


```

0000 1: ;-----
0000 2: ;      Copyright 2010 Integrated Logic Systems
0000 3: ;      Source Code is Copyright Stephen J. Car
0000 4: ;
0000 5: ;
0000 6: ;      Please do not share this source!
0000 7: ;-----
0000 8: ;      S2Utime.com.com
0000 9: ;
0000 10: ;
0000 11: ;
0000 12: ; *****
0000 13: ; **      **
0000 14: ; ** SPARTA DOS TIME **
0000 15: ; ** UTILITY FOR **
0000 16: ; ** SIO2USB **
0000 17: ; ** (C) 2008 ABBUC **
0000 18: ; ** LICENSE: GPLv3 **
0000 19: ; **      **
0000 20: ; ** P: C. Strotmann **
0000 21: ; ** H: T. Grasel **
0000 22: ; ** H. Reminder **
0000 23: ; ** E. Puetz **
0000 24: ; **      **
0000 25: ; ** VERSION 1.00 **
0000 26: ; **      **
0000 27: ; *****
0000 28: ;
0000 29: ;
0000 30: ; ~~~~~
0000 31: ;-----
0000 32: ; Notes: o This source code MAY NOT be placed for download
0000 33: ;      o "mea" is a macro that loads the address of the
0000 34: ;      into the pointer specified by the second field.
0000 35: ;-----
0000 36: ; Assembler: MADMAC (tm) ST Cross Assembler (Atari Corp)
0000 37: ;      XASM st and IBM VERSIONS
0000 38: ;-----
0000 39: ;=====
0000 40: ;
0000 41: com_file_name: .macro
0000 42: ;      dc.b 13,"filename.ext",$9b
0000 43: ;      dc.b 12,"S2Utime.com ",$9b
0000 44: ;      .endm
0000 45: ;
0000 46: ;
0000 47: ;~~~~~
0000 48: ; File revision history. Version Number in hex
0000 49: ;
0000 50: file_ver:      equ $11
0000 51: ;~~~~~
0000 52: ; the Month in dec for the first time this revision
0000 53: ;was compiled

```

```

0000 54: ;
0000 55: c_month:      equ 9
0000 56: ;~~~~~
0000 57: ; the day in dec for the first time this revision
0000 58: ;was compiled
0000 59: c_day:        equ 1
0000 60: ;~~~~~
0000 61: ; the year in dec for the first time this revision
0000 62: ;was compiled
0000 63: c_year:       equ 2012
0000 64: ;~~~~~
0000 65: ; Type of compiler used in program
0000 66: ;
0000 67: ; 0 = unknown Compiler
0000 68: ; 1 = xasm
0000 69: ; 2 = mac_65
0000 70: ; 3 = basic
0000 71: ; 4 = compiled basic xl
0000 72: ; 5 = C65
0000 73: ; 6 = Action
0000 74: ;
0000 75: ; We can add more as time goes on!
0000 76: ;
0000 77: ;
0000 78: ;
0000 79: xasm:         equ 1
0000 80: mac_65:       equ 2
0000 81: basic:        equ 3
0000 82: basicxl:      equ 4
0000 83: c65:         equ 5
0000 84: action:       equ 6
0000 85:
0000 86: file_compiler: equ xasm
0000 87: ;~~~~~
0000 88: ; is this relocatable code ?
0000 89: ; anyother value other than 1 or 2 would be unknown
0000 90: r..yes:       equ 1
0000 91: r..no:        equ 2
0000 92: ;
0000 93: ;~~~~~
0000 94: ; Gotta define if it can be relocated
0000 95: l_relocatable: equ r..no
0000 96: ;
0000 97: ;
0000 98: ;~~~~~
0000 99: r..crl:       equ $7d
0000 100: r..crlf:      equ $9b
0000 101: r..space:     equ $20
0000 102: r..bypassdos: equ $15 ; bypass dos check
0000 103: r..supress:   equ $ff
0000 104:
0000 105: l_frstscreenbyte: equ r..bypassdos
0000 106: ;~~~~~

