

BMCN DEC/X11 SYSTEM EXERCISER MODULE
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SEQ 0001

1

-REM -

IDENTIFICATION

PRODUCT CODE: AC-F057N-MC
PRODUCT NAME: CXBMCNO BOOTSTRAP ROM MOD
PRODUCT DATE: SEPTEMBER 1978
MAINTAINER: DEC/X11 SUPPORT GROUP

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1. ABSTRACT:

1 BMC IS A BKMOD THAT DOES A READ CHECKSUM FOR EACH ROM SELECTED IN ONE OF TWO GROUPS WITH BIT 15 = 0 IN SRI ANY COMBINATION OF ROMS IN THE A GROUP CAN BE TESTED BY SELECTIVE SETTING OF THE OTHER BITS IN SRI. WITH BIT 15 = 1 IN SRI ANY COMBINATION OF ROMS IN THE B GROUP CAN BE TESTED BY SELECTIVE ANY COMBINATION OF THE 8 OTHER BITS IN SRI. IF YOUR SYSTEM HAS A ROM OR ROMS FROM EACH OF THE TWO GROUPS THEN CONFIGURE 2 COPIES OF THE BMC MODULE AND USE ON TO CHECK THE ROMS IN THE A GROUP AND THE OTHER FOR THE ROMS IN THE B GROUP.

2. REQUIREMENTS:

HARDWARE: ANY PDP-11 WITH A ROM.
STORAGE: BMC REQUIRES:
1. DECIMAL WORDS: 662
2. OCTAL WORDS: 1226
3. OCTAL BYTES: 2454

3. PASS DEFINITION:

ONE PASS CONSISTS OF DOING A CHECKSUM ON EACH ROM 3000(8) TIMES.

4. EXECUTION TIME:

BMC RUNNING ALONE TAKES APPROXIMATELY ONE MINUTE.

5. CONFIGURATION REQUIREMENTS:

SET THE CORRESPONDING BITS IN SPI TO A "1" FOR THE DESIRED ROM.
GROUP A (BIT 15 MUST BE A ZERO)

BIT 0 =YA
BIT 1 =YB
BIT 2 =YR11
BIT 3 =YVC
BIT 4 =YVF
BIT 5 =YVH
BIT 6 =BM873 YA
BIT 7 =BM873 YB
BIT 8 =BM873 YC
BIT 9 =BM873 YD
BIT 10 =M9301YA
BIT 11 =M9301YB
BIT 12 =M9301YC
BIT 13 =BM792YU
BIT 14 =M9400 (NOT A YH)

GROUP B (BIT 15 MUST ALSO BE SET TO A ONE)

BIT 0 =BM873 SE
BIT 1 =BM873 SF
BIT 2 =BM873 SC
BIT 3 =M9301 SB
BIT 4 =M9301 SA
BIT 5 =M9301 YD
BIT 6 =M9400 YH
BIT 7 =M9301 YF
BIT 8 =M9301 YG
BIT 9 =M9301 YJ
BIT 10 = OPEN
BIT 11 = OPEN
BIT 12 = OPEN
BIT 13 = OPEN
BIT 14 = OPEN

REMEMBER, FOR GROUP B ROMS, BIT 15 MUST BE SET ALONG WITH ANY OTHER BITS.

6. -----
DEVICE/OPTION SETUP:

M9301 ROMS MUST HAVE THE SWITCH SET WHICH ENABLES THE SECOND
HALF OF THE ROM (165000 - 165777), OR ELSE LOCATIONS MUST BE PATCHED
AS SHOWN:

LOCATION FIX? +2 MUST GO FROM A 177777 TO A 000001
WHERE FIX? IS FIXA FOR M9301 YA, FIXB M9301YB, ETC.
LOCATIONS M93?HI AND M93?LO WHERE ? IS THE Y? OPTION
TO BE TESTED, MUST BE SET TO:

M93AHI: 26634 74
M93ALO: 74
M93BHI: 53546
M93BLO: 100
M93CHI: 136712
M93CLO: 113

7. -----
MODULE OPERATION:

A READ CHECKSUM ON ALL SELECTED ROMS IN THE ORDER INDICATED
IN STEP #5. THE YA HAS A POSSIBILITY OF TWO CHECKSUM VALUES DEPENDING
ON THE ROM USED. AN APPROPRIATE CHECK IS MADE FOR THIS SITUATION.

