

N: CIO HANDLER
 EQUATES

LIST D,G,I

0000

```

; N: HANDLER FOR FUJINET
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```

INCLUDE D2:EQUATES.ASM
; CURRENT IOCB IN ZERO PAGE
    
```

```

= 0020      ZIOCB  EQU      $20      ; ZP IOCB
= 0020      ZICHID EQU      ZIOCB    ; ID
= 0021      ZICDNO EQU      ZIOCB+1  ; UNIT #
= 0022      ZICCOM EQU      ZIOCB+2  ; COMMAND
= 0023      ZICSTA EQU      ZIOCB+3  ; STATUS
= 0024      ZICBAL EQU      ZIOCB+4  ; BUF ADR LOW
= 0025      ZICBAH EQU      ZIOCB+5  ; BUF ADR HIGH
= 0026      ZICPTL EQU      ZIOCB+6  ; PUT ADDR L
= 0027      ZICPTH EQU      ZIOCB+7  ; PUT ADDR H
= 0028      ZICBLL EQU      ZIOCB+8  ; BUF LEN LOW
= 0029      ZICBLH EQU      ZIOCB+9  ; BUF LEN HIGH
= 002A      ZICAX1 EQU      ZIOCB+10 ; AUX 1
= 002B      ZICAX2 EQU      ZIOCB+11 ; AUX 2
= 002C      ZICAX3 EQU      ZIOCB+12 ; AUX 3
= 002D      ZICAX4 EQU      ZIOCB+13 ; AUX 4
= 002E      ZICAX5 EQU      ZIOCB+14 ; AUX 5
= 002F      ZICAX6 EQU      ZIOCB+15 ; AUX 6
    
```

```

; INTERRUPT VECTORS
; AND OTHER PAGE 2 VARS
    
```

```

= 0202      VPRCED EQU      $0202    ; PROCEED VCTR
= 02C6      COLOR2 EQU      $02C6    ; MODEM BKG C
= 02E7      MEMLO  EQU      $02E7    ; MEM LO
= 02EA      DVSTAT EQU      $02EA    ; 4 BYTE STATS
    
```

```

; PAGE 3
; DEVICE CONTROL BLOCK (DCB)
    
```

```

= 0300      DCB    EQU      $0300    ; BASE
= 0300      DDEVIC EQU      DCB      ; DEVICE #
= 0301      DUNIT  EQU      DCB+1    ; UNIT #
= 0302      DCOMND EQU      DCB+2    ; COMMAND
= 0303      DSTATS EQU      DCB+3    ; STATUS/DIR
= 0304      DBUFL  EQU      DCB+4    ; BUF ADR L
= 0305      DBUFH  EQU      DCB+5    ; BUF ADR H
= 0306      DTIMLO EQU      DCB+6    ; TIMEOUT (S)
= 0307      DRDVD  EQU      DCB+7    ; NOT USED
= 0308      DBYTL  EQU      DCB+8    ; BUF LEN L
= 0309      DBYTH  EQU      DCB+9    ; BUF LEN H
= 030A      DAUXL  EQU      DCB+10   ; AUX BYTE L
= 030B      DAUXH  EQU      DCB+11   ; AUX BYTE H

= 031A      HATABS EQU      $031A    ; HANDLER TBL
    
```

```

; IOCB'S * 8
    
```

N: CIO HANDLER
EQUATES

D2:EQUATES.ASM

```

= 0340      IOCB  EQU      $0340      ; IOCB BASE
= 0340      ICHID EQU      IOCB       ; ID
= 0341      ICDNO EQU      IOCB+1    ; UNIT #
= 0342      ICCOM EQU      IOCB+2    ; COMMAND
= 0343      ICSTA EQU      IOCB+3    ; STATUS
= 0344      ICBAL EQU      IOCB+4    ; BUF ADR LOW
= 0345      ICBAH EQU      IOCB+5    ; BUF ADR HIGH
= 0346      ICPTL EQU      IOCB+6    ; PUT ADDR L
= 0347      ICPH  EQU      IOCB+7    ; PUT ADDR H
= 0348      ICBLL EQU      IOCB+8    ; BUF LEN LOW
= 0349      ICBLH EQU      IOCB+9    ; BUF LEN HIGH
= 034A      ICAX1 EQU      IOCB+10   ; AUX 1
= 034B      ICAX2 EQU      IOCB+11   ; AUX 2
= 034C      ICAX3 EQU      IOCB+12   ; AUX 3
= 034D      ICAX4 EQU      IOCB+13   ; AUX 4
= 034E      ICAX5 EQU      IOCB+14   ; AUX 5
= 034F      ICAX6 EQU      IOCB+15   ; AUX 6

