

HDI High Speed SIO#

Manual:#

HDI Manual: [HDI Interface/HDI Manual.pdf](#)

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01000 * High-Speed SIO-Driver, will
01010 * be relocated by HDI and
01020 * send to computer.
01030 ;
01040 USIOA      LDA $0301      ;DUNIT
01050             BNE SIO2
01060             LDX #$08
01070 DLWTBLL   STA LWTBL-1,X  ;$F614
01080             DEX
01090             BNE DLWTBLL
01100             RTS
01110 SIO2       TAX
01120 REL01     LDA LWTBL-1,X  ;$F614
01130             BNE SIO3
01140             LDA #$28
01150 REL02     STA LWTBL-1,X  ;$F614
01160             LDY #$07
01170 SIOCL    LDA $0302,Y    ;DCOMND
01180             PHA
01190 REL03     LDA C3F,Y      ;$F60D
01200             STA $0302,Y  ;DCOMND
01210             DEY
01220             BPL SIOCL
01230 REL04     JSR SIO3       ;$F450
01240             LDX $0301    ;DUNIT
01250             LDY $0303    ;DSTATS
01260             BMI SIO21
01270             LDA $01
01280 REL05     STA LWTBL-1,X  ;$F614
01290 SIO21     LDY #$00
01300 SIO21CL   PLA
01310             STA $0302,Y  ;DCOMND
01320             INY
01330             CPY #$08
01340             BCC SIO21CL
01350 SIO3      SEI
01360             TXA
01370             ORA #$30
01380             STA $023A    ;CDEVIC
01390             LDA $0302    ;DCOMND
01400             STA $023B    ;CCOMND
01410             LDA $030A    ;DAUX1
01420             STA $023C    ;CAUX1
01430             LDA $030B    ;DAUX2
01440             STA $023D    ;CAUX2
01450 REL06     LDA LWTBL-1,X  ;$F614
01460             STA $D204    ;AUDF3
01470             TSX
01480             STX $3F      ;FEOF
01490             LDA #$02
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01500		STA \$37	;DRETRY
01510	IO11	LDA #\$07	
01520		STA \$36	;CRETRY
01530	IO12	LDA #\$34	
01540		STA \$D303	
01550		LDA #\$00	
01560		STA \$30	;STATUS
01570		STA \$3E	;FTYPE
01580		STA \$35	;BUFEND+1
01590		STA \$D206	;AUDF4
01600		LDA #\$3A	
01610		STA \$32	;BUFADR
01620		LDA #\$02	
01630		STA \$33	;BUFADR+1
01640		ASL	
01650		STA \$34	;BUFEND
01660	REL07	JSR SEND1	;\$F4DC
01670		LDA \$0304	;DBUFLO
01680		STA \$32	;BUFADR
01690		LDA \$0305	;DBUFHI
01700		STA \$33	;BUFADR+1
01710		LDA \$0308	;DBYTLO
01720		STA \$34	;BUFEND
01730		LDA \$0309	;DBYTHI
01740		STA \$35	;BUFEND+1
01750		LDA \$0303	;DSTATS
01760		BPL IO2	
01770	REL08	JSR SEND1	;\$F4DC
01780	IO2	DEC \$3E	;FTYPE
01790	REL09	JSR SETT11	;\$F544
01800		BIT \$0303	;DSTATS
01810		BVC IO3	
01820	REL10	JSR GETA1	;\$F521
01830	IO3	LDA #\$A0	
01840		STA \$D207	;AUDC4
01850		LDA \$10	
01860		STA \$D20E	;IRQEN
01870	REL11	JSR CLR11	;\$F576
01880		LDA \$30	;STATUS
01890		BEQ IO4	
01900		DEC \$37	;DRETRY
01910		BNE IO11	
01920	IO4	TAY	
01930		BNE IO5	
01940		INY	
01950	IO5	STY \$0303	;DSTATS
01960		CLI	
01970		RTS	
01980	SEND1	LDY #\$00	
01990	SE1	INY	
02000		BNE SE1	
02010		LDA #\$23	
02020	REL12	JSR POKEY	;\$F5F7
02030		LDA (\$32),Y	;BUFADR
02040		STA \$31	;CHKSUM
02050		STA \$D20D	;SEROUT
02060		INY	
02070		BNE SE3	
02080	SE2	LDA (\$32),Y	;BUFADR

