

MemoCircuits version 1.0

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1. Description

MemoCircuits is an application which makes it possible to record and to display informations relating to the integrated circuits like part number, description, pins description and truth table (if exists). For more clearness, the integrated circuits are distributed on various libraries.

In this version, a certain number of integrated circuits are provided with this application, it acts of family 7400, family 4000, some operational amplifiers and some drivers. The total constitutes more than 500 referred circuits.

MemoCircuits is a shareware, following the evaluation period, if this product feet what you need, you can buy it by visiting the page :

<http://www.abcsemiconductors.com/appPDA>

Restrictions on the shareware version:

- you cannot create new library
- only the first 20 elements of each library are visible
- you cannot create more than 10 elements for each library
- some screens are displayed to announce you that you are in shareware version

Please refer to the file licence.txt

2. Installation

2-1. Pre required before installation:

To make a success of the installation, you must have the following minimum configuration:

Operating system Windows

Minimum disk space: 900 KB

Zip utility decompression files

HotSync (utility normally provided at the time of the purchase of your PDA)

Operating system PalmOS > = 3

Minimum Free memory on your Palm: 470 KB

MemoCircuits.zip contains the following files:

- MemoCircuits_install.exe: the application files for your Palm
- doc\licence.txt: licence of this product
- doc\licenceSW.txt: licence of SuperWaba
- doc\manual.pdf: this document

2-2. Installation:

Decompress the MemoCircuits.zip file, execute MemoCircuits_install.exe and follow the instructions, the installation automatically place necessary files in your HotSync.

3. Uses

Once the MemoCircuits application launched on your Palm, you obtain the following window:

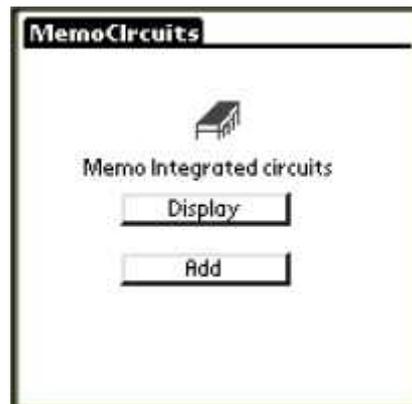


Figure 1 : principal window

Two buttons appear in it: the first « Display » to display the list of components, the second « Add » to add a new component.

Display Menu :

By activating the « Display » button we obtains the following window:

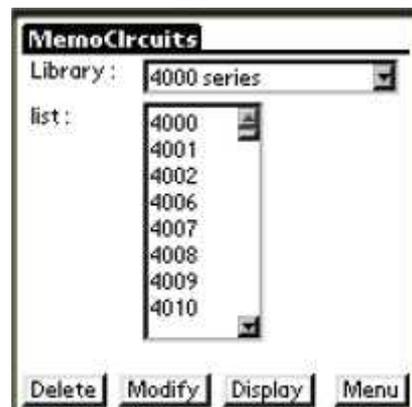


Figure 2 : display menu

In this window (Figure 2) we find:

- combo-box menu « library » which displays the list of the libraries available. In this version, there are 4 libraries: 7400 series (270 elements), 4000 series (128 elements), Operational amplifiers (95 elements), Drivers (32 elements).
- combo-box menu « list » which contains the part numbers of the concerned library.
- « Supp » button to remove an element, while activating this button, a warning message will be displayed to confirm or not the removal of the selected element. Note that the suppression is final, you cannot recover the element which you removed.

- button « modify » to modify the characteristics of an element, by activating this button, another window will open, then you can modify the characteristics of that element (see Add Menu)
- « Display » to display the characteristics of an element, by activating this button a new window will open, containing the principal characteristics of the selected integrated circuit i.e. its description, pins configurations and truth table (if exists), an example is given on figure 3.

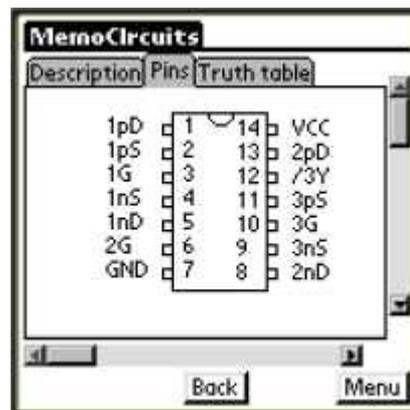


Figure 3 : characteristics of an integrated circuit

- « menu » return to the principal menu (Figure 1)

Add menu :

This menu enables you to insert the characteristics of an integrated circuit. By activating the button « Add », a window containing edits are displayed (figure 4) with the following elements:

- « Library »: combo-box menu allowing choice of in which library you want to add your component. If you want to create a new library, select « Create new library » and register below the name your library.
- « Part number »: edit field to enter the part number. It's what will be displayed in the list of the menu « Display ».
- « Description »: allows to enter the description and the function of your component on 4 lines.
- « pins number »: the number of pins in the integrarte circuit. This number must be between 2 and 48.
- « Delete »: erase the inscriptions in the edit fields.
- « Menu »: you can constantly return to the principal menu by activating this button, no recording will added.