```

; HARDWARE REGISTERS

```

= D302      PACTL EQU      $D302     ; PIA CTRL A

```

; OS ROM VECTORS

```

= E456      CIOV  EQU      $E456     ; CIO ENTRY
= E459      SIOV  EQU      $E459     ; SIO ENTRY

```

; CONSTANTS

```

= 0009      PUTREC EQU      $09       ; CIO PUTREC
= 0071      DEVIDN EQU      $71       ; SIO DEVID
= 0040      DSREAD EQU      $40       ; FUJI->ATARI
= 0080      DSWRIT EQU      $80       ; ATARI->FUJI
= 0004      MAXDEV EQU      4         ; # OF N: DEVS
= 0088      EOF    EQU      $88       ; ERROR 136
= 009B      EOL    EQU      $9B       ; EOL CHAR

```

INCLUDE D2:INIT.ASM

N: CIO HANDLER
HANDLER START

```

0000
0000 = 2300          ORG      $2300

2300                START

                        ; INSERT INTO HATABS

2300                IHTBS  PROC

                        ; FIND FIRST EMPTY ENTRY, OR
                        ; ALREADY EXTANT N: ENTRY.

2300  A000          LDY      #$00
2302  B91A03        :1     LDA      HATABS,Y
2305  F00B ^2312    BEQ      HFND
2307  C94E          CMP      #'N'
2309  F007 ^2312    BEQ      HFND
230B  C8            INY
230C  C8            INY
230D  C8            INY
230E  C021          CPY      #11*3
2310  90F0 ^2302    BCC      :1

                        ; EITHER FOUND EMPTY SPOT,
                        ; OR FOUND EXTANT N: ENTRY.

2312  A94E          HFND   LDA      #'N'
2314  991A03        STA      HATABS,Y
2317  A98A          LDA      #LOW CIOHND
2319  991B03        STA      HATABS+1,Y
231C  A926          LDA      #HIGH CIOHND
231E  991C03        STA      HATABS+2,Y
                        EPROC

                        ; MOVE MEMLO

2321                PROC
2321  A900          LDA      #LOW END
2323  8DE702        STA      MEMLO
2326  A92F          LDA      #HIGH END
2328  8DE802        STA      MEMLO+1
                        EPROC

```

N: CIO HANDLER
SHOW FUJINET BANNER

D2:INIT.ASM

```

232B                                ; QUERY FUJINET
                                ;
                                ; JSR      STPOLL
                                ;
                                ; OUTPUT READY OR ERROR

232B      OBANR  PROC
232B      A200      LDX      #0 ; IOCB #0 E:
232D      A909      LDA      #PUTREC
232F      9D4203    STA      ICCOM,X
2332      A928      LDA      #28 ; 40 CHRS MAX
2334      9D4803    STA      ICBLL,X
2337      A900      LDA      #0
2339      9D4903    STA      ICBLH,X
233C      AD0303    LDA      DSTATS ; DSTATS < 128?
233F      100D ^234E BPL      OBRDY

2341      A9A5      OBERR   LDA      #LOW BERROR
2343      9D4403    STA      ICBAL,X
2346      A926      LDA      #HIGH BERROR
2348      9D4503    STA      ICBAH,X
234B      4C5823    JMP      OBCIO

234E      A996      OBRDY   LDA      #LOW BREADY
2350      9D4403    STA      ICBAL,X
2353      A926      LDA      #HIGH BREADY
2355      9D4503    STA      ICBAH,X
2358      2056E4    OBCIO   JSR      CIOV
                                EPROC

                                ; VECTOR IN PROCEED INTERRUPT

235B      SPRCED  PROC
235B      A983      LDA      #LOW PRCVEC
235D      8D0202    STA      VPRCED
2360      A926      LDA      #HIGH PRCVEC
2362      8D0302    STA      VPRCED+1
                                EPROC

                                ; RTS BACK TO DOSVEC, DONE.

2365      60       RTS