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02090 REL13      JSR PUTBYTE      ;$F5D4
02100           INY
02110           BNE SE3
02120           INC $33          ;BUFADR+1
02130           DEC $35          ;BUFEND+1
02140           LDX #$E0
02150 SEWL      INX
02160           BNE SEWL
02170 SE3       CPY $34          ;BUFEND
02180           BNE SE2
02190           LDA $35          ;BUFEND+1
02200           BNE SE2
02210           LDA $31          ;CHKSUM
02220 REL14     JSR PUTBYTE      ;$F5D4
02230 SEO1      LDA $D20E        ;IRQST
02240           AND #$08
02250           BNE SEO1
02260           LDY #$03
02270 REL15     JSR STOUTX0      ;$F578
02280           LDA #$C0
02290           STA $D20E        ;IRQEN
02300           BNE RDQUIT
02310 GETA1     LDY #$00
02320           STY $31          ;CHKSUM
02330 GE1       JSR GETBYTE      ;$F5B1
02340           STA ($32),Y      ;BUFADR
02350 REL16     JSR ADDSUM        ;$F5EF
02360           INY
02370           BNE GE2
02380           INC $33          ;BUFADR+1
02390           DEC $35          ;BUFEND+1
02400 GE2       CPY $34          ;BUFEND
02410           BNE GE1
02420           LDA $35          ;BUFEND+1
02430           BNE GE1
02440 REL17     JSR GETBYTE      ;$F5B1
02450           CMP $31          ;CHKSUM
02460           BNE ERR8F
02470           RTS
02480 SETTI1    LDA $0306        ;DTIMLO
02490           ROR
02500           ROR
02510           TAY
02520           AND #$3F
02530           TAX
02540           TYA
02550           ROR
02560           AND #$C0
02570           TAY
02580 REL18     JSR STOUT        ;$F57A
02590 RDQUIT    LDA #$3C
02600           STA $D303
02610           LDA #$13
02620 REL19     JSR POKEY        ;$F5F7
02630 REL20     JSR GETBYTE      ;$F5B1
02640           CMP #$41
02650           BEQ CLRTI1
02660           CMP #$43
02670           BEQ CLRTI1

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02680          CMP  #$45
02690          BEQ  ERR90
02700          LDA  #$8B
02710          BNE  ERR
02720  ERR90    LDA  #$90
02730          STA  $30          ;STATUS
02740  CLRTI1   LDY  #$00
02750  STOUTX0  LDX  #$00
02760  STOUT    LDA  ERRABS      ;$F
02770          STA  $0226        ;CDTMA1
02780  STOU2    LDA  ERRABS+1    ;$F
02790          STA  $0227        ;CDTMA1+1
02800          LDA  #$01
02810          JMP  $E45C        ;Setze CDTMV1
02820  ERRABS   .DA  ERR8A      ;$F
02830  IOER80   LDX  $3F        ;FEOF
02840          TXS
02850          LDA  #$80
02860          STA  $30          ;STATUS
02870          BNE  EABS3
02880  ERR8F    LDA  #$8F
02890          .HX  2C
02900  ERR8A    LDA  #$8A        ;Timeout
02910  ERR      STA  $30        ;STATUS
02920          LDX  $3F        ;FEOF
02930          TXS
02940          LDA  $3E          ;FTYPE
02950          BMI  ERR
02960          DEC  $36          ;CRETRY
02970          BEQ  ERR
02980  REL21    JMP  IO12        ;$F47A
02990  ERR      LDA  #$28
03000          STA  $D204        ;AUDF3
03010  EABS3    JMP  IO3          ;$F4C1
03020  GETBYTE  LDA  $D20E        ;IRQST
03030          BPL  IOER80
03040          AND  #$20
03050          BNE  GETBYTE
03060          LDA  #$DF
03070          STA  $D20E        ;IRQEN
03080          LDA  #$E0
03090          STA  $D20E        ;IRQEN
03100          LDA  $D20F        ;SKSTAT
03110          STA  $D20A        ;SKRES
03120          BPL  ERR8A
03130          AND  #$20
03140          BEQ  ERR8A
03150          LDA  $D20D        ;SERIN
03160          RTS
03170  PUTBYTE  TAX
03180  PUTA1    LDA  $D20E        ;IRQST
03190          AND  #$10
03200          BNE  PUTA1
03210          LDA  #$EF
03220          STA  $D20E        ;IRQEN
03230          LDA  #$D0
03240          STA  $D20E        ;IRQEN
03250          TXA
03260          STA  $D20D        ;SEROUT

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03270      LDX $D20E      ;IRQST
03280      BPL IOER80
03290 ADDSUM      CLC
03300      ADC $31        ;CHKSUM
03310      ADC #$00
03320      STA $31        ;CHKSUM
03330      RTS
03340 POKEY      STA $D20F      ;SKCTL
03350      STA $D20A      ;SKRES
03360      LDA #$28
03370      STA $D208      ;AUDCTL
03380      LDA #$A8
03390      STA $D207      ;AUDC4
03400      LDA #$F8
03410      STA $D20E      ;IRQEN
03420      RTS
03430 C3F      .HX 3F40
03440      .DA $0001
03450      .DA $0001
03460      .DA $0001
03470 LWTBL      .BL 8,0
03480 USIOE
03490 ABSTBL      .DA DLWTBLL+1,REL01+1,REL02+1,REL03+1,REL04+1,REL05+1,REL06+1
03500      .DA REL07+1,REL08+1,REL09+1,REL10+1,REL11+1,REL12+1,REL13+1
03510      .DA REL14+1,REL15+1,GE1+1,REL16+1,REL17+1,REL18+1,REL19+1
03520      .DA REL20+1,STOUT+1,STOU2+1,ERRABS,REL21+1,EABS3+1

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