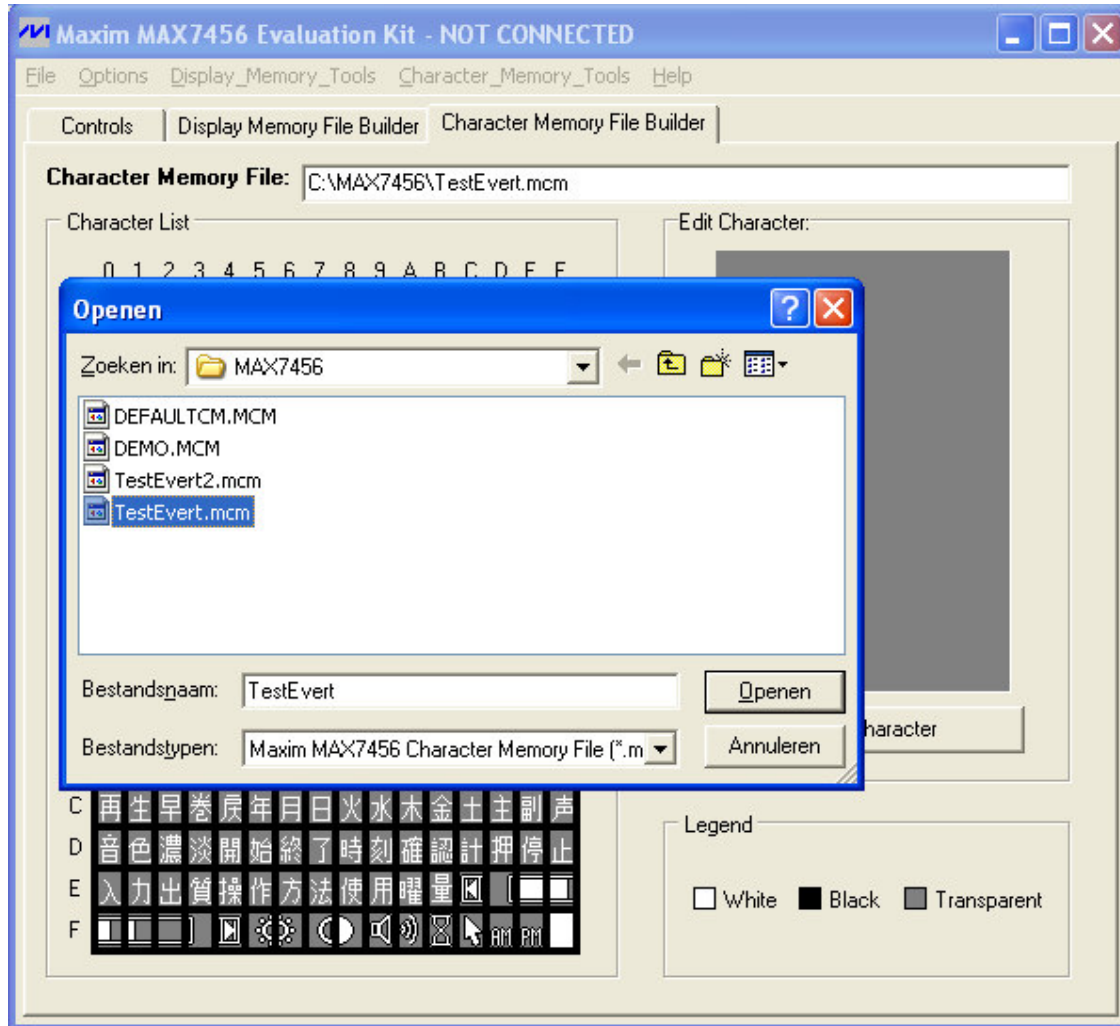


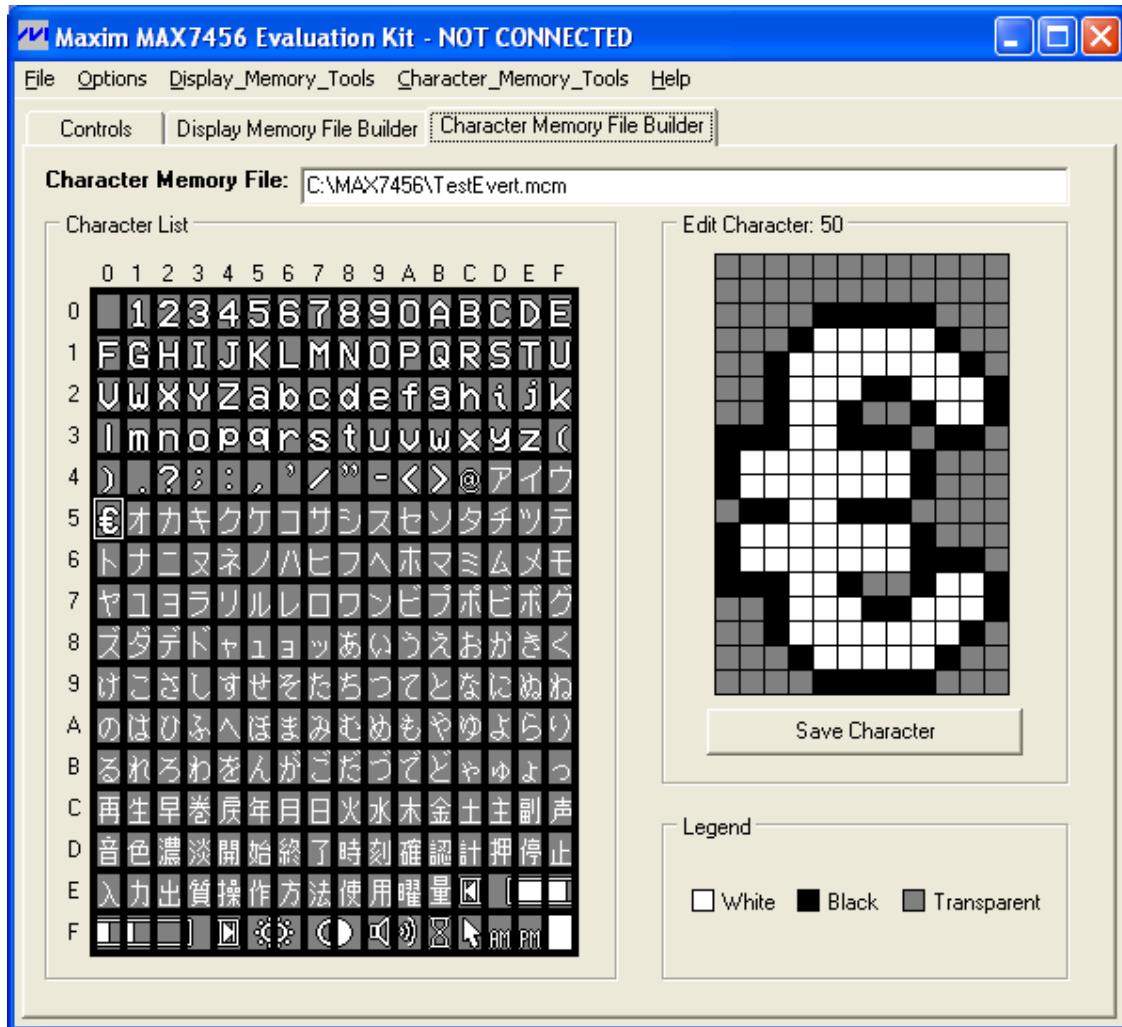
Max7456 -> Bascom Converter

How to convert Max7456 *.mcm (Maxim character memory) files to Bascom data file.
Install and run the Maxim Character evaluation kit. Strange name for software but we know now what we need.