```

N: CIO HANDLER
CIO OPEN

2366

INCLUDE D2:OPEN.ASM

N: CIO HANDLER
CIO OPEN

```

2366
2366          OPEN      PROC

                ; PERFORM THE OPEN

2366  204D26      JSR      ENPRCD   ; ENABLE PRCED
2369  205F26      JSR      GDIDX    ; X=ZICDNO-1
236C  A971        LDA      #DEVIDN ; $70
236E  8D0003      STA      DDEVIC
2371  A521        LDA      ZICDNO
2373  8D0103      STA      DUNIT
2376  A94F        LDA      #'O'    ; 'O'PEN
2378  8D0203      STA      DCOMND
237B  A980        LDA      #DSWRIT ; -> PERIP
237D  8D0303      STA      DSTATS
2380  A524        LDA      ZICBAL   ; POINT DBUF
2382  8D0403      STA      DBUFL   ; TO FILENAME
2385  A525        LDA      ZICBAH   ; ...
2387  8D0503      STA      DBUFH   ; ...
238A  A90F        LDA      #SOF
238C  8D0603      STA      DTIMLO
238F  A900        LDA      #S00    ; OPEN WANTS
2391  8D0803      STA      DBYTL   ; 256 BYTE
2394  A901        LDA      #S01    ; PAYLOAD
2396  8D0903      STA      DBYTH   ; ...
2399  A52A        LDA      ZICAX1   ; IOCB AUX1...
239B  9DB526      STA      AX1SV,X ; ...SAVE IT
239E  8D0A03      STA      DAUXL   ; ...USE IT
23A1  A52B        LDA      ZICAX2   ; IOCB AUX2...
23A3  9DB926      STA      AX2SV,X ; ...SAVE IT
23A6  8D0B03      STA      DAUXH   ; ...USE IT
23A9  2059E4      JSR      SIOV     ; SEND TO #FN

                ; RETURN DSTATS UNLESS = 144
                ; IN WHICH CASE, DO A STATUS
                ; AND RETURN THE EXTENDED ERR
                ; FROM IT...

23AC  AC0303      OPCERR LDY      DSTATS ; GET SIO STATUS
23AF  C090        CPY      #S90    ; ERR 144?
23B1  D006 ^23B9  BNE      OPDONE   ; NOPE. RETURN DSTATS

                ; 144, GET EXTENDED ERROR

23B3  207825      JSR      STPOLL  ; POLL FOR STATUS
23B6  ACED02      LDY      DVSTAT+3

                ; RESET BUFFER LENGTH + OFFSET

23B9  A901        OPDONE LDA      #S01
23BB  8DB426      STA      TRIP
23BE  205F26      JSR      GDIDX
23C1  A900        LDA      #S00
23C3  9DCD26      STA      RLEN,X
23C6  9DD526      STA      TOFF,X
23C9  9DD126      STA      ROFF,X
23CC  98          TYA

```

N: CIO HANDLER
CIO OPEN

23CD 60

RTS ; AY = ERROR
EPROC

INCLUDE D2:CLOSE.ASM

N: CIO HANDLER
CIO CLOSE

```

23CE
23CE          CLOSE  PROC
23CE  205626   JSR    DIPRCD ; DIS INTRPS
23D1  A971     LDA    #DEVIDN ; $70
23D3  8D0003   STA    DDEVIC
23D6  A521     LDA    ZICDNO ; UNIT #
23D8  8D0103   STA    DUNIT
23DB  A943     LDA    #'C' ; C = CLOSE
23DD  8D0203   STA    DCOMND
23E0  A900     LDA    # $00 ; NO PAYLOAD
23E2  8D0303   STA    DSTATS
23E5  8D0403   STA    DBUFL
23E8  8D0503   STA    DBUFH
23EB  8D0803   STA    DBYTL
23EE  8D0903   STA    DBYTH
23F1  8D0A03   STA    DAUXL
23F4  8D0B03   STA    DAUXH
23F7  A90F     LDA    # $0F
23F9  8D0603   STA    DTIMLO
23FC  2059E4   JSR    SIOV

```

```

; FLUSH BUFFERS IF NEEDED
23FF  20CC24   JSR    PFLUSH

```

```

2402  AC0303   LDY    DSTATS
2405  98       TYA
2406  60       RTS
EPROC

```

INCLUDE D2:GET.ASM

N: CIO HANDLER
CIO GET

D2:GET.ASM

```

2407
2407          GET      PROC

2407  205F26          JSR      GDIDX
240A  BDCD26          LDA      RLEN,X
240D  D051 ^2460      BNE      :CDISC  ; LEN > 0?

                ; LEN=0, DO A STATUS POLL
                ; AND UPDATE LEN

240F  207825          JSR      STPOLL
2412  205F26          JSR      GDIDX
2415  ADEA02          LDA      DVSTAT
2418  9DCD26          STA      RLEN,X

                ; IF LEN=0, THEN RET EOF
                ; OTHERWISE, GET DATA FROM
                ; SIO.

241B  D005 ^2422      BNE      :SIGET
241D  A088            LDY      #EOF
241F  A988            LDA      #EOF
2421  60              RTS

2422  A971            :SIGET LDA      #DEVIDN ; $71
2424  8D0003          STA      DDEVIC
2427  A521            LDA      ZICDNO
2429  8D0103          STA      DUNIT
242C  A952            LDA      #'R'
242E  8D0203          STA      DCOMND
2431  A940            LDA      #DSREAD
2433  8D0303          STA      DSTATS
2436  206326          JSR      ICD2B
2439  8D0503          STA      DBUFH
243C  A900            LDA      #$00
243E  8D0403          STA      DBUFL
2441  8D0903          STA      DBYTH
2444  8D0B03          STA      DAUXH
2447  A90F            LDA      #$0F
2449  8D0603          STA      DTIMLO
244C  ADEA02          LDA      DVSTAT
244F  8D0803          STA      DBYTL
2452  8D0A03          STA      DAUXL
2455  2059E4          JSR      SIOV
2458  205F26          JSR      GDIDX
245B  A900            LDA      #$00
245D  9DD126          STA      ROFF,X

2460  ADEC02          :CDISC LDA      DVSTAT+2 ; CHECK DISC
2463  D005 ^246A      BNE      :EOF2  ; NOPE.
2465  A988            LDA      #EOF
2467  A088            LDY      #EOF
2469  60              RTS

246A  BDCD26          :EOF2  LDA      RLEN,X
246D  D000 ^246F      BNE      :UPDP

