



```

0000 1: ;-----
0000 2: ;      Copyright 2010 Integrated Logic Systems
0000 3: ;      Source Code is Copyright St
0000 4: ;
0000 5: ;
0000 6: ;      Please do not share this source!
0000 7: ;-----
0000 8: ;      Exp_on.com
0000 9: ;
0000 10: ;      Can turn the express Cart on or off
0000 11: ;
0000 12: ;
0000 13: ;Updated the screen Print Utility so it will work with the
0000 14: ; This change will also help "Print P:"      8/1
0000 15: ;
0000 16: ;
0000 17: ;Also added code for Control+1 pause of screen to the high
0000 18: ;handling.      8/24/2012      sjc
0000 19: ;
0000 20: ;
0000 21: ;      ~~~~~
0000 22: ;-----
0000 23: ; Notes: o This source code MAY NOT be placed for download
0000 24: ;      o "mea" is a macro that loads the address of the
0000 25: ;      into the pointer specified by the second f
0000 26: ;-----
0000 27: ; Assembler: MADMAC (tm) ST Cross Assembler (Atari Corp)
0000 28: ;      XASM  st and IBM VERSIONS
0000 29: ;-----
0000 30: ;=====
0000 31:
0000 32: com_file_name:      .macro
0000 33: ;      dc.b  13,"filename.ext",$9b
0000 34: ;      dc.b  12,"Exp_on.com  ", $9b
0000 35: ;      .endm
0000 36:
0000 37: ;
0000 38: ;~~~~~
0000 39: ; File revision history. Version Number in hex
0000 40: ;
0000 41: file_ver:      equ  $13
0000 42: ;~~~~~
0000 43: ; the Month in dec for the first time this revision
0000 44: ;was compiled
0000 45: ;
0000 46: c_month:      equ  8
0000 47: ;~~~~~
0000 48: ; the day in dec for the first time this revision
0000 49: ;was compiled
0000 50: c_day:      equ  26
0000 51: ;~~~~~
0000 52: ; the year in dec for the first time this revision
0000 53: ;was compiled

```

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

```

0000      107:
0000      108:
0000      109:          .include    equates
0000      110:          .include    globals
0000      111:          .include    macros
0000      112:
0000      113:
4000      114:          .org    $4000
4000      115:
4000      116:
4000      117:
4000      118: win_start:
4000      119: header_info:
4000      120:          .include    header
42a7      121: ;
42a7      122:
42a7      123:
42a7      124:
42a7      125: ATARI:
42a7 a980  126:          LDA    #$80
42a9 8dc602 127:          STA    $02C6
42ac a9ff  128:          LDA    #$FF
42ae 8dc502 129:          STA    $02C5
42b1 a97d  130:          LDA    #$7D
42b3 204f48 131:          JSR    ECHO
42b6 202a46 132:          JSR    KEY_OFF
42b9 200646 133:          JSR    TD_ON
42bc a952  134:          LDA    #'R'
42be cd0007 135:          CMP    $0700
42c1 f048  136:          beq    not_x
42c3 a953  137:          lda    #'S'
42c5 cd0007 138:          cmp    $700
42c8 d017  139:          BNE    OTHER_DOS
42ca a940  140:          LDA    #$40 ; X CART VERSION #
42cc cd0107 141:          CMP    $0701
42cf d03a  142:          BNE    NOT_X
42d1 4c9746 143:          JMP    TOP
42d4      144:
42d4 0000  145: HAPPY_B:    dc.b    $00,$00
42d6 20aa46 146: WARP:      JSR    SCREEN1
42d9 203e43 147:          JSR    WARP1
42dc a968  148:          LDA    #'h'
42de 4c6843 149:          JMP    WARP2
42e1 206344 150: OTHER_DOS: JSR    PRINTSI
42e4 7d9b20 151:          dc.b    $7D,$9B," This is odd, no Spartados!!"
4304 ad0007 152:          LDA    $0700
4307 c953  153:          CMP    #'S'
4309 d0cb  154:          BNE    WARP
430b 20aa46 155: NOT_X:     JSR    SCREEN1
430e a93e  156:          LDA    # low WARP1
4310 48     157:          PHA
4311 a943  158:          LDA    # high WARP1
4313 48     159:          PHA