8. -----
OPERATING OPTIONS:

NONE

9. -----
NON-STANDARD PRINTOUTS:

NONE

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000000*      BKMOD <BMCN > 300, 13
000000*      MODULP 40020, 046502, 300, 13
;          -TITLE BMCN DEC/X11 SYSTEM EXERCISER MODULE
          DDXCOM VERSION 6 23-MAY-78
          .LIST BIN
;*****
000000*      047103 040 BEGIN:
000000*      046502 000      MODNAM: -ASCII /BMCN / ;MODULE NAME
000005*      000      000      XPLAC: -BYTE OPEN ;USED TO KEEP TRACK OF WBUFF USAGF
000010*      000000 000000 ADDR: +0 ;1ST DEVICE ADDR.
000015*      000000 000000 VECTOR: +0 ;1ST DEVICE VECTOR.
000020*      000000 000000 BR1: -BYTE PRTY+0 ;1ST BR LEVEL.
000025*      000000 000000 BR2: -BYTE PRTY+0 ;2ND BR LEVEL.
000030*      000000 000000 DTID1: +1 ;DEVICE INDICATOR 1.
000035*      000000 000000 SR1: OPEN ;SWITCH REGISTER 1.
000040*      000000 000000 SR2: OPEN ;SWITCH REGISTER 2.
000045*      000000 000000 SR3: OPEN ;SWITCH REGISTER 3.
000050*      000000 000000 SR4: OPEN ;SWITCH REGISTER 4.
;*****
000026*      040020 STAT: 40020 ;STATUS WORD.
000030*      000224 INIT: START ;MODULE START ADDR.
000032*      000274 SPOINT: MODSP ;MODULE STACK POINTER.
000034*      000000 PASCNT: 0 ;PASS COUNT.
000036*      000300 ICONF: 300 ;# OF ITERATIONS PER PASS=300
000040*      000000 SCOUNT: 0 ;LOC TO COUNT ITERATIONS
000042*      000000 SPCNT: 0 ;LOC TO SAVE TOTAL SOFT ERRORS
000044*      000000 HRDCNT: 0 ;LOC TO SAVE TOTAL HARD ERRORS
000046*      000000 SOPPAS: 0 ;LOC TO SAVE SOFT ERRORS PER PASS
000048*      000000 HRDPAS: 0 ;LOC TO SAVE HARD ERRORS PER PASS
000050*      000000 SYSCNT: 0 ;# OF SYS ERRORS ACCUMULATED
000052*      000000 RANUM: 0 ;HOLDS RANDOM # WHEN RAND MACRO IS CALLED
000054*      000000 CONFIG: 0 ;RESERVED FOR MONITOR USE
000056*      000000 RES1: 0 ;RESERVED FOR MONITOR USE
000058*      000000 RES2: 0 ;RESERVED FOR MONITOR USE
000060*      000000 SVR0: OPEN ;LOC TO SAVE R0.
000062*      000000 SVR1: OPEN ;LOC TO SAVE R1.
000064*      000000 SVR2: OPEN ;LOC TO SAVE R2.
000066*      000000 SVR3: OPEN ;LOC TO SAVE R3.
000068*      000000 SVR4: OPEN ;LOC TO SAVE R4.
000070*      000000 SVR5: OPEN ;LOC TO SAVE R5.
000072*      000000 SVR6: OPEN ;LOC TO SAVE R6.
000074*      000000 CSRA: OPEN ;ADDR OF CURRENT CSR.
000076*      000000 SBADR: ;ADDR OF GOOD DATA, OR
000078*      000000 ACSR: OPEN ;CONTENTS OF CSR.
000080*      000000 WASADR: ;ADDR OF BAD DATA, OR
000082*      000000 ASTAT: OPEN ;STATUS REG CONTENTS.
000084*      000000 ERRTP: ;TYPE OF ERROR

