

SERIES-III 8086/8087/8088 MACRO ASSEMBLER V1.0 ASSEMBLY OF MODULE SYSGEN
 OBJECT MODULE PLACED IN :F1:SYSGEN.OBJ
 NO INVOCATION LINE CONTRCLS

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LOC  OBJ          LINE    SOURCE
          1 +1  $TITLE ('KAOS - SYSGEN MACRO LISTING FILE')
          2          NAME      SYSGEN
          3 +1  $ NOGEN
          4
          5
          6
          7
          8      $      INCLUDE (:F1:SYSGEN.MAC)
=1      9      ;;;      (C) INTEL CORPORATION 1981.  ALL RIGHTS RESERVED.  NO PART
=1     10      ;      OF THIS PROGRAM OR PUBLICATION MAY BE REPRODUCED, TRANS-
=1     11      ;      MITTED, TRANSCRIBED, STORED IN A RETRIEVAL SYSTEM, OR
=1     12      ;      TRANSLATED INTO ANY LANGUAGE OR COMPUTER LANGUAGE, IN ANY
=1     13      ;      FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, MAGNETIC,
=1     14      ;      OPTICAL, CHEMICAL, MANUAL OR OTHERWISE, WITHOUT THE PRIOR
=1     15      ;      WRITTEN PERMISSION OF INTEL CORPORATION, 3065 BOWERS AVENUE,
=1     16      ;      SANTA CLARA, CALIFORNIA, 95051, ATTN: SOFTWARE LICENSE
=1     17      ;      ADMINISTRATION.
=1     18
=1     19
=1     20
=1     21
=1     22      ;;;      GROUPDEF - DEFINE LINKER GROUPS
=1     23      ;
=1     24      ;      THIS MACRO DEFINES CGROUP AND DGROUP.
=1     25
=1     26
=1     27      %*DEFINE(GROUPDEF)(
=1          CGROUP  GROUP  CODE
=1          DGROUP  GROUP  DATA,STACKS
=1          )
=1     28
=1     29
=1     30
=1     31
=1     32      ;;;      OBJECTLIST (NAME) - START OBJECT LIST FOR "CREATELIST".
=1     33      ;
=1     34      ;      THIS MACRO GIVES A NAME TO AND MARKS THE BEGINNING OF
=1     35      ;      A LIST TO BE PASSED TO "CREATELIST".
=1     36      ;
=1     37      ;      PARAMETER:
=1     38      ;      NAME - THE NAME TO BE DECLARED PUBLIC AS THE NAME OF THIS LIST.
=1     39
=1     40
=1     41      %*DEFINE(OBJECTLIST(NAME))(
=1          CODE    SEGMENT PUBLIC 'CODE'
=1          PUBLIC  %NAME
=1          %NAME   EQU      $
=1          CCODE   ENDS
=1          )
=1     42

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LOC  CBJ          LINE  SOURCE
=1    43
=1    44
=1    45
=1    46      ;;;   PROCESS (PRI, ENTRY, STACKSIZE) - CREATE PCB AND STACK FOR PROCESS.
=1    47      ;
=1    48      ;   PARAMETERS:
=1    49      ;   PRI - THE PRIORITY OF THE PROCESS, ZERO BEING THE HIGHEST
=1    50      ;   AND SIZE-1 (FROM THE "READYLIST" MACRO) BEING THE LOWEST.
=1    51      ;   ENTRY - THE ENTRY NAME OF THE PROCESS. THIS SYMBOL
=1    52      ;   WILL BE DECLARED EXTERNAL.
=1    53      ;   STACKSIZE - THE NUMBER OF BYTES OF USER SPACE TO
=1    54      ;   CREATE IN THE STACK.
=1    55
=1    56
=1    57      %*DEFINE(PROCESS(PRI,ENTRY,STACKSIZE))(
=1              EXTRN   %ENTRY:FAR
=1      CCDE      SEGMENT PUBLIC 'CODE'
=1              DB      2
=1              DW      OFFSET DGROUP:PCB_%ENTRY
=1              DW      %PRI
=1              DW      OFFSET CGROUP:%ENTRY
=1              DW      OFFSET DGROUP:STK_%ENTRY
=1      CCDE      ENDS
=1      DATA    SEGMENT PUBLIC 'DATA'
=1      PCB_%ENTRY  DW      7 DUP (?)
=1      DATA    ENDS
=1      STACKS   SEGMENT PUBLIC 'STACKS'          ;CREATE STACK
=1              DW      %EVAL(((%STACKSIZE+1)/2)+5) DUP (?)
=1      STK_%ENTRY EQU $
=1      STACKS   ENDS)
=1    58
=1    59
=1    60
=1    61
=1    62      ;;;   SEMAPHORE (NAME, INITIAL) - CREATE SEMAPHORE.
=1    63      ;
=1    64      ;   PARAMETERS:
=1    65      ;   NAME - THE NAME OF THE SEMAPHORE. THIS NAME WILL BE
=1    66      ;   DECLARED PUBLIC.
=1    67      ;   INITIAL - THE INITIAL NUMBER OF SIGNALS ON THE SEMAPHORE.
=1    68
=1    69
=1    70      %*DEFINE(SEMAPHORE(NAME,INITIAL))(
=1      CCDE      SEGMENT PUBLIC 'CODE'
=1              PUBLIC  %NAME
=1              DB      4
=1              DW      OFFSET DGROUP:%NAME
=1              DW      %INITIAL
=1      CODE      ENDS
=1      DATA    SEGMENT PUBLIC 'DATA'
=1      %NAME     DW      4 DUP (?)
=1      DATA    ENDS)
=1    71
=1    72
=1    73