```

```
4314 206344 160:      JSR  PRINTSI
4317 9b9b 161:      dc.b  $9B,$9B
4319 2020db 162:      dc.b  <+128>," [Return] for Express Cart
433b 9bff 163:      dc.b  $9B,-1
433d 9b 164:      dc.b  $9B
433e 165:
433e 206344 166: WARP1:  JSR  PRINTSI
4341 c1eef9 167:      dc.b  <+128>,"Any other key to boot Expre
4363 9bff 168:      dc.b  $9B,-1
4365 202444 169:      JSR  GETKEY
4368 170:
4368 8dd442 171: WARP2:  STA  HAPPY_B
436b a901 172:      LDA  #$01
436d 8d77d5 173:      STA  $D577
4370 174: ;
4370 adf6bf 175:      LDA  $BFF6
4373 c945 176:      CMP  #'E'
4375 d02d 177:      BNE  DAMN_BANK
4377 adfebf 178:      LDA  $BFFE
437a 8d9e43 179:      STA  TTL+1
437d adffbf 180:      LDA  $BFFF
4380 8d9f43 181:      STA  TTL+2
4383 add442 182:      LDA  HAPPY_B
4386 c99b 183:      CMP  #$9B
4388 f00e 184:      BEQ  CMOS
438a a514 185:      LDA  $14
438c c514 186: ?WWW:   CMP  $14
438e f0fc 187:      BEQ  ?WWW
4390 a901 188:      LDA  #$01
4392 8d77d5 189:      STA  $D577
4395 6cfabf 190:      JMP  ($BFFA)
4398 a901 191: CMOS:   LDA  #$01
439a 8d77d5 192:      STA  $D577
439d 193: ; LDA $0700
439d 194: ; CMP #'S'
439d 195: ; BNE TTL_1
439d 20ffff 196: TTL:   JSR  $FFFF
43a0 4c06a0 197: TTL_1:  JMP  $A006
43a3 60 198:      RTS
43a4 4c1749 199: DAMN_BANK: JMP  NO_ECART
43a7 200: ;
43a7 201: ; this macro library was written by
43a7 202: ; Stephen J. Carden
43a7 203: ;
43a7 204: ;-----
43a7 205: ;this one make's a nice tone
43a7 206: ;-----
43a7 207: BELL:
43a7 8dd343 208:      STA  BELL_M3
43aa 8cd443 209:      STY  BELL_M3+1
43ad 8ed543 210:      STX  BELL_M3+2
43b0 a0af 211:      LDY  #$AF
43b2 a914 212:      LDA  $14
```

```
43b4 8d00d2 213:      STA $D200
43b7 8c01d2 214: BELL_M1:  STY $D201
43ba a900  215:      LDA #$00
43bc 8514  216:      STA $14
43be a514  217: BELL_M2:  LDA $14
43c0 c902  218:      CMP #$02
43c2 90fa  219:      BCC BELL_M2
43c4 88    220:      DEY
43c5 c0a0  221:      CPY #$A0
43c7 b0ee  222:      BCS BELL_M1
43c9 add343 223:      LDA BELL_M3
43cc acd443 224:      LDY BELL_M3+1
43cf aed543 225:      LDX BELL_M3+2
43d2 60    226:      RTS
43d3 000000 227: BELL_M3:  dc.b $00,$00,$00
43d6      228: ;
43d6      229: ;
43d6      230: ;-----
43d6      231: ;this make's inveres charter flash
43d6      232: ;      FLASH MACRO
43d6      233: ;-----
43d6      234: ;
43d6      235: ;
43d6 48    236: FLASH:   PHA
43d7 48    237:         PHA
43d8      238: FLASH_1:
43d8 a900  239:      LDA #$00
43da 8541  240:      STA $41
43dc ee2244 241: FLASH_LOOP4: INC FLASH_DATA
43df a90a  242:      LDA #$0A
43e1 cd2244 243:      CMP FLASH_DATA
43e4 f026  244:      BEQ FLASH_LOOP
43e6      245: ;
43e6 a900  246:      LDA #$00
43e8 8514  247:      STA $14
43ea      248: FLASH_LOOP3:
43ea ea    249:      NOP
43eb a901  250:      LDA #$01
43ed 8df302 251:      STA $02F3
43f0 a514  252:      LDA $14
43f2 cd2244 253:      CMP FLASH_DATA
43f5 f002  254:      BEQ FLASH_LPPP
43f7 d0f1  255:      BNE FLASH_LOOP3
43f9 a900  256: FLASH_LPPP: LDA #$00
43fb 8514  257:      STA $14
43fd ea    258: FLASH_LOOP5: NOP
43fe a902  259:      LDA #$02
4400 8df302 260:      STA $02F3
4403 a514  261:      LDA $14
4405 cd2344 262:      CMP FLASH_DATA+1
4408 f0d2  263:      BEQ FLASH_LOOP4
440a d0f1  264:      BNE FLASH_LOOP5
440c      265: FLASH_LOOP:
```

```
440c a900 266:      LDA #$00
440e 8541 267:      STA $41
4410 a901 268:      LDA #$01
4412 8df002 269:     STA $02F0
4415 68 270:      PLA
4416 68 271:      PLA
4417 a905 272:      LDA #$05
4419 8d2244 273:     STA FLASH_DATA
441c a90a 274:      LDA #$0A
441e 8d2344 275:     STA FLASH_DATA+1
4421 60 276:      RTS
4422 050a 277: FLASH_DATA:  dc.b $05,$0A
4424      278: ;
4424      279: ;-----
4424      280: ; GET KEY ROUTEEN
4424      281: ;this routeen get's one key and
4424      282: ;return it to the accumulator
4424      283: ;-----
4424      284: ;
4424 a900 285: GETKEY:    LDA #$00
4426 8df002 286:     STA $02F0
4429 86b6 287:     STX $B6
442b 84b7 288:     STY $B7
442d 203544 289:     JSR G_FFF
4430 a6b6 290:     LDX $B6
4432 a4b7 291:     LDY $B7
4434 60 292:     RTS
4435 ad25e4 293: G_FFF:    LDA $E420+5
4438 48 294:     PHA
4439 ad24e4 295:     LDA $E420+4
443c 48 296:     PHA
443d 60 297:     RTS
443e      298: ;
443e      299: ;-----
443e      300: ;   STACK SAVER
443e      301: ;-----
443e      302: SAVE_STACK:
443e 48 303:     PHA
443f 98 304:     TYA
4440 48 305:     PHA
4441 8a 306:     TXA
4442 48 307:     PHA
4443 60 308:     RTS
4444      309: ;
4444      310: ;-----
4444      311: ; THIS RESTORE'S THE STACK
4444      312: ;-----
4444      313: RESTORE_STACK:
4444 68 314:     PLA
4445 aa 315:     TAX
4446 68 316:     PLA
4447 a8 317:     TAY
4448 68 318:     PLA
```

```
4449 60    319:      RTS
444a      320:
444a      321: ;-----
444a      322: ;this take's the value of the a reg
444a      323: ;and put a hex number to the screen
444a      324: ;-----
444a      325: ;
444a 48    326: DRIVE_ERROR: PHA
444b 4a    327:      LSR
444c 4a    328:      LSR
444d 4a    329:      LSR
444e 4a    330:      LSR
444f 205544 331:      JSR L8913
4452 68    332:      PLA
4453 290f   333:      AND #$0F
4455 c90a   334: L8913:    CMP #$0A
4457 b004   335:      BCS L891B
4459 0930   336:      ORA #$30
445b d002   337:      BNE L891D
445d 6936   338: L891B:    ADC #$36
445f 205648 339: L891D:    JSR SPRINT
4462 60    340:      RTS
4463      341: ;
4463      342: ;
4463      343: ;-----
4463      344: ; jsr printsi
4463      345: ;this prints an inline string
4463      346: ; terminated by $ff
4463      347: ;-----
4463      348: ; jsr prints
4463      349: ; dc.b "print this",$9B,$FF
4463      350: ECHOSI:
4463 a901   351: PRINTSI:  LDA #$01
4465 8df002  352:      STA $02F0
4468 68    353:      PLA
4469 8d7944  354:      STA PSTR+1
446c 68    355:      PLA
446d 8d7a44  356:      STA PSTR+2
4470 ee7944  357: PRSL:     INC PSTR+1
4473 d003   358:      BNE PSTR
4475 ee7a44  359:      INC PSTR+2
4478 adffff  360: PSTR:     LDA $FFFF
447b c9ff   361:      CMP #$FF
447d f006   362:      BEQ ESTRI
447f 20c344  363:      JSR FAST_OUTPUT
4482 4c7044  364:      JMP PRSL
4485 ad7a44  365: ESTRI:    LDA PSTR+2
4488 48    366:      PHA
4489 ad7944  367:      LDA PSTR+1
448c 48    368:      PHA
448d a900   369:      LDA #$00
448f 8df002  370:      STA $02F0
4492 60    371:      RTS
```