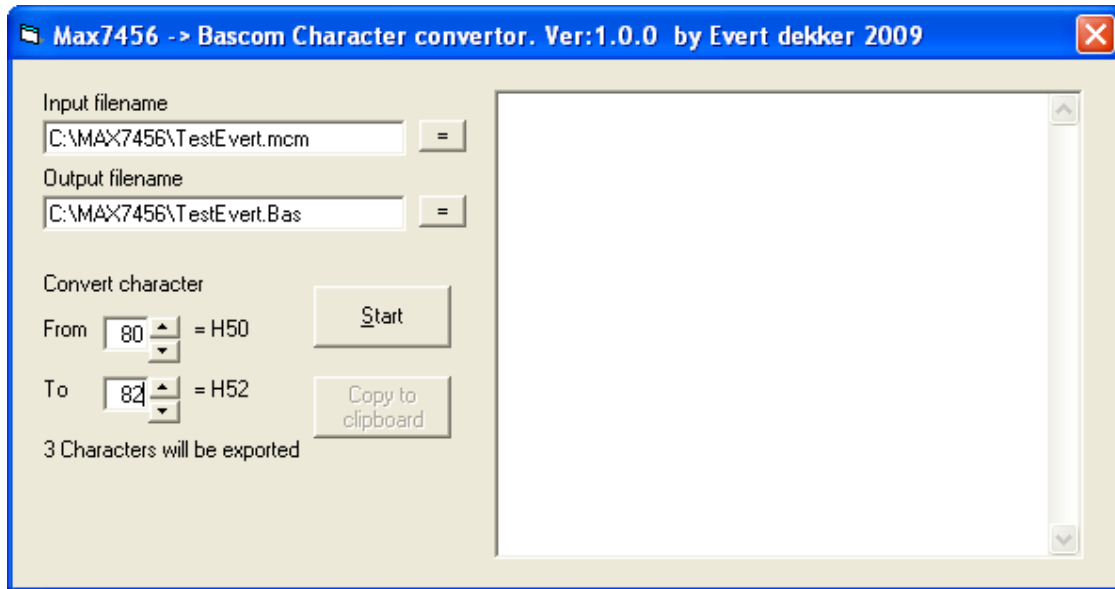


When the software start's it will ask you to connect to the evaluation kit, choose "do not connect".

Go to the tab "Character memory file builder" and choose open file trough the file menu. Open now your mcm file.



Now you can edit, copy, delete your own characters. When finished save your mcm file. In the character list you see at the top and left side the character number. Remember or write down these numbers, we need them later in the converter and in Bascom. The character numbers and you can also see the number above the character that you are editing now. In this sample I have made character &H50 euro symbol €.



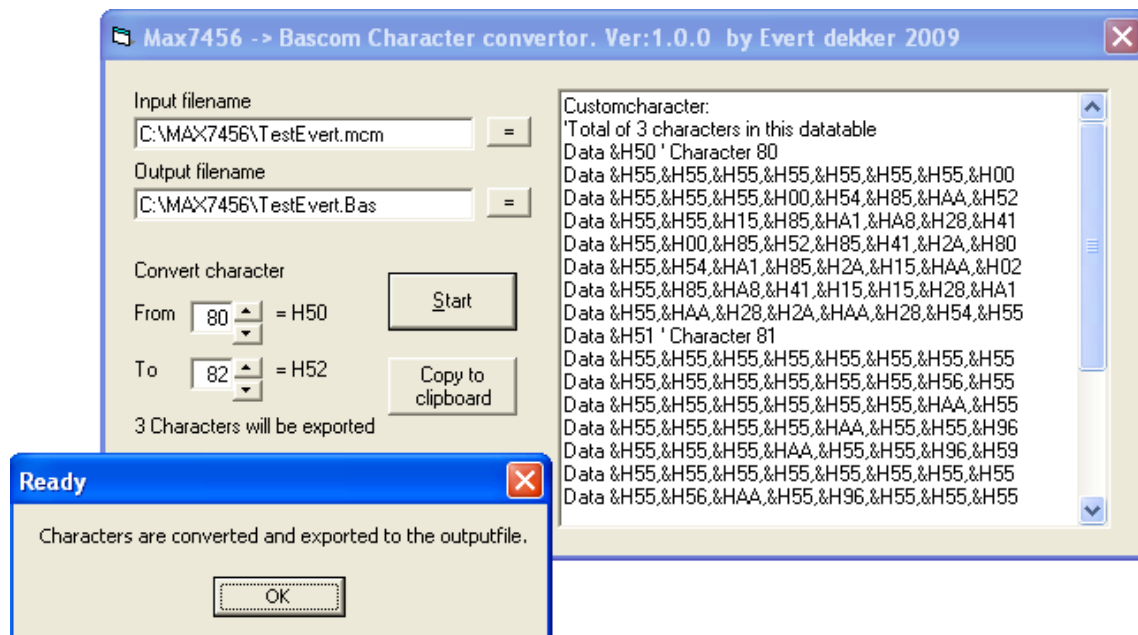
Now we ready to convert the characters to Bascom data.

Start-up Max7456 Converter and select the mcm with the = button behind input filename. The output filename will get by default the same path and filename but with the extension BAS.

Filename and path can be changed with the = behind the output filename.

Choose now witch characters should be converted. In my example we would like to convert the euro symbol (&H50) and also symbol &H51 &H52.