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000106*      000000 ASB: OPEN ;EXPECTED DATA.
000110*      000000 ANAS: OPEN ;ACTUAL DATA.
000112*      000274 RSTRT: RSTRT ;RESTART ADDRESS AFTER END OF PASS
000114*      000000 WTD0: OPEN ;WORDS TO MEMORY PER ITERATION
000116*      000000 WDRP: OPEN ;WORDS FROM MEMORY PER ITERATION
000118*      000013 INTR: OPEN ;# OF INTERRUPTS PER ITERATION
000120*      000000 IDNUM: 13 ;MODULE IDENTIFICATION NUMBER=13
000122*      000040 ;MODULE STACK STARTS HERE.
          -REPT SPSIZ
          -HLIST
          -WORD 0
          -LIST
          -ENDR
000224*      MODSP:
;*****
229 START:
230 RESTR: MOV SRI, HOLD1 ;GET THE ROMS TO TEST INFO
231 ;SET THE ROMS TO TEST INFO
232 000224*      016767 177566 002152 MOV SRI, HOLD1 ;SET THE ROMS TO TEST INFO
233 000232*      002007 ;SET THE ROMS TO TEST INFO
234 000234*      012767 001356* 002132 MOV #SVROM, TEST ;POINT TO NEW ROM INFO
235 000232*      042767 100000 002134 BIC #100000, HOLD1 ;GET RID OF "GROUP" BIT
236 000250*      000403 BR STR ;GO TEST
237
238 000252*      012767 000606* 002114 1$: MOV #SETUP, TEST ;POINT TO OLDER ROMS INFO
239
240 000260*      016767 002120 002110 STR: MOV HOLD1, HOLD ;TEST FOR ROMS
241 000256*      005767 002104 TST HOLD
242 000272*      001007 BNE 1$
243 000274*      104410 000000* ENDS, BEGIN
244 000300*      016700 002070 1$: MOV TEST, RO ;LET RO POINT TO SETUP ROUTINES
245 000304*      012767 000001 002074 MOV #1, POINT ;SET DROP POINTER
246
247
248 ;CALCULATIONS TO DETERMINE A LEGAL ROM
249
250 CAL: CLR HI
251 CLR LO
252 ASR HOLD ;LOOK FOR ROM
253 BCS DO ;GO SETUP
254 ADD #24, RO ;MOVE POINTER
255 ASL POINT ;MOVE DROP POINTER
256 BR CAL
257
258
259 ;CHECKSUM DRIVER
260
261 DO: JSR RS, (RO) ;GO SETUP
262 R1, SAVE ;SAVE ROM ADDRESS
263 MOV R2, SAVE1 ;SAVE LINT
264 BFLAC ; IS IT A BM873 OR M9301?
265 JSR #73024, R1 ; BRANCH IF NOT
266 ; ARE WE AT THE DIODE LOCATION?
267 ; BRANCH IF SO
268 ; IS THIS THE OTHER DIODE LOCATION?
269
270