```

```

0000 107: ; The language the output file is in.
0000 108: ;
0000 109: ;
0000 110: ; 0 = Undefined
0000 111: ; 1 = English
0000 112: ; 2 = German
0000 113: ;
0000 114: r..language: equ 1
0000 115: ;~~~~~
0000 116: ZPF0: equ $F0
0000 117: ZPF1: equ ZPF0+1
0000 118: SDBASE: equ $700
0000 119: SDDEV: equ $761
0000 120: SDDATE: equ $77B
0000 121: SDTIME: equ SDDATE+3
0000 122: EDITRV: equ $E400
0000 123:
0000 124:
0000 125: .include equates
0000 126: .include globals
0000 127: .include macros
0000 128:
5000 129: .org $5000
5000 130:
5000 131: win_start:
5000 132: header_info:
5000 133: .include header
52a7 134: ;
52a7 135: peekabyte:
52a7 136: ;-----
52a7 137: START:
52a7 a960 138: lda #$60
52a9 8da752 139: sta start
52ac 203253 140: jsr COUTINIT
52af 141: ; jsr BANNER
52af 208153 142: jsr GETTIME
52b2 3016 143: bmi SIOERROR
52b4 208f53 144: jsr TESTDATA
52b7 20da53 145: jsr SETTIME
52ba 4cee53 146: jmp EXIT
52bd 147: ;-----
52bd 148: ERRORMSG:
52bd 206453 149: jsr PRINT
52c0 fd 150: dc.b $FD ; B
52c1 457272 151: dc.b "Error: "
52c8 ea 152: dc.b $EA
52c9 60 153: RTS
52ca 154: ;-----
52ca 155: SIOERROR:
52ca 20bd52 156: jsr ERRORMSG
52cd 206453 157: jsr PRINT
52d0 647572 158: dc.b "during SIO Communication"
52e8 ea 159: dc.b $EA

```

```

52e9 4c1753 160:          jmp    EEXIT
52ec      161: ;-----
52ec      162: DATAERROR:
52ec 20bd52 163:          jsr    ERRORMSG
52ef 206453 164:          jsr    PRINT
52f2 77726f 165:          dc.b   "wrong or incomplete data r
5313 ea    166:          dc.b   $EA
5314 4c1753 167:          jmp    EEXIT
5317      168: ;-----
5317      169: EEXIT:
5317 206453 170:          jsr    PRINT
531a 9b    171:          dc.b   $9B
531b 446174 172:          dc.b   "Date/Time not set!"
532d 9bea   173:          dc.b   $9B,$EA
532f 4c0054 174:          jmp    TODOS
5332      175: ;-----
5332      176: ;BANNER:
5332      177: ;          jsr    PRINT
5332      178: ;          dc.b   "SIO2USB DATE/TIME UTILITY
5332      179: ;          dc.b   $9B
5332      180: ;          dc.b   "(C) 2008 ABBUC/RAF"
5332      181: ;          dc.b   $9B,$EA
5332      182: ;          RTS
5332      183: ;-----
5332      184: ;DETECTDOS:
5332      185: ;          ldy    #0
5332      186: ;          lda    SDBASE,Y
5332      187: ;          cmp    #'S'
5332      188: ;          bne    ISREAL
5332      189: ;          INY
5332      190: ;          INY
5332      191: ;          INY
5332      192: ;          lda    SDBASE,Y
5332      193: ;          cmp    #'B'
5332      194: ;          beq    BEWEDOS
5332      195: ; IS ORIGINAL SPARTADOS
5332      196: ;          jsr    PRINT
5332      197: ;          dc.b   "Sparta DOS"
5332      198: ;          dc.b   $EA
5332      199: ;          jsr    DETECTED
5332      200: ;          jmp    SETTIME
5332      201: ;BEWEDOS:
5332      202: ;          jsr    PRINT
5332      203: ;          dc.b   "BW-DOS"
5332      204: ;          dc.b   $EA
5332      205: ;          jsr    DETECTED
5332      206: ;          jsr    PRINT
5332      207: ;          dc.b   $9B,$EA
5332      208: ;          jmp    SETTIMEBW
5332      209: ;ISREAL:
5332      210: ;          cmp    #'R'
5332      211: ;          bne    NOSPARTA
5332      212:

```

```

5332 213:
5332 214: ;      jsr  PRINT
5332 215: ;      dc.b  "REALDOS"
5332 216: ;      dc.b  $EA
5332 217: ;      jsr  PRINT
5332 218: ;      dc.b  " detected"
5332 219: ;      dc.b  $EA
5332 220: ;      jmp  SETTIME
5332 221: ;NOSPARTA:
5332 222: ;      jsr  PRINT
5332 223: ;      dc.b  "No SPARTA compatible DOS"
5332 224: ;      dc.b  $EA
5332 225: ;      jsr  DETECTED
5332 226: ;      lda  #$9B
5332 227: ;      jsr  COUT
5332 228: ;      jmp  EEXIT
5332 229: ;-----
5332 230: ;DETECTED:
5332 231: ;      RTS
5332 232: ;-----
5332 233: COUTINIT:
5332 a01e 234:      ldy  #$1E
5334 b91a03 235: .1:      lda  HATABS,Y
5337 c945 236:      cmp  #'E'
5339 f008 237:      beq  .3
533b 88 238:      DEY
533c 88 239:      DEY
533d 88 240:      DEY
533e 10f4 241:      bpl  .1
5340 4c5a53 242:      jmp  .2
5343 b91b03 243: .3:      lda  HATABS+1,Y
5346 85f0 244:      sta  ZPF0
5348 b91c03 245:      lda  HATABS+2,Y
534b 85f1 246:      sta  ZPF1
534d a007 247:      ldy  #7
534f b1f0 248:      lda  (ZPF0),Y
5351 8d5d53 249:      sta  COUT2+1
5354 88 250:      DEY
5355 b1f0 251:      lda  (ZPF0),Y
5357 8d6053 252:      sta  COUT1+1
535a 60 253: .2:      RTS
535b 254: ;-----
535b 255: COUT:
535b aa 256:      TAX
535c a9f2 257: COUT2:      lda  #$F2
535e 48 258:      PHA
535f a9af 259: COUT1:      lda  #$AF
5361 48 260:      PHA
5362 8a 261:      TXA
5363 60 262:      RTS
5364 263: ;-----
5364 264: PRINT:
5364 68 265:      PLA

```

```

5365 85f0 266:          sta  ZPF0
5367 68 267:          PLA
5368 85f1 268:          sta  ZPF1
536a e6f0 269: .1:         inc  ZPF0
536c d002 270:          bne  .2
536e e6f1 271:          inc  ZPF1
5370 a200 272: .2:         ldx  #0
5372 a1f0 273:          lda  (ZPF0,X)
5374 c9ea 274:          cmp  #$EA
5376 f006 275:          beq  .3
5378 205b53 276:          jsr  COUT
537b 4c6a53 277:          jmp  .1
537e 6cf000 278: .3:         jmp  (ZPF0)
5381      279: ;-----
5381      280: ;ISXL:
5381      281: ;          ldy  #$1B
5381      282: ;          lda  (DOSVEC),Y
5381      283: ;          cmp  #$FF
5381      284: ;          beq  .1
5381      285: ;          jsr  PRINT
5381      286: ;          dc.b  " under ROM (XL/XE)"
5381      287: ;          dc.b  $9B,$EA
5381      288: ;          CLC
5381      289: ;          RTS
5381      290: ;
5381      291: ;.1:         jsr  PRINT
5381      292: ;          dc.b  " in main RAM"
5381      293: ;          dc.b  $9B,$EA
5381      294: ;          SEC
5381      295: ;          RTS
5381      296: ;-----
5381      297: GETTIME:
5381 a20b 298:          ldx  #$0B
5383 bd0354 299: .1:         lda  READRTC,X
5386 9d0003 300:          sta  DDEVIC,X
5389 ca 301:          DEX
538a 10f7 302:          bpl  .1
538c 4c59e4 303:          jmp  SIOV
538f      304: ;-----
538f      305: TESTDATA:
538f ad0d54 306:          lda  su2.buf
5392 c906 307:          cmp  #6
5394 d007 308:          bne  .3
5396 ad1454 309:          lda  su2.buf+7
5399 c9ff 310:          cmp  #$FF
539b f003 311:          beq  .2
539d 4cec52 312: .3:         jmp  DATAERROR
53a0      313: ; CONVERT BCD -> DEC
53a0 a205 314: .2:         ldx  #5
53a2 bd0e54 315: .1:         lda  su2.buf+1,X
53a5 29f0 316:          AND  #$F0
53a7 4a 317:          LSR
53a8 4a 318:          LSR

