437 001274 000000 DATHLD: .BYTE OPEN ;TMP HLDING FOR MASKING
438 001275 000000 DATMSK: .BYTE OPEN ;MASK TO CHOP OFF BITS
439 001276 000000 COUNT: OPEN ;COUNTS NO. OF INTR. PER PASS
440 001300 000000 COUNTC: OPEN ;COUNTS NO. OF PUNCHES ISSUED
441 001302 000000 OPTR1: OPEN ;FIF0 QUEUE POINTERS
442 001304 000000 OPTR2: OPEN
443 001306 000000 TEQP1: OPEN ;ERROR RETURN QUEE POINTERS
444 001308 000000 TEQP2: OPEN
445 001312 000000 FORK: OPEN ;ERROR RETURN POINTER
446 001314 000000 GETOUT: OPEN ;ENDPASS FLAG
447 001316 000000 ACTDEV: OPEN ;CONTAINS NO. OF ACTIVE DEVICES
448 001320 000010 TR: .RLWM 8: ;16 BYTE FIFO QUEUE
449 001340 000010 TEQ: .RLWM 8: ;16 BYTE ERROR RETURN QUEUE
450
451 000001 .END
  
```

ACSR	000102R	226#	399*						
ACTDEV	001316R	244#							
ADDR	000002R	102#		431	447#				
ADDR22=	00100C	244#	201	321	407	416			
ASB	000106R	230#							
ASTAT	000104R	229#							
AWAS	000108R	231#							
BEGIN	000000R	180#	263	296	348	367	387	399	421
BIT0	= 3C0001	244#							
BIT1	= 000000	244#							
BIT10	= 000000	244#							
BIT11	= 000000	244#							
BIT12	= 100000	244#							
BIT13	= 020000	244#							
BIT14	= 040000	244#							
BIT15	= 100000	244#							
BIT16	= 000100	244#							
BIT17	= 000010	244#							
BIT18	= 000020	244#							
BIT19	= 000040	244#							
BIT2	= 000000	244#							
BIT3	= 000000	244#							
BIT4	= 000000	244#							
BIT5	= 000000	244#							
BIT6	= 000000	244#							
BIT7	= 000000	244#							
BIT8	= 000000	244#							
BIT9	= 001000	244#							
BREAK	= 104407	244#							
BRI	000012R	194#	279						
BR2	000013R	195#							
BTODS	= 104413	244#							
COATA	= 104412	244#							
COMFIC	= 000056R	214#							
COUNT	001276R	362#		424*					
COUNTC	001308R	379#		381*	425*	440*			
CSRA	000100R	224#	390*						
DATCK	= 104411	244#							
DATEXP	= 104404	244#							
DATFIB	001274R	303#		384*	385	437*			
DATFIBR	000127R	303#		384*	388*				
DATTAB	000446R	301#		382*	383				
DEVTAB	000426R	253		255	281*	288	300#	413	
DVIDI	000014R	196#							
ENDITS	= 104413	244#							
ENPS	001160R	367#		421					
ERRTYP	000106R	229#							
FALTS	= 104400	244#							
GETOUT	001316R	375#		387	445*				
GETPAS	= 104415	244#		375*	400	446*			
GETTAB	= 104414	244#							
HEXCON	= 000043R	209#	399						
HEXCON2	= 104405	244#							
ICONT	000036R	207#	424						
ICOUNT	000040R	207#							
IDNUM	000122R	236#							
IWIT	000030R	203#							



INTR	000120R	235#	248*															
JSPFAB	000466R	269	306#															
MAP225	104416	244#																
MODBRAM	000000R	190#																
MODSP	000224R	204	242#															
HSCG5	104465	244#																
HSCG5	104462	244#																
HSCG5	1044C1	244#																
HULL	000000	244#	399															
OPR	000000	191	197	198	199	200	217	218	219	220	221	222	223	224				
		228	230	230	231	233	234	235	244#	437	438	439	440	441				
		440	444	444	445	446	447											
OTDAS	104420	244#																
PASCNT	000034P	205#																
PIRGS	0000C4	244#	348															
POPSP	005726	244#																
POPSP2	022626	244#																
PRTY	000000	195	244#															
PRTY0	000000	244#																
PRTY1	000040	244#																
PRTY2	000100	244#																
PRTY3	000140	244#																
PRTY4	000200	104	244#															
PRTY5	000240	244#																
PRTY6	000300	244#																
PRTY7	000326	244#																
PS	177776	244#																
PSM	177776	244#																
PUSH	005746	244#																
PUSH2	004692	244#																
QPTR2	001348	355	342*	343	345*	426*	441#											
		355	357*	358	360*	427*	442#											
RANDS	104417	244#																
RANWUM	000054P	213#																
RESORT	000054P	213#	284	287#														
RES2	000560P	216#																
RSTRT	000112P	252#																
SBADR	000172P	225#																
SOPCNT	000042P	244#																
SOPFC	000406P	210#																
