



# Tech Info Library

## Apple II+ Mini-Assembler (4 of 4)

Revised: 3/2/88  
Security: Everyone

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08AA: AD 00 02      LDA IN      ;GET CHAR
08AD: C9 AO          CMP #$AO     ;ASCII SPACE?
08AF: FO 13          BEQ SPACE    ;YES
08B1: C8             INY
08B2: C9 A4          CMP #$A4     ;ASCII '$' IN COL 1?
08B4: FO 92          BEQ FKMON    ;YES,SIMULATE MONITOR
08B6: 88             DEY          ;NO, BACKUP A CHAR
08B7: 20 A7 FF       JSR GETNUM   ;GET A NUMBER
08BA: C9 93          CMP #$93     ;':' TERMINATOR?
08BC: DO D5          ERR4 BNE ERR2 ;NO, ERR
08BE: 8A             TXA
08BF: FO D2          BEQ ERR2     ;NO ADDR PRECEDING COLON
08C1: 20 78 FE       JSR A1PCLP   ;MOVE ADDR TO PCL, PCH
08C4: A9 03          SPACE LDA #$03 ;COUNT OF CHAR IN MNEMONIC
08C6: 85 3D          STA A1H
08C8: 20 EF 09       NXTMN JSR GETNSP ;GET 1ST MNEMONIC CHARACTER
08CB: OA             ASL A
08CC: E9 BE          SBC #$BE     ;SUBTRACT OFFSET
08CE: C9 C2          CMP #$C2     ;LEGAL CHARACTER?
08DO: 90 C1          BCC ERR2     ;NO
08D2: OA             ASL A        ;COMPRESS-LEFT JUSTIFY
08D3: OA             ASL A
08D4: A2 04          LDX #$04
08D6: OA             NXTM2 ASL A    ;DO 5 TRIPLE WORD SHIFTS
08D7: 26 42          ROL A4L
08D9: 26 43          ROL A4H
08DB: CA             DEX
08DC: 10 F8          BPL NXTM2
08DE: C6 3D          DEC A1H      ;DONE WITH 3 CHAR?
08EO: FO F4          BEQ NXTM2    ;YES BUT DO 1 MORE SHIFT
08E2: 10 E4          BPL NXTMN    ;NO
08E4:                *
08E4: A2 05          LDX #$05     ;5-CHAR ADDRESSING MODE
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0836: 20 3F 09  FORM2  JSR GETNSP      ;GET 1ST CHAR OF ADDRESS
08E9: 84 34                      STY YSAV
08EB: DD B4 F9                      CMP CHAR1,X  ;1ST CHAR MATCH PATTERN?
08EE: DO 13                      BNE FORM3      ;NO
08FO: 20 3F 09                      JSR GETNSP      ;YES, GET 2ND CHAR
08F3: DD BA F9                      CMP CHAR2,X  ;MATCHES SECOND HALF?
08F6: FO ON                      BEQ FORM5      ;YES
08F8: BD BA F9                      LDA CHAR2,X  ;NO, IS 2ND HALF ZERO?
08FB: FO 07                      BEQ FORM4      ;YES
08FD: C9 A4                      CMP #$A4      ;NO 2ND HAL OPTIONAL?
08FF: FO 03                      BEQ FORM4      ;YES
0901: A4 34                      LDY YSAV
0903: 18                      FORM3  CLC          ;CLEAR CARRY NO MATCH
0904: 88                      FORM4  DEY          ;BACK UP ONE CHARACTER
0905: 26 44                      FORM5  ROL FMT       ;FORM FORMAT BYTE
0907: EO 03                      CPX #$03      ;TIME TO CHECK FOR ADDRESS
0909: DO OD                      BNE FORM7      ;NO
090B: 20 A7 FF                      JSR GETNUM     ;YES
090E: A5 3F                      LDA A2H
0910: FO 01                      BEQ FORM6      ;HIGH ORDER BYTE ZERO
0912: E8                      INX          ;NO, INCR FOR 2-BYTE
0913: 86 35                      FORM6  STX L        ;STORE LENGTH
0915: A2 03                      LDX #$03      ;RELOAD FORMAT INDEX
0917: 88                      DEY          ;BACKUP A CHARACTER
0918: 86 3D                      FORM7  STX A1H      ;SAVE INDEX
091A: CA                      DEX          ;DONE WITH FORMAT CHECK?
091B: 10 C9                      BPL FORM2      ;NO
091D: A5 44                      LDA FMT       ;YES PUT LENGTH
091F: OA                      ASL A         ;IN LOW BITS
0920: OA                      ASL A
0921: 05 35                      ORA L
0923: C9 20                      CMP #$20
0925: BO 06                      BCS FORM8      ;ADD $ IF NONZERO LENGTH
0927: A6 35                      LDX L         ;AND DON'T ALREADY HAVE IT
0929: FO 02                      BEQ FORM8
092B: 09 80                      ORA #$80
092D: 85 44                      FORM8  STA FMT
092F: 84 34                      STY YSAV
0931: B9 00 02                      LDA IN,Y      ;GET NEXT NONBLANK
0934: C9 BB                      CMP #$BB      ;' ' START OF COMMENT
0936: FO 04                      BEQ FORM9      ;YES
0938: C9 8D                      CMP #$8D      ;A CARRIAGE RETURN ?
093A: DO 80                      BNE ERR4      ;NO, ERR
093C: 4C 67 08  FORM9  JMP TRYNEXT
093F: *
093F: B9 00 02  GETNSP  LDA IN,Y
0942: C8                      INY
0943: C9 AO                      CMP #$AO      ;GET NEXT NON BLANK CHAR
0945: FO F8                      BEQ GETNSP
0947: 60                      RTS

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