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4493      372: ;
4493      373: ;-----
4493      374: ;actual screen handler
4493      375: ;screen offset definitions
4493      376: ;-----
4493 0000 377: SCR_OFFSET  dc.w  0
4495 2800 378:          dc.w  40
4497 5000 379:          dc.w  80
4499 7800 380:          dc.w 120
449b a000 381:          dc.w 160
449d c800 382:          dc.w 200
449f f000 383:          dc.w 240
44a1 1801 384:          dc.w 280
44a3 4001 385:          dc.w 320
44a5 6801 386:          dc.w 360
44a7 9001 387:          dc.w 400
44a9 b801 388:          dc.w 440
44ab e001 389:          dc.w 480
44ad 0802 390:          dc.w 520
44af 3002 391:          dc.w 560
44b1 5802 392:          dc.w 600
44b3 8002 393:          dc.w 640
44b5 a802 394:          dc.w 680
44b7 d002 395:          dc.w 720
44b9 f802 396:          dc.w 760
44bb 2003 397:          dc.w 800
44bd 4803 398:          dc.w 840
44bf 7003 399:          dc.w 880
44c1 9803 400:          dc.w 920
44c3      401: ;
44c3      402: FAST_OUTPUT:
44c3 855a 403:          sta  $5a
44c5 ad0407 404:          lda  sc.redirect
44c8 c902 405:          cmp  #print_p
44ca f01f 406:          beq  .go_cio
44cc      407: .leo:
44cc adff02 408:          lda  $02ff      ; CONTROL 1
44cf c900 409:          cmp  #$00
44d1 d0f9 410:          bne  .leo
44d3      411:
44d3 a55a 412:          lda  $5a
44d5 c920 413:          cmp  #32
44d7 9004 414:          bcc  .do_look
44d9 c97d 415:          cmp  #125
44db 9013 416:          bcc  .do_here
44dd a000 417: .do_look:      ldy  #0
44df b9e645 418: .lookup:      lda  .char_table,y
44e2 f00c 419:          beq  .do_here
44e4 c55a 420:          cmp  $5a
44e6 f003 421:          beq  .go_cio
44e8 c8 422:          iny
44e9 d0f4 423:          bne  .lookup
44eb      424:

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```
44eb      425:
44eb a55a 426: .go_cio:      lda  $5a
44ed 4cf645 427:      jmp  putlocal
44f0      428:
44f0      429:
44f0 a000 430: .do_here:      ldy  #0
44f2 a55d 431:      lda  $5d
44f4 915e 432:      sta  ($5e),y
44f6 a55a 433:      lda  $5a
44f8 c99b 434:      cmp  #$9b
44fa f044 435:      beq  .docr
44fc 20c545 436: .notcr:      jsr  .get_adr
44ff a55a 437:      lda  $5a
4501 297f 438:      and  #$7f
4503 c920 439:      cmp  #32
4505 9007 440:      bcc  .add64
4507 c960 441:      cmp  #96
4509 9009 442:      bcc  .sub32
450b 4c1745 443:      jmp  .asis
450e 18 444: .add64:      clc
450f 6940 445:      adc  #64
4511 4c1745 446:      jmp  .asis
4514 38 447: .sub32:      sec
4515 e920 448:      sbc  #32
4517 245a 449: .asis:      bit  $5a
4519 1002 450:      bpl  .xxlate
451b 0980 451:      ora  #$80
451d a000 452: .xxlate:      ldy  #0
451f 915e 453:      sta  ($5e),y
4521 e655 454:      inc  $55
4523 e663 455:      inc  $63
4525 a555 456:      lda  $55
4527 c928 457:      cmp  #40
4529 b019 458:      bcs  .next_row
452b c8 459:      iny
452c b15e 460:      lda  ($5e),y
452e 855d 461:      sta  $5d
4530 0980 462:      ora  #$80
4532 aef002 463:      ldx  752
4535 d002 464:      bne  .nocurs1
4537 915e 465:      sta  ($5e),y
4539 e65e 466: .nocurs1:      inc  $5e
453b d002 467:      bne  .nooav
453d e65f 468:      inc  $5e+1
453f 60 469: .nooav:      rts
4540 a900 470: .docr:      lda  #0
4542 8563 471:      sta  $63
4544 a552 472: .next_row:      lda  $52
4546 8555 473:      sta  $55
4548 e654 474:      inc  $54
454a a454 475:      ldy  $54
454c c018 476:      cpy  #24
454e b013 477:      bcs  .scroll
```

