

INTEL 8051 LINKER MAP TO AVOCET AVSIM51 SYMBOL FORMAT CONVERTER

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TGM-DSK-169: MAP2SYM.C,~.DOC,~.EXE

```
SYNTAX : MAP2SYM [d:]sourcefile[.m51] </r>
          [d:]      drive and path of sourcefile
          [.m51]    extension of sourcefile is not needed
          </r>     view report during conversion
                   (when not set program runs a lot faster)
```

OUTPUT: [d:]sourcefile.SYM

You get a symbolfile with the same drive, path and program name as your source file. The extension of the symbol file is .SYM and is automatically set by MAP2SYM.

WHY DO I NEED MAP2SYM ?

If you develop a 8051 program with INTEL MCS-51 Assembler and test your program with AVOCET AVSIM51 you don't see your labels in the AVSIM51. Also your external DATA and CODE space will not be recognized. When you want to have full advantage of the AVSIM51 you need MAP2SYM. This program will generate the informations needed by AVSIM51.

WHAT DO I HAVE TO NOTICE WHEN DEVELOPING PROGRAMS?

During development the source file(s) must have the assembler controls \$DEBUG and \$\$SYMBOLS switched on. Only if these options are set, MAP2SYM will work correctly. The only restriction is that at minimum one label must exist. If you don't follow this MAP2SYM will work without stopping.

AVSIM51 has some restrictions in Labels they are

```
MOV DPTR,#label  "label" must be in the XDATA area, if it is
                  defined in CODE area
                  it will not be recognized
MOV Rn,#label    "label" must be defined with EQU
                  to be recognized
MOV A,label      "label" has to be a DATA address
MOV A,#label     "label" has to be defined with EQU
MOV Rn,#label    "label" has to be defined with EQU
```

These are the known effects of the AVSIM51, but there may be more equivalent effects. A future version of MAP2SYM may have a solution for this problem

HOW DO I LOAD PROGRAMS IN AVSIM51?

To load your 8051 program into AVSIM51 there must be a HEX file of your program. To load it choose the LOAD AVOCET option and enter the filename without any extension.

DO I HAVE ANY SUPPORT FOR THIS PROGRAM?

Sorry there is no support for this program. I tested it with INTEL MCS-51 and KEIL A51. One of the testfiles was the sample file from INTEL MCS-51 MACRO ASSEMBLER with relocatable segments. There were no errors or system failures. The computer with which this program was compiled was 100% virus free (NO Yankee Doodle !!!).

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AVSIM51 is a registrated Trademark of AVOCET SYSTEMS INC.

Version 1.31 released on 10th March 1991 by W.Murth

COPYRIGHT NOTES:

You can copy this program freely without any restrictions. But please copy also the documentation file (to prevent "What the hell does this program do?" or "Why does it work so catastrophically" or "Hmmm? What do i do wrong? After 54 runs I dont have the right output") AND the source code (!!!).

Please don't change the copyright notice in the header of the source and recompile it with your name instead.

Anmerkung: Das gleiche Problem tritt auch beim X8051-Assembler auf. Die vom Linker generierten Symboldateien sind dem AVSIM nicht unmittelbar zuzumuten. Das hier beschriebene Programm MAP2SYM könnte dazu verwendet werden, auch die Umformung der X8051-SYM-Dateien zu übernehmen. Wenn es jemand geschafft hat, bitte der Redaktion mitteilen.

Zur Schulabgängerniveaudebatte: EIN MODERNER LIEBESBRIEF

Halo hübsches Freulein!

Wie get es Tier? Mir get eß gut. Weil ich gestern zufiel, gelehrt hab und zulang auf wahr, bin ich Häute ein pisschen mühde. Abba sonst iß alles in Ordnung.

Tschau, dein Beerli.