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271
272 000374 001902
273 000400 005233
274 000400 005233
275 000402 002167 002002
276 000406 005567 002000
277 000414 005302
278 000414 001457
279 000415 001767
280 000415 002010
281 000424 012767 001772
282 000433 016701 000001 001762
283 000436 016702 001556
284 000444 000740
285 000444 000240
286 000446 020267 001736
287 000452 001013
288 000454 020467 001732
289 000460 001010
290 000462 104413 000000
291
292 000466 005767 001704
293 000472 001672
294 000474 002700 000030
295 000500 000704
296
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306
307 000502 026767 001672 001416 ERR: CMP SAVE, AADR ;CHECK FOR YA ERROR
308 000510 001010 ;BNE ERR1
309 000512 026767 001672 001416 ;CMP LO, ACK ;CHECK ALTERNATE LOW SUM
310 000520 001004 ;BNE ERR1
311 000522 026767 001664 001410 ;CMP HI, ACK1 ;CHECK ALTERNATE HIGH SUM
312 000530 001756 ;BEQ ALT ;OK
313
314 000532 016767 001642 177340 ERR1: MOV SAVE, CSRA ;SAVE ROM ADDRESS
315 000530 016767 001644 177334 ;MOV LO, ACSR ;SAVE CHECKSUM
316 000546 016767 001630 177330 ;MOV SAVE, ASTAT ;SAVE LIMIT
317 000554 005067 177326 ;CLR ERR1P ;UNKNOWN ERROR
318 *****ERR1P*****
319 000560 104405 000000 000000 ;RDERS, BEGIN, NULL ;CHECKSUM ERROR
320 **********
321 000566 104403 000000 002416 ;MSGNS, BEGIN, MES1 ;ASCII MESSAGE CALL WITH COMMON HEADER
322 000574 046767 001606 001602 ;BIC PONT, HOLD1 ;CLEAR OFFENDING ROM
323 000602 000167 177452 ;JMP STR
324
325
326

```

;PASS COUNTER

;ERROR CHECKING AND REPORTING

;REGISTER SETUP ROUTINE

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327
328
329 000606 016701 001314 SETUP: MOV AADR, R1 ;SET YA REGISTERS
330 000612 016702 001312 ;MOV ACH, R2
331 000622 016704 001306 ;MOV ACHK, R3
332 000626 012767 000000 001560 ;MOV ACHK1, R4
333 000634 000205 ;RTS R5, BMFLAG
334
335
336 000636 016701 001306 ;MOV BADR, R1 ;SET YB REGISTERS
337 000642 016702 001304 ;MOV BCLM, R2
338 000646 016703 001302 ;MOV BCK, R3
339 000652 016704 001300 ;MOV BCK1, R4
340 000656 012767 000000 001530 ;MOV B0, BMFLAG
341 000664 000205 ;RTS R5
342
343
344 000666 016701 001256 ;MOV BADR, R1 ;SET NR-11 REGISTERS
345 000672 016702 001262 ;MOV BCLM, R2
346 000678 016703 001260 ;MOV NCK, R3
347 000702 016704 001258 ;MOV NCK1, R4
348 000714 000205 000000 001500 ;MOV B0, BMFLAG
349 ;RTS R5
350
351
352 000716 016701 001244 ;MOV CADR, R1 ;SET YC REGISTERS
353 000722 016702 001242 ;MOV ACH, R2
354 000726 016703 001236 ;MOV CCK, R3
355 000732 016704 001234 ;MOV CCK1, R4
356 000736 012767 000000 001450 ;MOV B0, BMFLAG
357 000744 000205 ;RTS R5
358
359
360 000746 016701 001214 ;MOV CADR, R1 ;SET YF REGISTERS
361 000752 016702 001216 ;MOV FLM, R2