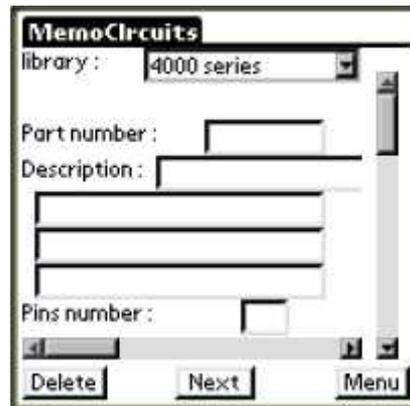


Figure 4 : Add window.

- « Next »: By pressing this button, a new window will appear with edit fields. You can here describe each pin of your integrated circuit (figure 5). Fill these fields and press « next » button.

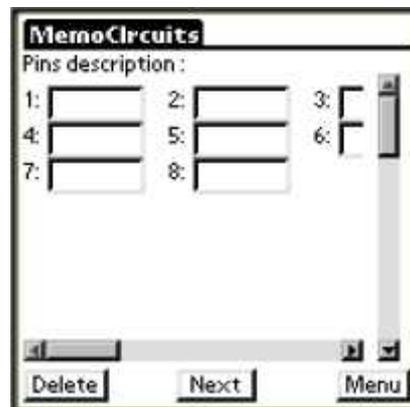


Figure 5 : edit fields for pins description

- After the pins description, a new window will appear, it will allow you to insert the truth table (figure 6). The table is divided into lines and columns which you can change the number. This stage is not required, you can press button « Save » without filling the truth table

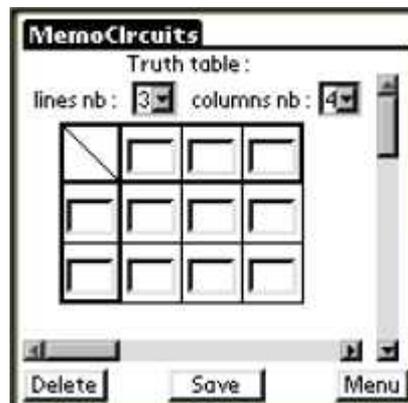


Figure 6 : truth table

Now your component is added, you can display it in the menu "Display".

Menu bar :

This bar (figure7) gives access additional functions of this application, it contains the following elements:



Figure 7 : menu bar

- « Sort a library »: In order to facilitate the localization of your components, you can use this option for sorting in the ascending order. For that, select the concerned library and press the button « sort ». Caution: this operation can last more than one minute if your device is not recent and if the list is big.
- « Include a library »: this option enables you to add a library of components. Visit <http://www.abcsemiconductors.com/appPDA/> page to know if other libraries were added.
- « Remove a library »: this option makes it possible to remove a library with all its elements.
- « Keyboard »: display of a keyboard to allow you to quickly type text.
- Help « Description » which contains a small description of this application. Help "About" which contains some information on the version of this application.

4. List of symbols and notations

List notations which you can meet during the display characteristics of the integrated circuits:

0 : logic low level
1 : logic high level
Z : high impedance
X : don't care, either 0 or 1
? : undefined (although some manufacturers may define a behaviour)
- : no change (latched in closed state, or register value not changed)
/ : rising or positive-edge clock input
\
: falling or negative-edge clock input
!/: not a rising edge, either 0, 1 or \
!\ : not a falling edge, either 0, 1 or /

b[]: bar. exemple b[AB] is equivalent to \overline{AB}

5. Credits

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Web : <http://www.abcsemiconductors.com>

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This application uses, with the agreement of its author, of the data coming from GIICM,

web : <http://www.falstaff.demon.co.uk/giicm.html>

Contact : falstaff@falstaff.demon.co.uk

This application uses SuperWaba virtual machine

Web : <http://www.superwaba.org>

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