

identify.library

A library that converts cryptical IDs to a human-readable form
Version 4.0, 19 October 1996

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Please read the Copyright chapter!

1 Introduction

The `identify.library` has a rather long history.

It all began when I got mad about all the System info programs only showing the expansion boards as a number. So I wrote `expname.library`, which may already be known to you.

Later, `expname` could also identify the system's parameters (even if it was wrong sometimes ;)). I still have new ideas for this library. The only trouble is that the name does not fit any more.

Well, now you have the second generation of the `expname.library`, called `identify.library`. It has been completely rewritten and expanded. The conceptual flaws of the `expname.library` has been removed, and a lot of newbies have been added.

The library has currently these features:

- Converting manufacturer and product id into manufacturer name, product name, and product class.
- Converting the cryptical Amiga Guru codes into readable descriptions.
- Analyzing the system's configuration (system type, processor, memory, graphics and so on...).
- Converting shared library offsets into function names.

Even if the library appears to be quite ready — it is still far away!

I need your help! Please send manufacturer and product names and IDs, your system's configuration, suggestions, bug reports and so on; simply all you want to see implemented in the library.

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CONTENTS OF THE PACKAGE

The Identify package is *only* complete if these files are present:

```
Identify/catalogs/deutsch/Identify.catalog
Identify/catalogs/Identify.cd
Identify/identify.doc
Identify/identify.doc.info
Identify/Identify-D.dvi
Identify/Identify-D.dvi.info
Identify/Identify-D.guide
Identify/Identify-D.guide.info
Identify/Identify-E.dvi
Identify/Identify-E.dvi.info
Identify/Identify-E.guide
Identify/Identify-E.guide.info
Identify/include/identify_lib.i
Identify/include/fd/identify_lib.fd
Identify/include/inline/identify.h
Identify/include/libraries/identify.h
Identify/include/libraries/identify.i
Identify/include/Pascal/identify.lib
Identify/include/Pascal/libraries/identify.h
Identify/include/pragmas/identify_pragmas.h
Identify/include/proto/identify_protos.h
Identify/libs/expname.library
Identify/libs/identify.library
Identify/Function
Identify/Guru
Identify/ListExp
Identify.info
FILE_ID.DIZ
```

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4 ListExp

ListExp is a small tool that was already included in the `expname.library` package.

It describes the hardware components of the system. At first, it will write some hardware parameters (like CPU, Memory). After that, all expansion boards will be listed up (hopefully by name).

By the option `FULL`, all currently used commodities are listed up, too. The output is then useable for bug reports and similar.

A further option allows to get the manufacturer name, product name and class from manufacturer ID and product ID. Use the options `MANUFID` and `PRODID` to do so.

Example:

```
> ListExp MANUFID=514 PRODID=9
-- ListExp V3.0 -- by Richard Koerber

Manufacturer: Commodore West Chester
Product:      A2060
Class:        ArcNet
```

If some entries in the expansion list begin with a '#' instead of a name, you should send a copy of the ListExp output and the description of the missing board (manufacturer name, product name, product class) to me. :-)

It is also not possible to check out all combinations of Amiga expansions. If your hardware is not properly recognized, please write me.

Please note: Some manufacturers, especially GVP and Phase 5, assigned the same ID to different boards. `identify.library` is prepared and tries to differ these boards, anyhow it can't in any case decide right.

5 Guru

Guru translates the cryptical alert code into a human-readable form.

The only parameter is the alert code (all eight digits without any symbols before or behind).
An example:

```
> guru 81000005
-- Guru V1.0 -- by Richard Koerber

Type:          Deadend
Subsystem:     exec.library
General:       General fault
Specified:     Corrupt memory list detected in FreeMem
```

Please understand the result like that:

- Type** What kind of alert is it? It may be a deadend alert, or a recovery alert.
- Subsystem** Which system caused the alert?
- General** To what general class does this alert belong? In this case, it is a general fault which must be specified later.
- Specified** What was the cause? This example shows that the memory list has been corrupted by a bad-written program.

6 Function

You can use the tool `Function` to decode the name of a function by providing the library name and the function offset.

The first argument is the library name, e.g. `'exec.library'`. You may also give device or resource names here. All letters after the point (including the point itself) are optional, but it is case sensitive.

The last argument is the function offset to be decoded. It must be a multiple of 6, but it doesn't need to be signed.

Example:

```
> Function exec.library -456
-- Function V1.0 -- by Richard Koerber

Library:    exec.library
Offset:     -456
Function:    DoIO
```

This function requires the `.fd` files and an assign `'FD:'` to the drawer containing these files. The files must have the usual file name format, e.g. `'exec_lib.fd'`.

Appendix A Known Bugs

My Amiga:

**** HARDWARE ****

```
System:      Amiga 4000 (CPU=68030 FPU=68882 MMU=68030 Chipset=AGA)
AmigaOS:    V39.106 (SetPatch V40.16)   Exec V39.47   Workbench V39.29
Graphic OS: CyberGraphX
Memory:     Chip 2MB + Fast 12MB = TOTAL 14MB   ROM = 512KB
```

**** EXPANSIONS ****

Nr	ID	Address	Size	Manufacturer	Product
1	082C.10	00E90000	64K	BSC/AlfaData	Multiface II Multi I/O
2	2140.22	40000000	64M	Phase 5	CyberVision 64 Graphic
3	4754.05	00EA0000	64K	MacroSystem Germany	MaestroPro Audio
4	4754.0C	00EB0000	64K	MacroSystem Germany	Toccata Audio
5	2140.0A	44000000	4M	Phase 5	FastLane Z3 RAM expansion
6	2140.0B	48000000	32M	Phase 5	FastLane Z3 SCSI host adapter

THESE BUGS ARE CURRENTLY KNOWN:

- ‘Phase 5’ and ‘GVP’ have sometimes assigned one ID to two or more boards. In this case, `identify.library` may return a name that does not fit to the hardware.
- Currently, an 68030 will only be recognized with MMU.
- I couldn’t test the Amiga analysis completely, because of missing Amiga. If your Amiga model is not properly recognized, please send me a copy of your ListExp output.

Appendix B History

V 4.0

- IdFunction() implemented.
- New tool Function.
- Added further boards.
- Bugfix: In some cases the manufacturer name was trashed.
- Pascal include files (made by Axel Dörfler)
- Identifies SetPatch version

V 3.1

- 2 boards added
- Bugfix: always recognized an Amiga 3000 on ECS machines with OS3.1.
- Bugfix: recognized CyberGraphX even when PictDT was installed only.
- Improved memory rounding

V 3.0

- Bases on the `expname.library`, but completely rewritten.
- Now convert alert codes, too.
- Wrote GURU.

Appendix C Credits

I want to thank especially these fellows (in no special order):

Sven Arke for his support with his BBS.

Andreas Gelhausen

for Scout, his board list and his ideas.

Thomas Kessler

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for ToxicBoards.

Kössi

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Wason, Ralph Wermke, Henrik Wetterstrom, Martin Wietfeld, Frank Wille, Alexander Wild, Beno Zidaric, Rolf Zuercher.

Keep on!

```
      //  
  \\ //  -- Amiga - The Computer for Creative Mind --  
   \X/
```

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