```

N: CIO HANDLER
CIO GET

D2:GET.ASM

```

246F  DECD26      :UPDP  DEC      RLEN,X
2472  BCD126      LDY      ROFF,X
2475  E003        CPX      #\$03
2477  F01A ^2493  BEQ      :G3
2479  E002        CPX      #\$02
247B  F010 ^248D  BEQ      :G2
247D  E001        CPX      #\$01
247F  F006 ^2487  BEQ      :G1

                ; RETURN NEXT CHAR IN APROPOS
                ; BUFFER INTO A

2481  B90027      :G0     LDA      RBUF,Y
2484  4C9924      JMP      :GX
2487  B90028      :G1     LDA      RBUF+\$100,Y
248A  4C9924      JMP      :GX
248D  B90029      :G2     LDA      RBUF+\$200,Y
2490  4C9924      JMP      :GX
2493  B9002A      :G3     LDA      RBUF+\$300,Y
2496  4C9924      JMP      :GX
2499  FED126      :GX     INC      ROFF,X
249C  A8           TAY

                ; RESET TRIP IF LEN=0

249D  BD2D26      LDA      RLEN,X
24A0  D005 ^24A7  BNE      :DONE
24A2  A900        LDA      #\$00
24A4  8DB426      STA      TRIP

24A7  98          :DONE  TYA
24A8  A001        LDY      #\$01      ; SUCCESS

24AA  60          RTS          ; DONE...
                EPROC

                INCLUDE D2:PUT.ASM

```

N: CIO HANDLER
CIO PUT

D2:PUT.ASM

```

24AB
24AB          PUT      PROC

                ; ADD TO TX BUFFER

24AB  205F26      JSR      GDIDX
24AE  BCD526      LDY      TOFF,X   ; GET OFFSET
24B1  99002B      STA      TBUF,Y   ; STORE CHAR
24B4  FED526      INC      TOFF,X   ; INC OFFSET
24B7  A001        LDY      #$01    ; SUCCESSFUL

                ; FLUSH IF EOL OR FULL

24B9  C99B        CMP      #EOL    ; EOL?
24BB  F00B ^24C8  BEQ      :FLUSH  ; FLUSH BUFFER
24BD  205F26      JSR      GDIDX    ; GET OFFSET
24C0  BCD526      LDY      TOFF,X
24C3  E0FF        CPX      #$FF    ; LEN = $FF?
24C5  F001 ^24C8  BEQ      :FLUSH  ; FLUSH BUFFER
24C7  60          RTS

                ; FLUSH BUFFER, IF ASKED.

24C8  20CG24      :FLUSH JSR      PFLUSH  ; FLUSH BUFFER
24CB  60          RTS
                EPROC

24CC          PFLUSH PROC

                ; CHECK CONNECTION, AND EOF
                ; IF DISCONNECTED.

24CC  207825      JSR      STPOLL  ; GET STATUS
24CF  ADEC02      LDA      DVSTAT+2
24D2  D005 ^24D9  BNE      :1
24D4  A088        LDY      #EOF
24D6  A988        LDA      #EOF
24D8  60          RTS

24D9  205F26      :1     JSR      GDIDX    ; GET DEV X
24DC  BDD526      LDA      TOFF,X
24DF  D003 ^24E4  BNE      :2
24E1  4C3B25      JMP      :DONE

                ; FILL OUT DCB FOR PUT FLUSH

24E4  A971        :2     LDA      #DEVIDN
24E6  8D0003      STA      DDEVIC
24E9  A521        LDA      ZICDNO
24EB  8D0103      STA      DUNIT
24EE  A957        LDA      #'W'    ; WRITE
24F0  8D0203      STA      DCOMND
24F3  A980        LDA      #DSWRIT
24F5  8D0303      STA      DSTATS

                ; PICK APROPOS BUFFER PAGE