Press the start button and voila...



The output bas file is generated and ready to be used.

Data table is also be copied to the clipboard so you can pass it direct into your Bascom code with “paste” or Ctrl+V.

```

BASICOM-AVR IDE [1.11.9.3] - [C:\Program Files\Mcs Electronics\
File Edit View Program Tools Options Window Help
Max7456.bas
Sub Label
Customcharacter:
'Total of 3 characters in this datatable
Data &H50 ' Character 80
Data &H55,&H55,&H55,&H55,&H55,&H55,&H55,&H00
Data &H55,&H55,&H55,&H55,&H00,&H54,&H85,&HAA,&H52
Data &H55,&H55,&H15,&H85,&HA1,&HA8,&H28,&H41
Data &H55,&H00,&H85,&H52,&H85,&H41,&H2A,&H80
Data &H55,&H54,&HA1,&H85,&H2A,&H15,&HAA,&H02
Data &H55,&H85,&HA8,&H41,&H15,&H15,&H28,&HA1
Data &H55,&HAA,&H28,&H2A,&HAA,&H28,&H54,&H55
Data &H51 ' Character 81
Data &H55,&H55,&H55,&H55,&H55,&H55,&H55,&H55
Data &H55,&H55,&H55,&H55,&H55,&H55,&H56,&H55
Data &H55,&H55,&H55,&H55,&H55,&H55,&HAA,&H55
Data &H55,&H55,&H55,&H55,&HAA,&H55,&H55,&H96
Data &H55,&H55,&H55,&HAA,&H55,&H55,&H96,&H59
Data &H55,&H55,&H55,&H55,&H55,&H55,&H55,&H55
Data &H55,&H56,&HAA,&H55,&H96,&H55,&H55,&H55
Data &H52 ' Character 82
Data &H55,&H55,&H55,&H55,&H55,&H55,&H55,&H55
Data &H55,&H55,&H55,&H55,&H55,&H55,&H59,&H55
Data &H55,&H55,&H55,&H55,&H55,&H55,&H55,&HAA,&H56
Data &H55,&H55,&H55,&H55,&HAA,&H56,&H55,&H65
Data &H55,&H55,&H55,&HAA,&H55,&H56,&H65,&H55
Data &H55,&H55,&H55,&H56,&H56,&H56,&H56,&H56
Data &H55,&H59,&HAA,&H55,&H65,&H56,&H59,&H55

```

Now we have the data in Bascom and with this we can program the Max7456 with our own characters.

The second line in the data table contains a rem line with the total characters that are in these table, this is needed when calling the sub **Writecustomcharacter** , this sub expect the number of characters that need to programmed in the Max7465.

In this case 3 characters so we can call it with;

Call Writecustomcharacter(3) or
Writecustomcharacter 3

The Max7465 has NVM memory (eeprom) so the custom character set needs to be programmed only ones. You can remove the data lines when done, saves you a lot flash in the AVR.

```

Characterslookup:
'Convert the ascii table to the Max7456 table. (Not exist) are characters that are
Data &H00 '32 Space
Data &H42 '33 ! (not exist)
Data &H48 '34 "
Data &H42 '35 # (not exist)
Data &H42 '36 $ (not exist)
Data &H42 '37 % (not exist)
Data &H42 '38 & (not exist)
Data &H47 '39 '
Data &H3F '40 (
Data &H40 '41 )
Data &H42 '42 * (not exist)
Data &H50 '43 + (not exist)
Data &H45 '44 ,
Data &H49 '45 -
Data &H41 '46 .
Data &H47 '47 /
Data &H0A '48 0
Data &H01 '49 1
Data &H02 '50 2
Data &H03 '51 3
Data &H04 '52 4
Data &H05 '53 5
Data &H06 '54 6
Data &H07 '55 7
Data &H08 '56 8
Data &H09 '57 9
Data &H44 '58 :
Data &H43 '59 ;
Data &H4A '60 <
Data &H42 '61 = (not exist)

```

Because the character table used by the Max7456 uses not the same ASCII number as we used to, there's a lookup table in Bascom. In this table we need to connect our custom character to an ASCII character.

In this sample &H50, our homemade euro symbol is connected to ASCII 43 “+”.

Characters with “(not exist)” doesn't exist in the Max7456 character table and will shown “?” &H42 or you can use them for your own character.