362 000756 016703 001214 ;MOV FCK, R3
363 000762 016704 001212 ;MOV FCK1, R4
364 000766 012767 000000 001420 ;MOV B0, BMFLAG
365 000774 000205 ;RTS R5
366
367
368 000776 016701 001200 ;MOV HADR, R1 ;SET YH REGISTERS
369 001002 016702 001172 ;MOV ACH, R2
370 001009 016703 001172 ;MOV HCK, R3
371 001012 016704 001170 ;MOV HCK1, R4
372 001016 012767 000000 001370 ;MOV B0, BMFLAG
373 001024 000205 ;RTS R5
374
375
376 001026 016701 001156 ;MOV BMADR, R1 ;SET BM873 YA ADDRESS
377 001032 016702 001154 ;MOV BMLM, R2
378 001036 016703 001152 ;MOV BCK, R3
379 001042 016704 001150 ;MOV BCK1, R4
380 001046 012767 000001 001340 ;MOV B1, BMFLAG ;INDICATE TO CHECKSUM ROUTINE
381 001054 000205 ;RTS R5
382

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495 001562- 016704 000500
496 001566- 012767 177777 000620
497 001574- 000205
498
499
500
501 001576- 016701 000406 ;M9401 YH SET UP
502 001602- 016702 000476
503 001606- 016703 000476
504 001612- 016704 000474
505 001616- 012767 177777 000570
506 001624- 000205
507
508
509 001626- 016701 000356 ;M9301 YP
510 001632- 016702 000362
511 001636- 016703 000452
512 001642- 016704 000450
513 001646- 012767 177777 000540
514 001654- 000205
515
516
517
518 ;M9301 YH SET UP
519 001656- 016701 000326
520 001662- 016702 000332
521 001666- 016703 000426
522 001672- 016704 000424
523 001676- 012767 177777 000510
524 001704- 000205
525
526
527 ;M9301 YE SET UP
528 001706- 016701 000276
529 001712- 016702 000303
530 001716- 016703 000402
531 001722- 016704 000400
532 001726- 012767 177777 000460
533 001734- 000205
534
535
536 ;M9301 VJ SET UP
537 001736- 016701 000246
538 001742- 016702 000252
539 001746- 016703 000356
540 001752- 016704 000354
541 001756- 012767 177777 000430
542 001764- 000205
543
544
545 ;GROUP B BIT 11 SET UP
546 001766- 016701 000342
547 001772- 016702 000346
548 001776- 016703 000336
549 002002- 016704 000334
550

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551 002006- 012767 177777 000400
552 002014- 000205
553
554 ;GROUP B BIT 12 SET UP
555 002016- 016701 000322
556 002022- 016702 000350
557 002026- 016703 000316
558 002032- 016704 000314
559 002036- 012767 177777 000350
560 002044- 000205
561
562 ;GROUP B BIT 13 SET UP
563 002046- 016701 000302
564 002052- 016702 000300
565 002056- 016703 000276
566 002062- 016704 000274
567 002066- 012767 177777 000320
568 002074- 000205
569
570 ;GROUP B BIT 14 SET UP
571 002076- 016701 000262
572 002102- 016702 000260
573 002106- 016703 000256
574 002112- 016704 000254
575 002116- 012767 177777 000270
576 002124- 000205
577
578
579 ;THINGS YOU CANNOT RUN WITHOUT, AT THIS POINT IN TIME.
580
581
582
583
584 AADR: 173000 ;YA ADDRESS