```

N: CIO HANDLER
CIO PUT

D2:PUT.ASM

```

24F8 E003          CPX      #\$03
24FA F014 ^2510    BEQ      :TB3
24FC E002          CPX      #\$02
24FE F00C ^250C    BEQ      :TB2
2500 E001          CPX      #\$01
2502 F004 ^2508    BEQ      :TB1

2504 A92B          :TB0    LDA      #HIGH TBUF
2506 500C ^2514    BVC      :TBX
2508 A92C          :TB1    LDA      #HIGH TBUF+1
250A 5008 ^2514    BVC      :TBX
250C A92D          :TB2    LDA      #HIGH TBUF+2
250E 5004 ^2514    BVC      :TBX
2510 A92E          :TB3    LDA      #HIGH TBUF+3
2512 5000 ^2514    BVC      :TBX

; FINISH DCB AND DO SIOV

2514 8D0503        :TBX    STA      DBUFH
2517 A900          LDA      #\$00
2519 8D0403        STA      DBUFL
251C 8D0903        STA      DBYTH
251F 8D0B03        STA      DAUXH
2522 A90F          LDA      #\$0F
2524 8D0603        STA      DTIMLO
2527 BDD526        LDA      TOFF,X
252A 8D0803        STA      DBYTL
252D 8D0A03        STA      DAUXL
2530 2059E4        JSR      SIOV

; CLEAR THE OFFSET CURSOR
; AND LENGTH

2533 205F26        JSR      GDIDX
2536 A900          LDA      #\$00
2538 9DD526        STA      TOFF,X

253B A001          :DONE   LDY      #\$01
253D 60            RTS
EPROC

INCLUDE D2:STATUS.ASM

```

N: CIO HANDLER
CIO STATUS

D2:STATUS.ASM

```

253E                                     ; IF TRIP, DO STATUS POLL
                                         ; OTHERWISE, RETURN SAVED
                                         ; STATUS...

253E          STATUS PROC
253E  204D26      JSR      ENPRCD   ; ENABLE PRCD
2541  205F26      JSR      GDIDX    ; GET DEVICE#
2544  BDCD26      LDA      RLEN,X   ; GET RLEN
2547  D005 ^254E  BNE      STSLEN   ; RLEN > 0?
2549  ADB426      LDA      TRIP
254C  D00E ^255C  BNE      STTRI1   ; TRIP = 1?

                                         ; NO TRIP, RETURN SAVED LEN

254E  BDCD26      STSLEN LDA      RLEN,X ; GET RLEN
2551  8DEA02      STA      DVSTAT   ; RET IN DVSTAT
2554  A900        LDA      #$00
2556  8DEB02      STA      DVSTAT+1
2559  4C7425      JMP      STDONE   ; DONE.

                                         ; DO POLL AND UPDATE RCV LEN

255C  207825      STTRI1 JSR      STPOLL ; POLL FOR ST
                                         ; IS <= 256?

255F  ADEB02      LDA      DVSTAT+1
2562  D006 ^256A  BNE      STTRI2   ; > 256
2564  9DCD26      STA      RLEN,X
2567  4C6F25      JMP      STTRIU   ; UPDATE TRIP

                                         ; > 256, SET TO 256

256A  A9FF        STTRI2 LDA      #$FF
256C  9DCD26      STA      RLEN,X

                                         ; UPDATE TRIP FLAG

256F  D003 ^2574  STTRIU BNE      STDONE
2571  8DB426      STA      TRIP     ; RLEN = 0

                                         ; RETURN CONNECTED? FLAG.

2574  ADEC02      STDONE LDA      DVSTAT+2
2577  60          RTS
                                         EPROC

                                         ; ASK FUJINET FOR STATUS

2578          STPOLL PROC
2578  A971        LDA      #DEVIDN ; #FN DEVID
257A  8D0003      STA      DDEVIC
257D  A521        LDA      ZICDNO  ; IOCB #
257F  8D0103      STA      DUNIT
2582  A953        LDA      #'S'   ; S = STATUS
2584  8D0203      STA      DCOMND

```

N: CIO HANDLER
CIO STATUS

D2:STATUS.ASM

```

2587 A940          LDA    #DSREAD ; #FN->ATARI
2589 8D0303       STA    DSTATS
258C A9EA          LDA    #LOW DVSTAT
258E 8D0403       STA    DBUFL ; PUT IN DVSTAT
2591 A902          LDA    #HIGH DVSTAT
2593 8D0503       STA    DBUFH ; ...
2596 A904          LDA    #$04 ; 4 BYTES
2598 8D0803       STA    DBYTL
259B A900          LDA    #$00
259D 8D0903       STA    DBYTH
25A0 A90F          LDA    #$0F
25A2 8D0603       STA    DTIMLO
25A5 A900          LDA    #$00
25A7 8D0A03       STA    DAUXL
25AA 8D0B03       STA    DAUXH
25AD 2059E4       JSR    SIOV ; DO IT...