```

4550 20c545 478:      jsr  .get_adr
4553 a000 479:      ldy  #0
4555 b15e 480:      lda  ($5e),y
4557 855d 481:      sta  $5d
4559 aef002 482:      ldx  752
455c d004 483:      bne  .nocurs2
455e 0980 484:      ora  #$80
4560 915e 485:      sta  ($5e),y
4562 60 486: .nocurs2:      rts
4563      487:
4563 c654 488: .scroll:      dec  $54
4565 a558 489:      lda  $58
4567 8568 490:      sta  $68
4569 18 491:      clc
456a 6928 492:      adc  #40
456c 855e 493:      sta  $5e
456e a559 494:      lda  $58+1
4570 8569 495:      sta  $68+1
4572 6900 496:      adc  #0
4574 855f 497:      sta  $5e+1
4576 a000 498:      ldy  #0
4578 a203 499:      ldx  #3
457a b15e 500: .sloop:      lda  ($5e),y
457c 9168 501:      sta  ($68),y
457e c8 502:      iny
457f d0f9 503:      bne  .sloop
4581 e65f 504:      inc  $5e+1
4583 e669 505:      inc  $68+1
4585 ca 506:      dex
4586 d0f2 507:      bne  .sloop
4588 b15e 508: .sloop2:      lda  ($5e),y
458a 9168 509:      sta  ($68),y
458c c8 510:      iny
458d c098 511:      cpy  #152
458f 90f7 512:      bcc  .sloop2
4591 a558 513:      lda  $58
4593 18 514:      clc
4594 6998 515:      adc  #920&$ff
4596 855e 516:      sta  $5e
4598 a559 517:      lda  $58+1
459a 6903 518:      adc  #920/256
459c 855f 519:      sta  $5e+1
459e a000 520:      ldy  #0
45a0 98 521:      tya
45a1 915e 522: .clear:      sta  ($5e),y
45a3 c8 523:      iny
45a4 c028 524:      cpy  #40
45a6 90f9 525:      bcc  .clear
45a8 aef002 526:      ldx  752
45ab d006 527:      bne  .nocurs3
45ad a980 528:      lda  #$80
45af a455 529:      ldy  $55
45b1 915e 530:      sta  ($5e),y

```

```

45b3 a900 531: .nocurs3:      lda  #0
45b5 855d 532:                sta  $5d
45b7 a55e 533:                lda  $5e
45b9 18   534:                clc
45ba 6555 535:                adc  $55
45bc 855e 536:                sta  $5e
45be a55f 537:                lda  $5e+1
45c0 6900 538:                adc  #0
45c2 855f 539:                sta  $5e+1
45c4 60   540:                rts
45c5 a554 541: .get_adr:      lda  $54
45c7 0a   542:                asl
45c8 a8   543:                tay
45c9 a558 544:                lda  $58
45cb 18   545:                clc
45cc 799344 546:                adc  scr_offset,y
45cf 855e 547:                sta  $5e
45d1 a559 548:                lda  $58+1
45d3 799444 549:                adc  scr_offset+1,y
45d6 855f 550:                sta  $5e+1
45d8 a55e 551:                lda  $5e
45da 18   552:                clc
45db 6555 553:                adc  $55
45dd 855e 554:                sta  $5e
45df a55f 555:                lda  $5e+1
45e1 6900 556:                adc  #0
45e3 855f 557:                sta  $5e+1
45e5 60   558:                rts
45e6      559: .char_table:
45e6 1b1c1d 560:                dc.b  27,28,29,30,31,125,126,127
45ee 9c9d9e 561:                dc.b  156,157,158,159,253,254,255
45f6      562:
45f6      563:
45f6 a20b 564: putlocal:      ldx  #11
45f8 8e4203 565:                stx  $0342
45fb a200 566:                ldx  #0
45fd 8e4803 567:                stx  $0348
4600 8e4903 568:                stx  $0349
4603 4c56e4 569:                jmp  $e456
4606      570: ;
4606      571: ;
4606      572: ;-----
4606      573: ;TIME DATE On/Off
4606      574: ;-----
4606      575: ;
4606      576: ;
4606 a901 577: td_on:        lda  #$01
4608 2c   578:                dc.b  $2c
4609 a900 579: td_off:       lda  #$00
460b 8d1e46 580:                sta  .c+1
460e a514 581: .a:          lda  $14
4610 c514 582:                cmp  $14
4612 f0fa 583:                beq  .a

```

