



Tech Info Library

Apple II+ Mini-Assembler (3 of 4)

Revised: 7/20/95
Security: Everyone

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0800:                ORG $800
0800: 20 4B D6        JSR NEW            ;SCRATCH ANY BASIC PROGRAM
0803: A9 00          LDA #$00
0805: 8D 00 08       STA #$0800
0808: 4C 9D 08       JMP RESETZ        ;BRANCH MINI/ASSEM'S START
080B: E9 81         REL    SBC #$81        ;IS FMT COMPATIBLE
080D: 4A            LSR A            ;WITH RELATIVE MODE?
080E: DO 14         BNE ERR3        ;NO.
0810: A4 3F         LDY A2H
0812: A6 3E         LDX A2L        ;DOUBLE DECREMENT
0814: DO 01         BNE REL2
0816: 88            DEY
0817: CA            REL2   DEX
0818: 8A            TXA
0819: 18            CLC
081A: E5 3A         SBC PCL        ;FORM ADDRESS PC-2
081C: 85 3E         STA A2L
081E: 10 01         BPL REL3
0820: C8            INY
0821: 98            REL3   TYA
0822: E5 3B         SBC PCH
0824: D0 6B         ERR3   BNE ERR        ;TOO FAR TO BRANCH ERROR
0826:                *
0826: A4 2F         FINDOP LDY LENGTH
0828: B9 3D 00      FNDOP2 LDA A1H,Y        ;MOVE INST TO (PC)
082B: 91 3A         STA (PCL),Y
082D: 88            DEY
082E: 10 F8         BPL FNDOP2
0830: 20 1A FC       JSR CURSUP
0833: 20 1A FC       JSR CURSUP        ;RESTORE CURSOR
0836: 20 DO F8       JSR INSTDSP       ;TYPE FORMATTED LINE
0839: 20 53 F9       JSR PCADJ        ;UPDATE PC
083C: 84 3B         STY PCH

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083E: 85 3A          STA PCL
0840: 4C A0 08          JMP NXTLINE      ;GET NEXT LINE
0843: 20 BE FF  FKMON3 JSR TOSVB        ;GO TO DELIM HANDLER
0846: A4 34          LDY YSAV        ;RESTORE Y-INDEX
0848: 20 A7 FF  FKMON  JSR GETNUM      ;READ PARAM
084B: 84 34          STY YSAV        ;SAVE Y-INDEX
084D: A0 17          LDY #$17        ;INIT DELIM INDEX
084F: 88          FKMON2  DEY          ;CHECK NEXT DELIM
0850: 30 4B          BMI RESETZ     ;ERR IF UNRECOGNIZED DELIM
0852: D9 CC FF          CMP CHRtbl,Y   ;COMPARE WITH DELIM TABLE
0855: D0 F8          BNE FKMON2     ;NO MATCH
0857: C0 15          CPY #$15       ;MATCH, IS IT CR?
0859: D0 E8          BNE FKMON3     ;NO HANDLE IT IN MONITOR
085B: A5 31          LDA MODE
085D: A0 00          LDY #$00
085F: C6 34          DEC YSAV
0861: 20 00 FE          JSR BL1        ;HANDLE CR OUTSIDE MONITOR
0864: 4C A0 08          JMP NXTLINE
0867:                *
0867: A5 3D  TRYNEXT LDA A1H          ;GET TRIAL OPCODE
0869: 20 8E F8          JSR INSDS2     ;GET FMT + LENGTH FOR
086C: AA          TAX            ;OPCODE
086D: BD 00 FA          LDA MNEMR,X    ;GET LOWER MNEMONIC BYTE
0870: C5 42          CMP A4L        ;MATCH?
0872: D0 13          BNE NEXTOP     ;NO, TRY NEXT OPCODE
0874: BD C0 F9          LDA MNEML, X   ;GET UPPER MNEMONIC BYTE
0877: C5 43          CMP A4H        ;MATCH ?
0879: D0 OC          BNE NEXTOP     ;NO, TRY NEXT OPCODE
087B: A5 44          LDA FMT
087D: A4 2E          LDY FORMAT     ;GET TRIAL FORMAT
087F: C0 9D          CPY #$9D       ;IS TRIAL FORMAT RELATIVE?
0881: FO 88          BEQ REL        ;YES
0883: C5 2E          CMP FORMAT     ;SAME FORMAT?
0885: FO 9F          BEQ FINDOP     ;YES
0887: C6 3D  NEXTOP  DEC A1H          ;NO, TRY NEXT OPCODE
0889: D0 DC          BNE TRYNEXT
088B: E6 44          INC FMT        ;NO MORE, TRY WITH LEN=2
088D: C6 35          DEC L          ;WAS L=2 ALREADY?
088F: FO D6          BEQ TRYNEXT    ;NO
0891:
0891: A4 34  ERR      LDY YSAV        ;YES, UNRECOGNIZED INST.
0893: 98  ERR2     TYA
0894: AA          TAX
0895: 20 4A F9          JSR PRBL2     ;PRINT ^ UNDER LAST READ
0898: A9 DE          LDA #$DE      ;CHAR TO INDICATE ERROR
089A: 20 ED FD          JSR COUT      ;POSITION
089D: 20 EA FF  RESETZ JSR BELL
08A0: A9 A1  NXTLINE LDA #$A1      ; '!'
08A2: 85 33          STA PROMPT    ;INITIALIZE PROMPT
08A4: 20 67 FD          JSR GETLNZ    ;GET LINE
08A7: 20 C7 FF          JSR ZMODE     ;INIT SCREEN STUFF

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