```

; MAX 256 BYTES WAITING.

```

25B0 ADEB02       LDA    DVSTAT+1
25B3 F00A ^25BF  BEQ    STP2
25B5 A9FF          LDA    #$FF
25B7 8DEA02       STA    DVSTAT
25BA A900          LDA    #$00
25BC 8DEB02       STA    DVSTAT+1

```

; A = CONNECTION STATUS

```

25BF ADEC02       STP2  LDA    DVSTAT+2
25C2 60          RTS
EPROC

```

INCLUDE D2:SPECIAL.ASM

N: CIO HANDLER
CIO SPECIAL

D2:SPECIAL.ASM

```

25C3
25C3          SPEC   PROC

                ; HANDLE LOCAL COMMANDS.

25C3  A522          LDA    ZICCOM
25C5  C90F          CMP    #\$0F      ; 15 = FLUSH
25C7  D006 ^25CF   BNE    :1        ; NO.
25C9  20CG24       JSR    PFLUSH   ; DO FLUSH
25CC  A001          LDY    #\$01    ; SUCCESS
25CE  60           RTS

                ; HANDLE SIO COMMANDS.
                ; GET DSTATS FOR COMMAND

25CF  A971          :1    LDA    #DEVIDN ; \$71
25D1  8D0003       STA    DDEVIC
25D4  A521          LDA    ZICDNO  ; UNIT #
25D6  8D0103       STA    DUNIT
25D9  A9FF          LDA    #\$FF    ; DS INQ
25DB  8D0203       STA    DCOMND
25DE  A940          LDA    #DSREAD
25E0  8D0303       STA    DSTATS
25E3  A9D9          LDA    #LOW INQDS
25E5  8D0403       STA    DBUFL
25E8  A926          LDA    #HIGH INQDS
25EA  8D0503       STA    DBUFH
25ED  A901          LDA    #\$01
25EF  8D0803       STA    DBYTL
25F2  A900          LDA    #\$00
25F4  8D0903       STA    DBYTH
25F7  8D0B03       STA    DAUXH
25FA  A90F          LDA    #\$0F
25FC  8D0603       STA    DTIMLO
25FF  A522          LDA    ZICCOM
2601  8D0A03       STA    DAUXL
2604  2059E4       JSR    SIOV    ; DO IT...

2607  AD0303       LDA    DSTATS
260A  1002 ^260E   BPL    :DSOK
260C  A8           :DSERR TAY          ; RET THE ERR
260D  60           RTS

                ; WE GOT A DSTATS INQUIRY
                ; IF \$FF, THE COMMAND IS
                ; INVALID

260E  ADD926       :DSOK LDA    INQDS
2611  C9FF          CMP    #\$FF    ; INVALID?
2613  D004 ^2619   BNE    :DSGO    ; DO THE CMD
2615  A092          LDY    #\$92    ; UNIMP CMD
2617  98           TYA
2618  60           RTS

2619  A971          :DSGO LDA    #DEVIDN ; \$71
261B  8D0003       STA    DDEVIC
261E  A522          LDA    ZICCOM

```

N: CIO HANDLER
CIO SPECIAL

D2:SPECIAL.ASM

```
2620 8D0203      STA      DCOMND
2623 ADD926      LDA      INQDS
2626 8D0303      STA      DSTATS
2629 A92B         LDA      #HIGH TBUF
262B 8D0503      STA      DBUFH
262E A900         LDA      #0
2630 8D0403      STA      DBUFL
2633 8D0903      STA      DBYTH
2636 A90F         LDA      #0F
2638 8D0603      STA      DTIMLO
263B A52A         LDA      ZICAX1
263D 8D0A03      STA      DAUXL
2640 A52B         LDA      ZICAX2
2642 8D0B03      STA      DAUXH
2645 2059E4      JSR      SIOV
2648 AC0303      LDY      DSTATS
264B 98          TYA
264C 60          RTS
EPROC
```

INCLUDE D2:UTIL.ASM

N: CIO HANDLER
UTILITY FUNCTIONS

D2:UTIL.ASM

```

264D                                     ; ENABLE PROCEED INTERRUPT

264D AD02D3      ENPRCD LDA      PACTL
2650 0901              ORA      #\$01      ; ENABLE BIT 0
2652 8D02D3      STA      PACTL
2655 60              RTS

                                     ; DISABLE PROCEED INTERRUPT

2656 AD02D3      DIPRCD LDA      PACTL
2659 29FE              AND      #\$FE      ; DISABLE BIT0
265B 8D02D3      STA      PACTL
265E 60              RTS

                                     ; GET ZIOCB DEVNO - 1 INTO X

265F                                     GDIDX PROC
265F A621              LDX      ZICDNO    ; IOCB UNIT #
2661 CA              DEX              ; - 1
2662 60              RTS
                                   EPROC

                                     ; CONVERT ZICDNO TO BUFFER
                                     ; PAGE, RETURN IN A

2663 ICD2B PROC
2663 A621              LDX      ZICDNO
2665 CA              DEX
2666 E003              CPX      #\$03
2668 F014 ^267E        BEQ      :3
266A E002              CPX      #\$02
266C F00C ^267A        BEQ      :2
266E E001              CPX      #\$01
2670 F004 ^2676        BEQ      :1

2672 A927              :0      LDA      #HIGH RBUF
2674 500C ^2682        BVC      :DONE

2676 A928              :1      LDA      #HIGH RBUF + 1
2678 5008 ^2682        BVC      :DONE

267A A929              :2      LDA      #HIGH RBUF + 2
267C 5004 ^2682        BVC      :DONE

267E A92A              :3      LDA      #HIGH RBUF + 3
2680 5000 ^2682        BVC      :DONE

2682 60              :DONE   RTS
                                   EPROC

