



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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