```

4614 ad01d3 584:      lda  $d301
4617 48 585:      pha
4618 29fe 586:      and  #$fe
461a 8d01d3 587:      sta  $d301
461d a000 588: .c:      ldy  #$00
461f 20c6ff 589:      jsr  $ffc6
4622 68 590:      pla
4623 8d01d3 591:      sta  $d301
4626 60 592: .b:      rts
4627 593: ;
4627 594: ;-----
4627 595: ;TIME DATE On/Off
4627 596: ;
4627 597: ;Usage:
4627 598: ;   Jsr key_on   ;Turns On keyboard Buffer
4627 599: ;
4627 600: ;   Jsr key_off   ;Turns Off Keyboard Buffer
4627 601: ;
4627 602: ;-----
4627 603: ;
4627 604: ;
4627 a901 605: key_on:      lda  #$01
4629 2c 606:      dc.b $2c
462a a900 607: key_off:      lda  #$00
462c 8d3f46 608:      sta  .c+1
462f a514 609: .a:      lda  $14
4631 c514 610:      cmp  $14
4633 f0fa 611:      beq  .a
4635 ad01d3 612:      lda  $d301
4638 48 613:      pha
4639 29fe 614:      and  #$fe
463b 8d01d3 615:      sta  $d301
463e a000 616: .c:      ldy  #$00
4640 20dbff 617:      jsr  $ffdb
4643 68 618:      pla
4644 8d01d3 619:      sta  $d301
4647 60 620: .b:      rts
4648 621: ;
4648 622: ; this enable's the express cart
4648 623: ;
4648 624: EXP_ON:
4648 200946 625:      JSR  TD_OFF
464b a901 626:      LDA  #$01
464d 8d77d5 627:      STA  $D577
4650 a900 628:      LDA  #low $A000
4652 8de002 629:      STA  $02E0
4655 a9a0 630:      LDA  # high $A000
4657 8de102 631:      STA  $02E1
465a a90c 632:      LDA  #$0C
465c a210 633:      LDX  #$10
465e 8d56e4 634:      STA  $E456
4661 a210 635:      LDX  #$10
4663 a928 636:      LDA  #$28

```

```

4665 9d4203 637:          STA  $0342,X
4668 a904 638:          LDA  #$04
466a 9d4a03 639:          STA  $034A,X
466d a97f 640:          LDA  #$7F
466f 9d4b03 641:          STA  $034B,X
4672 a988 642:          LDA  # low FILE
4674 8de002 643:          STA  $02E0
4677 9d4403 644:          STA  $0344,X
467a a946 645:          LDA  # high FILE
467c 8de102 646:          STA  $02E1
467f 9d4503 647:          STA  $0345,X
4682 2056e4 648:          JSR  $E456
4685 6ce002 649:          JMP  ($02E0)
4688 444341 650: FILE:      dc.b  "DCAR:CAR.COM",$9B,$00,$FF
4697      651:
4697      652:
4697      653: TOP:
4697      654: ;          LDA #$7D
4697      655: ;          JSR ECHO
4697 20aa46 656:          JSR SCREEN1
469a 20d446 657:          JSR SCREEN2
469d 4c1d48 658:          JMP WHAT_KEY
46a0      659: MAC.65:
46a0      660: ;          LDA #$7D
46a0      661: ;          JSR ECHO
46a0 20aa46 662:          JSR SCREEN1
46a3 20b949 663:          JSR DUMP3
46a6 4c9746 664:          JMP TOP
46a9 60 665:          RTS
46aa      666: ;
46aa      667: SCREEN1:
46aa 60 668:          rts          ; don't need this screen n
46ab 206344 669:          JSR PRINTSI
46ae      670:
46ae      671:
46ae      672: ;          dc.b $9B,$9B
46ae      673: ;          dc.b " "
46ae      674: ;          dc.b "....."
46ae      675: ;          dc.b "...",$9B
46ae      676: ;          dc.b " "
46ae      677: ;          dc.b "ü"
46ae      678: ;          dc.b " Ãñôöñ@ãí ö±@± ×ðéôôâî Âù "
46ae      679: ;          dc.b "ü",$9B
46ae      680: ;          dc.b " "
46ae      681: ;          dc.b "•.....",,
46ae      682: ;          dc.b $9B
46ae      683: ;          dc.b " "
46ae      684: ;          dc.b "ü"
46ae      685: ;          dc.b "Óôâðèâî Ãáôââî ! Êäéôè Ìââââôôâò"
46ae      686: ;          dc.b "ü",$9B
46ae      687: ;          dc.b " ü"
46ae      688: ;          dc.b " Ãĩðùòéçèò ±¹,¹ Äâî Äíí óâðöéââó"
46ae      689: ;          dc.b "ü",$9B

```