```

N: CIO HANDLER
INITIALIZATION

2683

; PROCEED VECTOR

2683

PRCVEC PROC

2683 A901 LDA #01
2685 8DB426 STA TRIP
2688 68 PLA
2689 40 RTI
EPROC

; ----- END OF CODE -----

; DEVHDL TABLE FOR N:

268A 6523 CIOHND DW OPEN-1
268C CD23 DW CLOSE-1
268E 0624 DW GET-1
2690 AA24 DW PUT-1
2692 3D25 DW STATUS-1
2694 C225 DW SPEC-1

; BANNERS

2696 2346554A49 BREADY DB '#FUJINET READY', \$9B
4E45542052
454144599B
26A5 2346554A49 BERROR DB '#FUJINET ERROR', \$9B
4E45542045
52524F529B

; VARIABLES

26B4 = 0001 TRIP DS 1 ; INTR FLAG
26B5 = 0004 AX1SV DS MAXDEV ; AUX1 SAVE
26B9 = 0004 AX2SV DS MAXDEV ; AUX2 SAVE
26BD = 0010 STSV DS 4*MAXDEV ; STATUS SAVE
26CD = 0004 RLEN DS MAXDEV ; RCV LEN
26D1 = 0004 ROFF DS MAXDEV ; RCV OFFSET
26D5 = 0004 TOFF DS MAXDEV ; TRX OFFSET
26D9 = 0001 INQDS DS 1 ; DSTATS INQ

; BUFFERS (PAGE ALIGNED)

26DA = 2700 ORG * + \$FF & \$FF00
2700 = 0400 RBUF DS 256*MAXDEV ; RX
2B00 = 0400 TBUF DS 256*MAXDEV ; TX
= 2F00 END = *
2F00 = 02E0 ORG \$02E0
02E0 0023 DW START

no ERRORS, 134 Labels, \$1E22 free.

AX1SV	26B5	6/31	18#38					
AX2SV	26B9	6/34	18#39					
BERROR	26A5	4/23	4/25	18#31				
BREADY	2696	4/29	4/31	18#28				
CIOHND	268A	3/33	3/35	18#19				
CIOV	E456	2#30	4/33					
CLOSE	23CE	8# 6	18/20					
n COLOR2	02C6	1#38						
DAUXH	030B	1#57	6/35	8/21	9/42	12/27	14/19	15/36
		16/18						
DAUXL	030A	1#56	6/32	8/20	9/47	12/32	14/18	15/40
		16/16						
DBUFH	0305	1#51	6/23	8/17	9/38	12/23	14/10	15/31
		16/ 9						
DBUFL	0304	1#50	6/21	8/16	9/40	12/25	14/ 8	15/29
		16/11						
DBYTH	0309	1#55	6/29	8/19	9/41	12/26	14/14	15/35
		16/12						
DBYTL	0308	1#54	6/27	8/18	9/46	12/31	14/12	15/33
DCB	0300	1#45	1/46	1/47	1/48	1/49	1/50	1/51
		1/52	1/53	1/54	1/55	1/56	1/57	
DCOMND	0302	1#48	6/17	8/13	9/34	11/56	13/61	15/25
		15/62						
DDEVIC	0300	1#46	6/13	8/ 9	9/30	11/52	13/57	15/21
		15/60						
DEVIDN	0071	2#36	6/12	8/ 8	9/29	11/51	13/56	15/20
		15/59						
DIPRCD	2656	8/ 7	17#15					
n DRDVD	0307	1#53						
DSREAD	0040	2#37	9/35	13/62	15/26			
DSTATS	0303	1#49	4/20	6/19	6/43	8/15	8/29	9/36
		11/58	14/ 6	15/27	15/43	16/ 7	16/20	
DSWRIT	0080	2#38	6/18	11/57				
DTIMLO	0306	1#52	6/25	8/23	9/44	12/29	14/16	15/38
		16/14						
DUNIT	0301	1#47	6/15	8/11	9/32	11/54	13/59	15/23
DVSTAT	02EA	1#40	6/50	9/17	9/45	9/53	11/38	13/21
		13/23	13/32	13/49	14/ 7	14/ 9	14/24	14/27
		14/29	14/33					
END	2F00	3/42	3/44	18#53				
ENPRCD	264D	6/10	13/11	17# 8				
EOF	0088	2#40	9/25	9/26	9/55	9/56	11/40	11/41
EOL	009B	2#41	11/18					
GDIDX	265F	6/11	6/56	9/ 8	9/16	9/49	11/10	11/20
		11/44	12/38	13/12	17#22			
GET	2407	9# 6	18/21					
HATABS	031A	1#59	3/18	3/32	3/34	3/36		
HFND	2312	3/19	3/21	3#31				
n ICAX1	034A	2#17						
n ICAX2	034B	2#18						
n ICAX3	034C	2#19						
n ICAX4	034D	2#20						
n ICAX5	034E	2#21						
n ICAX6	034F	2#22						
ICBAH	0345	2#12	4/26	4/32				
ICBAL	0344	2#11	4/24	4/30				
ICBLH	0349	2#16	4/19					