585 ACH: 32735 ;YA LIMIT
586 ACK: 172735 ;YA CHECKSUM
587 ACKR1: 10 ;YA CARRY
588 ACKI: 07715 ;YA ALTERNATE LOW SUM
589 ACKL: 10 ;YA ALTERNATE HIGH SUM
590 VLADR: 173400
591 VLHIGH: 66435
592 VLOW: 10
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607 002174 000037
608 002176 111603
609 002200 000010
610
611 002202 173300
612 002204 121506
613 002206 000010
614
615
616 002210 173000
617 002212 000200
618 002214 050754
619 002216 000035
620
621 002220 000400
622
623 002222 143524
624 002224 000065
625
626 002226 076101
627 002230 000064
628
629 002232 132040
630 002234 000055
631
632 002236 162074
633 002240 000054
634
635 002242 055367
636 002244 000170
637
638 002246 055471
639 002250 000174
640
641 002252 162214
642 002254 000206
643
644 002256 165000
645
646 002260 022464
647 002262 000203
648
649 002264 146474
650 002266 000063
651
652 002270 015456
653 002272 000117
654
655 002274 146054
656 002276 000207
657
658 002300 025332
659 002302 000175
660
661 002304 132311
662 002306 000177

FLM: 31 }VF LIMIT
FCK: 111603 }VF LOW SUM
FCK1: 10 }VF HI SUM
HADR: 173300 }VH ADDRESS
HCK: 121506 }VH LOW SUM
HCK1: 10 }VH HI SUM
BMADR: 173000
BMLM: 200 }BM873 YA LIMIT
BMCK: 60754 }BT SUM
BMCK1: 35 }LOW SUM
BCDLM: 400 }BM873 YB, YC, YD LIMIT
BRMCK: 143524 }BM873 YB HI SUM
BRMCK1: 65 }BM873 YB LOW SUM
CBMCK: 76101 }BM873 YC HI SUM
CBMCK1: 64 }BM873 YC LOW SUM
DBMCK: 132040 }BM873 YD HI SUM
DBMCK1: 55 }BM873 YD LOW SUM
SBMCK: 162074 }BM873 SF HI SUM
SBMCK1: 54 }BM873 SF LO SUM
M93AHI: 55367 }M9301YA HI SUM
M93ALO: 170 }M9301YA CARRY SUM
M93BHI: 55471 }M9301YB HI SUM
M93BLO: 174 }M9301YB CARRY SUM
M93CHI: 162214 }M9301YC HIGH SUM
M93CLO: 206 }M9301YC CARRY SUM
M93ADR: 165000 }M9301 LOWER ADDRESS
M94HI: 22464 }M9400 HIGH SUM
M94LO: 203 }M9400 CARRY SUM
SEBMC: 146474 }BM873 SE HI CHECKSUM
SEBMC1: 63 }LOW
SCBMC: 15456 }BM873 SC HI CHECKSUM
SCBMC1: 117 }LOW
M93SBH: 146054 }M9301 SB HI CHECKSUM
M93SBL: 207 }LOW
M93SAH: 25332 }M9301 SA HI CHECKSUM
M93SAL: 175 }LOW
M93VDH: 132311 }M9301 YD HI CHECKSUM
M93VDL: 177

663
664 002310 040774
665 002312 000174
666
667 002314 112445
668 002316 000215
669
670 002320 175261
671 002322 000174
672
673 002324 024457
674 002326 000164
675
676 002330 162632
677 002332 000153
678
679 002334 000000
680 002336 000000
681 002338 000000
682 002342 000000
683
684 002344 000000
685 002346 000000
686 002350 000000
687 002352 000000
688
689 002354 000000
690 002356 000000
691 002360 000000
692 002362 000000
693
694 002364 000000
695 002366 000000
696 002370 000000
697 002372 000000
698
699 002374 000000
700 002176 000000
701 002400 000000
702 002402 000000
703 002404 000000
704
705
706
707 002406 000000