```

46ae 690: ; dc.b " ü Ĩðēñ Íéãðì Òùóôâíó ü",
46ae 691: ; dc.b " •¼Åøððåóó Ãåðð Óðððìðð Åíåðåó¾'',",
46ae 692: ; dc.b " ü Íéäíéçèð Åøððåóó ¨ °´©³.¹-´±µ¶ ü",
46ae 693: ; dc.b " ü Êíóéää ôèå ¸-âéó ¨ °´©.¹-²´.´ ü",
46ae 694: ;
46ae 209a92 695: dc.b " §''''''''''''''''''''''''''''f",
46d3 60 696: RTS
46d4 697:
46d4 698:
46d4 699:
46d4 700: SCREEN2:
46d4 206344 701: JSR PRINTSI
46d7 209192 702: dc.b " ''''''''''''''''''''''''''''...',
46fb 20fc 703: dc.b " ü"
46fd a0a0a0 704: dc.b " [1] Run Express Cart "
471d fc9b 705: dc.b "ü", $9B
471f 20fc 706: dc.b " ü"
4721 a0a0a0 707: dc.b " [2] Turn off Express cart "
4741 fc9b 708: dc.b "ü", $9B
4743 20fc 709: dc.b " ü"
4745 a0a0a0 710: dc.b " & boot pigy back Cart "
4765 fc9b 711: dc.b "ü", $9B
4767 20fc 712: dc.b " ü"
4769 a0a0a0 713: dc.b " [3] Enable Express cart "
4789 fc9b 714: dc.b "ü", $9B
478b 20fc 715: dc.b " ü"
478d a0a0a0 716: dc.b " Exit to Dos "
47ad fc9b 717: dc.b "ü", $9B
47af 20fc 718: dc.b " ü"
47b1 a0a0a0 719: dc.b " [4] Turn off Express Cart "
47d1 fc9b 720: dc.b "ü", $9B
47d3 20fc 721: dc.b " ü"
47d5 a0a0a0 722: dc.b " Exit to Dos "
47f5 fc9b 723: dc.b "ü", $9B
47f7 209a92 724: dc.b " §'"
47fa dbc5f3 725: dc.b "<+128>,"[Esc to exit]"
4807 929292 726: dc.b "''''''''''''''''''''f"
481a 9bff 727: dc.b $9B,-1
481c 60 728: RTS
481d 729: WHAT_KEY:
481d 202444 730: JSR GETKEY
4820 c931 731: CMP #'1'
4822 f018 732: BEQ J_1
4824 c932 733: CMP #'2'
4826 f017 734: BEQ J_2
4828 c933 735: CMP #'3'
482a f016 736: BEQ J_3
482c c934 737: CMP #'4'
482e f015 738: BEQ J_4
4830 739: ; CMP #'5'
4830 740: ; BEQ J_5
4830 c91b 741: CMP #27 ;esc key
4832 f017 742: BEQ J_E

```