	ICBL	0348	2#15	4/17					
	ICCOM	0342	2# 9	4/15					
	ICD2B	2663	9/37	17#31					
n	ICDNO	0341	2# 8						
n	ICHID	0340	2# 7						
n	ICPTH	0347	2#14						
n	ICPTL	0346	2#13						
n	ICSTA	0343	2#10						
n	IHTBS	2300	3#12						
	INQDS	26D9	15/28	15/30	15/52	16/ 6	18#44		
	IOCB	0340	2# 6	2/ 7	2/ 8	2/ 9	2/10	2/11	2/12
			2/13	2/14	2/15	2/16	2/17	2/18	2/19
			2/20	2/21	2/22				
	MAXDEV	0004	2#39	18/38	18/39	18/40	18/41	18/42	18/43
			18/50	18/51					
	MEMLO	02E7	1#39	3/43	3/45				
n	OBANR	232B	4#12						
	OBCIO	2358	4/27	4#33					
n	OBERR	2341	4#23						
	OBRDY	234E	4/21	4#29					
n	OPCERR	23AC	6#43						
	OPDONE	23B9	6/45	6#54					
	OPEN	2366	6# 6	18/19					
	PACTL	D302	2#26	17/ 8	17/10	17/15	17/17		
	PFLUSH	24CC	8/27	11/28	11#32	15/13			
	PRCVEC	2683	4/39	4/41	18# 8				
	PUT	24AB	11# 6	18/22					
	PUTREC	0009	2#35	4/14					
	RBUF	2700	10/17	10/19	10/21	10/23	17/41	17/44	17/47
			17/50	18#50					
	RLEN	26CD	6/58	9/ 9	9/18	9/59	9/62	10/30	13/13
			13/20	13/34	13/40	18#41			
	ROFF	26D1	6/60	9/51	10/ 6	10/25	18#42		
	SIOV	E459	2#31	6/36	8/24	9/48	12/33	14/20	15/41
			16/19						
	SPEC	25C3	15# 6	18/24					
n	SPRCED	235B	4#38						
	START	2300	3# 8	18/56					
	STATUS	253E	13#10	18/23					
	STDONE	2574	13/24	13/44	13#49				
	STP2	25BF	14/25	14#33					
	STPOLL	2578	6/49	9/15	11/37	13/28	13#55		
	STSLN	254E	13/14	13#20					
n	STSV	26BD	18#40						
	STTRI1	255C	13/16	13#28					
	STTRI2	256A	13/33	13#39					
	STTRIU	256F	13/35	13#44					
	TBUF	2B00	11/12	12/12	12/14	12/16	12/18	16/ 8	18#51
	TOFF	26D5	6/59	11/11	11/13	11/21	11/45	12/30	12/40
			18#43						
	TRIP	26B4	6/55	10/33	13/15	13/45	18/10	18#37	
	VPRCED	0202	1#37	4/40	4/42				
	ZICAX1	002A	1#27	6/30	16/15				
	ZICAX2	002B	1#28	6/33	16/17				
n	ZICAX3	002C	1#29						
n	ZICAX4	002D	1#30						
n	ZICAX5	002E	1#31						

n	ZICAX6	002F	1#32						
	ZICBAH	0025	1#22	6/22					
	ZICBAL	0024	1#21	6/20					
n	ZICBLH	0029	1#26						
n	ZICBLL	0028	1#25						
	ZICCOM	0022	1#19	15/10	15/39	15/61			
	ZICDNO	0021	1#18	6/14	8/10	9/31	11/53	13/58	15/22
			17/23	17/32					
n	ZICHID	0020	1#17						
n	ZICPTH	0027	1#24						
n	ZICPTL	0026	1#23						
n	ZICSTA	0023	1#20						
	ZIOCB	0020	1#16	1/17	1/18	1/19	1/20	1/21	1/22
			1/23	1/24	1/25	1/26	1/27	1/28	1/29
			1/30	1/31	1/32				