



# 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 A0        CMP #$A0    ;ASCII SPACE?
08AF: FO 13        BEQ SPACE   ;YES
08B1: C8           INY
08B2: C9 A4        CMP #$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?
08D0: 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?
08E0: 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: B0 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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