```

```

53a9 85f0 319:      sta  ZPF0
53ab 4a 320:      LSR
53ac 65f0 321:      adc  ZPF0
53ae fd0e54 322:      SBC  su2.buf+1,X
53b1 49ff 323:      EOR  #$FF
53b3 9d0e54 324:      sta  su2.buf+1,X
53b6 ca 325:      DEX
53b7 10e9 326:      bpl  .1
53b9 327: ;
53b9 a202 328:      ldx  #2
53bb a00f 329:      ldy  #$0F
53bd bd1154 330: .4:      lda  su2.buf+4,X
53c0 910a 331:      sta  (DOSVEC),Y
53c2 88 332:      DEY
53c3 ca 333:      DEX
53c4 10f7 334:      bpl  .4
53c6 335: ;
53c6 a010 336:      ldy  #$10
53c8 ad1054 337:      lda  su2.buf+3
53cb 910a 338:      sta  (DOSVEC),Y
53cd c8 339:      INY
53ce ad0f54 340:      lda  su2.buf+2
53d1 910a 341:      sta  (DOSVEC),Y
53d3 c8 342:      INY
53d4 ad0e54 343:      lda  su2.buf+1
53d7 910a 344:      sta  (DOSVEC),Y
53d9 60 345:      RTS
53da 346: ;-----
53da 347: SETTIME:
53da 348: ;      jsr  ISXL
53da ad01d3 349:      lda  PORTB
53dd 48 350:      PHA
53de 29fe 351:      AND  #$FE
53e0 8d01d3 352:      sta  PORTB
53e3 20c3ff 353:      jsr  VSETTD
53e6 68 354:      PLA
53e7 8d01d3 355:      sta  PORTB
53ea 60 356:      RTS
53eb 357: ;-----
53eb 358: SETTIMEBW:
53eb 6c0807 359:      jmp  ($708)
53ee 360: ; FALLTHROUGH
53ee 361: ;-----
53ee 362: EXIT:
53ee 206453 363:      jsr  PRINT
53f1 446174 364:      dc.b  "Date/Time set"
53fe 9bea 365:      dc.b  $9B,$EA
5400 366: ; FALLTHROUGH
5400 367: ;-----
5400 368: TODOS:
5400 6c0a00 369:      jmp  (DOSVEC)
5403 370: ;-----
5403 371: READRTC:

```



```
-----
5403 710002 372:          dc.b  $71,$00,$02,$40
5407 0d54  373:          dc.w  su2.buf
5409 070080 374:          dc.b  $07,$00,$80,$00
540d      375: ;-----
540d 000000 376: su2.buf:      dc.b  $00,$00,$00,$00
5411 000000 377:          dc.b  $00,$00,$00,$00
5415      378: ;-----
5415      379: Win_end:      ds.b  0
5415      380: ;
```

End assembly: no errors