708 002410 000000
709 002412 000000
710 002414 000000
711
712
713 002416 097477
714 002420 177777
715
716
717 002422 020045 051104 050117
718 002430 042520 020104 043117

M94VHR: 40774 }M9400 VH HI CHECKSUM
M94VHL: 174 }M9400 VH LOW CHECKSUM
M93VFR: 112445 }M9301 VF HIGH CHECKSUM
M93VFL: 215 }M9301 VF LOW CHECKSUM
M93VHR: 175261 }M9301 VH HIGH CHECKSUM
M93VHL: 174 }M9301 VH LOW CHECKSUM
M93VEH: 24457 }M9301 VE HIGH CHECKSUM
M93VEL: 164 }M9301 VE LOW CHECKSUM
M93VJH: 162632 }M9301 VJ HIGH CHECKSUM
M93VJL: 153 }M9301 VJ LOW CHECKSUM
GB11ADR: 0 }BIT 11 ADDRESS
GB11LIM: 0 }BIT 11 LIMIT
GB11HI: 0 }HIGH CHECKSUM
GB11LO: 0 }CARRY CHECKSUM
GB12ADR: 0 }BIT 12 ADDRESS
GB12LIM: 0 }BIT 12 LIMIT
GB12HI: 0 }HIGH CHECKSUM
GB12LO: 0 }CARRY CHECKSUM
GB13ADR: 0 }BIT 13 ADDRESS
GB13LIM: 0 }BIT 13 LIMIT
GB13HI: 0 }HIGH CHECKSUM
GB13LO: 0 }CARRY CHECKSUM
GB14ADR: 0 }BIT 14 ADDRESS
GB14LIM: 0 }BIT 14 LIMIT
GB14HI: 0 }HIGH CHECKSUM
GB14LO: 0 }CARRY CHECKSUM
TEST: 0 }HOLDS START OF GROUP A OR B ROM SETUPS
HOLD: 0 }SRI SAVED
SAVE: 0 }SAVE ADDRESS
SAVE1: 0 }SAVE LIMIT
HOLD1: 0
PONT: 0 }DROP POINTER
LO: 0 }LOW CHECKSUM
HI: 0 }HIGH CHECKSUM
BMFLAG: 0 }FLAG TO SKIP LOC 173024 FOR RM873 ROM
MES1: DROPPED
177777
DROP: .ASCIZ "DROPPED OFFENDING ROM R"

PSW	=	177776	239#			
PUSH	=	005746	239#			
PUSH2	=	024646	259#			
RANDC	=	104417	259#			
RANRDM	=	000054R	198#			
RESRT	=	000224R	217#	232#		
RES1	=	000056R	200#			
RES2	=	000060R	207#			
STRT	=	000112R	217#			
SAVE	=	002400R	264*	307	314	701#
SAVE1	=	002402R	265*	316	702#	
SBAOR	=	000102R	210#			
SBMCK	=	002236R	454	632#		
SBMCK1	=	002240R	455	633#		
SCBMC	=	002270R	470	653#		
SCBMC1	=	002272R	471	653#		
SEBMC	=	002264R	462	649#		
SEBMC1	=	002266R	463	650#		
SETUP	=	000606R	238	329#		
SOPCHT	=	000042R	193#			
SOPFRS	=	104406	238#			
SOPPAS	=	000046R	195#			
SPOINT	=	000032R	189#			
SPTZ	=	000040	1#	222		
SR1	=	000016R	183#	232		
SR2	=	000020R	183#			
SR3	=	000022R	184#			
SR4	=	000024R	185#			
START	=	000224R	188#	231#		
STAT	=	000026R	187#			
STH	=	000269R	276#	240#	293	323
SVRO	=	000062R	207#			
SVR1	=	000064R	203#			
SVR2	=	000066R	204#			
SVR3	=	000070R	205#			
SVR4	=	000072R	206#			
SVR5	=	000074R	207#			
SVR6	=	000076R	208#			
SYSCNT	=	000052R	197#			
TFST	=	002374R	234*	238*	244	699#
TRPDFN	=	000022	229#			
VECTOR	=	000010R	178#			
WASADR	=	000104R	212#			
WDFR	=	000116R	216#			
WDT0	=	000114R	218#			
XFLAG	=	000005R	176#			
VLADR	=	002142R	431	590#		
VHIGH	=	002144R	433	591#		
VLOW	=	002146R	434	592#		

• AHS. 000000 000
002454 001

ERRORS DETECTED: 0

DEFAULT GLOBALS GENERATED: 0

XBMCNO, XBMCNO/SOL/CRF:SYN=DDXCOM, XBMCNO
RUN-TIME: 1 2.4 SECONDS
RUN-TIME RATIO: 18/4=4.3
CORE USED: 7K (13 PAGES)