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KAOS

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LOC  OBJ          LINE    SOURCE
=1     74
=1     75      ;;;      MAILBOX (NAME) - CREATE MAILBOX.
=1     76      ;
=1     77      ;      PARAMETER:
=1     78      ;      NAME - THE NAME OF THE MAILBOX.  THIS NAME WILL BE
=1     79      ;      DECLARED PUBLIC.
=1     80
=1     81
=1     82      %*DEFINE(MAILBOX(NAME))(
=1           PUBLIC  %NAME
=1     CCDE      SEGMENT PUBLIC 'CODE'
=1           DB      6
=1           DW      OFFSET DGROUP:%NAME
=1     CODE      ENDS
=1     DATA     SEGMENT PUBLIC 'DATA'
=1     %NAME     DW      8 DUP (?)
=1     DATA     ENDS)
=1     83
=1     84
=1     85
=1     86
=1     87      ;;;      ALARM(NAME) - CREATE ALARM CONTROL BLOCK.
=1     88      ;
=1     89      ;      PARAMETERS:
=1     90      ;      SIZE - NUMBER OF PRIORITIES IN READY LIST.
=1     91
=1     92
=1     93      %*DEFINE(ALARM(NAME))(
=1           PUBLIC  %NAME
=1     CCDE      SEGMENT PUBLIC 'CODE'
=1           DB      8
=1           DW      SEG DGROUP:%NAME
=1           DW      OFFSET DGROUP:%NAME
=1     CCDE      ENDS
=1     DATA     SEGMENT PUBLIC 'DATA'
=1     %NAME     DW      8 DUP (?)
=1     DATA     ENDS)
=1     94
=1     95
=1     96
=1     97
=1     98      ;;;      READYLIST - DEFINE READY LIST.
=1     99      ;
=1    100      ;      PARAMETERS:
=1    101      ;      SIZE - NUMBER OF PRIORITIES IN READY LIST.
=1    102
=1    103
=1    104      %*DEFINE(READYLIST(SIZE))(
=1     CODE      SEGMENT PUBLIC 'CODE'
=1           DB      10
=1     CODE      ENDS
=1     DATA     SEGMENT PUBLIC 'DATA'
=1           PUBLIC  READYLIST,READYLISTSIZE
=1     READYLIST  DW      %SIZE DUP (?,?,?)
=1     READYLISTSIZE EQU    %SIZE

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LOC	OBJ	LINE	SOURCE
		=1	DATA ENDS)
		=1 105	
		=1 106	
		=1 107	
		=1 108	
		=1 109	;;; ENDLIST - MARK END OF LIST.
		=1 110	;
		=1 111	; PARAMETERS:
		=1 112	; NONE.
		=1 113	
		=1 114	
		=1 115	;%*DEFINE(ENDLIST)(
		=1	CODE SEGMENT PUBLIC 'CODE'
		=1	DB 0
		=1	CCDE ENDS
		=1)
		116	
		117	
		118	
		119	
		120	END

ASSEMBLY COMPLETE, NO ERRORS FOUND