SOPPAS	000046P	210#																
SPOINT	000332P	234#																
SPS17	000040P	104#	237															
SR2	000010P	194#	283															
SR3	000022R	199#																
SR4	000024P	200#																
START	000024P	203#	247#															
STAT	000024P	203#																
STRT1	001218R	246	420	424#														
ST1	000260P	261#																
SVR0	000662P	217#																
SVR1	000664P	218#																
SVR2	000664P	219#																
SVR3	000670P	220#																

SVR4	000072P	221#																
SVR5	000074R	223#																
SVR6	000074R	223#																
SYSCNT	000052P	211#																
TEQ	001340P	363	395	403	405	428	429	449#										
TEOP1	001306P	391*	392*	393	395*	428*	443#											
TEOP2	001310P	411	403	405	405*	429*	444#											
TER0	001048P	372	372	372	372	372	372											
TER0	000762R	375	371	373#														
TER1	000776P	374	375	377#														
TINTR	000626P	332	310	312	314	316	318	320	322	324	326	328	330					
		332	334	336	341#													
		343	345	358	360	426	427	448#										
TQ	001320R	343	345	358	360	426	427	448#										
TRPDPD	000722P	244#																
TSERV	000664P	344	353#															
TSER1	001042P	354	380	386#														
VECTOR	000010P	193	268															
WASADR	000014R	127#																
WDFR	000114P	234#																
WDTO	000114P	233#	247*															
XFLAG	000005P	191#																
	001360P	304#	301#	448#	449#													

- ABS. 000000 UCC  
 001360 JFI

ERRORS DETECTED: 0  
 DEFAULT GLOBALS GENERATED: 0  
 XPABFO,XPABFO/SOL/CPF:SVW=DDXCOM,XPABFO  
 RUN-TIME: 11.2 SECONDS  
 RUN-TIME RATIO: 1973=5.P  
 CORE USED: 7K (13 PAGES)

DIAGNOSTIC ENGINEERING



DECO  DEPO  SUBMISSION

FOR RELEASE ENG. USE  
 NEW  CHANGE  DELETE

PRODUCT IDENTIFICATION													
MD	LIBRARY	PRODUCT NUMBER	REV	PATCH	ECO TALLY	PRODUCT DATE			STATUS	DISTRIBUTION	1ST COPY - RIGHT YEAR	LAST COPY - RIGHT YEAR	
						DD	MMM	YY					
	ZZ	CXPAB	F	1	01	3	APR	79	OBSOLETE	X G	R	1973	1979

TITLE: CXPAB/ PA611 PUNCH MODULE

AUTHOR: D. BUTENHOF      MAINTAINING GROUP: DEC/X11 SPT GP      MAINTAINER: D. BUTENHOF      SUBMITTING ENGINEER: D. BUTENHOF

PRODUCT COMPONENTS							
CK	DESCRIPTION	PRODUCT NO.	REV	CK	DESCRIPTION	PRODUCT NO.	REV
	DOCUMENT				INDEX		
	LISTING				SOURCE MEDIA		
	OBJECT MEDIA				TEST MEDIA		
X	DECO	AF-E857F-M1					

PRODUCTS OBSOLETE (other than previous version)									
LIBRARY	PRODUCT NUMBER	REV	LIBRARY	PRODUCT NUMBER	REV	LIBRARY	PRODUCT NUMBER	REV	LIBRARY
MD			MD			MD			

PROCESSORS PRODUCT OPERATES WITH (Enter all applicable 2-digit codes representing the Processor the product operates with. See separate instructions.)

OPERATIONAL CODES (Enter all applicable 2-digit codes that describe the product. See separate instructions.)

ACT/APT/XXDP	EXT	ACT SEQ NUMBER	ACT/XXDP COMPATIBLE?	APT COMPATIBLE?	1ST PASS RUN TIME	SUBSEQUENT PASS RUN TIME
INFORMATION FIELD			<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	SECONDS	SECONDS

DECO/DEPO INFORMATION

PROBLEM REPORTS CLOSED: \_\_\_\_\_

DEVICE AFFECTED: DEC/X11      MULTIMEDIA AFFECTED?  YES  NO

KIT NUMBERS	ZJ129-RZ, FR	ZJ215-FR	ZJ239-RZ, PB	ZJ240-RB, RE	ZJ240-FR
	ZJ215-RY, RZ	ZJ239-RB, RY	ZJ239-FR	ZJ240-RZ, PB	

PROBLEM: Unable to handle multiple devices correctly

SOLUTION: WITH THE FOLLOWING PATCH, WILL HANDLE ONLY ONE DEVICE

DEPO PATCH AREA					
CHANGE LOC	FROM	TO	CHANGE LOC	FROM	TO
366	10267	12700	420	100	240
370	724	172700			
372	116200	5010			
374	426	240			
376	6300	240			
400	6300	240			
402	66700	240			
404	177400	240			

SUBMITTING ENGINEER: <i>D. Butenhof</i>	MANUFACTURING ENGINEER: <i>John P. Bell</i>	SUPPORT ENGINEER	CHARGE DECO/DEPO TO DISCRETE PROJECT NUMBER
DATE: 3 APR 79	DATE: 25 APR 79	DATE:	098-05460
MAINTAINER: <i>D. Butenhof</i>	FIELD SERVICE	WAIVERING MANAGER	COORDINATION NO. 3064
DATE:	DATE:	DATE:	