



Tech Info Library

Apple IIGS: 6502 communications applications (2 of 2)

Revised: 6/10/87
Security: Everyone

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...

```
CharWait      NOP                ; This rtn checks the input buffer for chars
              ldx   #$C2          ; and returns the result in the carry flag
              ldy   #$20
              lda   #$01          ; status call 1 is input status
              jsr   (StatusCall)
              cpx   #0            ; test for an error
              beq   *+5           ; if its zero skip next jump
              jmp   Error         ; if non-zero an error occured call error rtn
              RTS
```

```
OutEmpty      NOP                ;This rtn checks the output buffer for chars
              ldx   #$C2          ; and returns the result in the carry flag
              ldy   #$20
              lda   #$01          ; status call 1 is input status
              jsr   (StatusCall)
              cpx   #0            ; test for an error
              beq   *+5           ; if its zero skip next jump
              jmp   Error         ; if non-zero an error occured call error rtn
              RTS
```

```
GetChar       NOP                ; This routine gets an input char from the
              ; serial port and places it into <A>
              ldx   #$C2
              ldy   #$20
              jsr   (ReadChar)
              cpx   #0            ; test for an error
              beq   *+5           ; if its zero skip next jump
              jmp   Error         ; if non-zero an error occured call error rtn
              RTS
```

```
PutChar       NOP                ; This routine writes a char in <A> to the
              ; serial port
              ldx   #$C2
              ldy   #$20
```

```

        jsr    (WriteChar)
        cpx    #0            ; test for an error
        beq    *+5          ; if its zero skip next jump
        jmp    Error        ; if non-zero an error ocured call error rtn
        RTS

DTROn    NOP                ; This routine turns the DTR line on
        lda    #$00         ; this rtn uses the extended interface calls
        sta    DTRData+4    ; set up the data block
        sta    DTRData+5
        ldy    #$00         ; on entry <x> <y> and <A> contain address of
        ldx    DTRDPtr+1    ; the call parm block
        lda    DTRDPtr
        jsr    (ExtendCall)
        rts

DTROff   NOP                ; This routine turns the DTR line off
        lda    #$80         ; this rtn uses the extended interface calls
        sta    DTRData+4    ; set up the data block
        sta    DTRData+5
        ldy    #$00         ; on entry <x> <y> and <A> contain address of
        ldx    DTRDPtr+1    ; the call parm block
        lda    DTRDPtr
        jsr    (ExtendCall)
        rts

DTRDPtr  dw    DTRData      ; pointer to our data structure
DTRData  DFB    03          ; # of params in call
        DFB    $0B         ; call # (0B means set DTR line)
        DW    0000         ; word for result code
        DW    0000         ; call data
                                ;(0000 means clear DTR, 8000 means set it)

SwitchBaud  NOP            ; This rtn shows how to change the Baud Rate
                                ; it turns on 1200 Baud and buffering. It
                                ; could
                                ; be expanded to handle all port commands
                                ; Init the string index
                                ; get the next byte to send
                                ; save index
                                ; Write out the char to the port
                                ; get the index back
                                ; are we done?
                                ; if so then end
                                ; if not get the next char and continue
                                ;

SB0010   ldx    #00          ; Init the string index
        lda    theString,x  ; get the next byte to send
        phx                    ; save index
        jsr    PutChar       ; Write out the char to the port
        plx                    ; get the index back
        cpx    StrLength     ; are we done?
        beq    SB0020        ; if so then end
        inx                    ; if not get the next char and continue
        jmp    SB0010

SB0020   rts

theString  dfb    01          ; command char (Control-A)
        asc    '8B'         ; 1200 baud command

StrLength  dfb    02

```