```
4834 a9fd 743:      LDA #253      ;control+2 buzzer
4836 204f48 744:      JSR ECHO
4839 4c1d48 745:      JMP WHAT_KEY
483c      746:
483c 4c4846 747: J_1:      JMP EXP_ON
483f 4c8948 748: J_2:      JMP EXP_OFF
4842 4cc148 749: J_3:      JMP EXP_MENU
4845 4cd748 750: J_4:      JMP WAKE_UP
4848 4ca046 751: J_5:      JMP MAC.65
484b 4c4e48 752: J_E:      JMP EXIT
484e 60      753: EXIT:     RTS
484f      754: ;-----
484f      755: ; PRINT BYTE
484f      756: ;-----
484f      757: ECHO:
484f 48      758:      PHA
4850 a901 759:      LDA #$01
4852 8df002 760:      STA $02F0
4855 68      761:      PLA
4856 85b8 762: SPRINT:   STA $B8
4858 a904 763:      LDA #$04
485a 8d4a03 764:      STA $034A
485d 86b6 765:      STX $B6
485f 84b7 766:      STY $B7
4861 a206 767:      LDX #$06
4863 bd01e4 768:      LDA $E400+1,X
4866 85b3 769:      STA $B3
4868 bd00e4 770:      LDA $E400,X
486b 85b2 771:      STA $B2
486d a5b8 772:      LDA $B8
486f 208348 773:      JSR L88DA
4872 a6b6 774:      LDX $B6
4874 a4b7 775:      LDY $B7
4876 a90c 776:      LDA #$0C
4878 8d4a03 777:      STA $034A
487b a5b8 778:      LDA $B8
487d a900 779:      LDA #$00
487f 8df002 780:      STA $02F0
4882 60      781:      RTS
4883      782: ;
4883 e6b2 783: L88DA:   INC $B2
4885 6cb200 784:      JMP ($B2)
4888 60      785:      RTS
4889      786: ;
4889      787: ;
4889      788: ;
4889      789: ;EXPRESS OFF COMMAND
4889      790: EXP_OFF:
4889 a901 791:      LDA #$01
488b 8d78d5 792:      STA $D578
488e a97d 793:      LDA #$7D
4890 cd00a0 794:      CMP $A000
4893 d003 795:      BNE HLD
```



```
4895 2022b0 796:      JSR $B022
4898      797: HLD:
4898 a90c 798:      LDA #$0C
489a a210 799:      LDX #$10
489c 2056e4 800:     JSR $E456
489f a210 801:      LDX #$10
48a1 a928 802:      LDA #$28
48a3 9d4203 803:     STA $0342,X
48a6 a904 804:      LDA #$04
48a8 9d4a03 805:     STA $034A,X
48ab a97f 806:      LDA #$7F
48ad 9d4b03 807:     STA $034B,X
48b0 a988 808:      LDA # low FILE
48b2 9d4403 809:     STA $0344,X
48b5 a946 810:      LDA # high FILE
48b7 9d4503 811:     STA $0345,X
48ba 2056e4 812:     JSR $E456
48bd 6ce002 813:     JMP ($02E0)
48c0 60 814:      RTS
48c1      815: EXP_MENU:
48c1 a901 816:      LDA #$01
48c3 8d77d5 817:     STA $D577
48c6      818: ; JMP $A006
48c6 60 819:      RTS
48c7      820: BYPASS_X:
48c7 a901 821:      LDA #$01
48c9 8d77d5 822:     STA $D577
48cc adf6bf 823:     LDA $BFF6
48cf c945 824:     CMP #'E'
48d1 d044 825:     BNE NO_ECART
48d3 4c06a0 826:     JMP $A006
48d6 60 827:      RTS
48d7      828: ;
48d7      829: WAKE_UP:
48d7 ad00b0 830:     LDA $B000
48da 48 831:      PHA
48db ee00b0 832:     INC $B000
48de 68 833:      PLA
48df cd00b0 834:     CMP $B000
48e2 d033 835:     BNE NO_ECART
48e4 a900 836:      LDA #$00
48e6 8d78d5 837:     STA $D578
48e9 206344 838:     JSR PRINTSI
48ec 9b9b20 839:     dc.b $9B,$9B," "
48ef c5f8f0 840:     dc.b <+128>,"Express Cart control is off
490b 9b 841:      dc.b $9B
490c 204279 842:     dc.b " Bye...."
4914 9bff 843:     dc.b $9B,-1
4916 60 844:      RTS
4917      845:
4917 202149 846: NO_ECART: JSR DUMP1
491a 204f49 847:     JSR DUMP2
491d 20b949 848:     JSR DUMP3
```

