expname.library

A system shared library that decodes product and manufacturer ID
Version 2.3, Release 28 April 1996

Richard Körber

1 Introduction

This system shared library is able to decode the manufacturer ID and product ID of expansion boards. If the name of this board is known, it is returned as string; otherwise you will receive a string containing the decimal value of the ID, introduced by a '`#`'.

Though there are already a lot of names known, I still rely on your help. Please send the manufacturer name and id and the product name and id of as much boards as possible! `:-)`

These programs are known to use `expname.library`:

`ListExp`   A ShowConfig replacement.

`ShowConfigEnh`
        Patches the original ShowConfig to recognize expansions using `expname.library`.

`SystemPrefs`
        Configures your CPU, RAMSEY and CIA comfortably by a preferences editor. Supports 68060 and DraCo.

Note: I'll stop `boards.library` support from now on, regarding the explicit request of the author.

2 Copyright

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- Disk magazines and services that charge extra for file transfers may NOT distribute it without written permission by the developer!

- You are allowed to use the expname.library even in a commercial product without any written permission of me. Please note in your program's documentation that you're using expname.library by Richard Körber.

DISCLAIMER

By using this product, you accept the FULL responsibility for any damage or loss that might occur through its use or the inability to use it. The developer of the software can NOT be held responsible.

CONTENTS OF THE PACKAGE

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

```
ExpName/expname.doc
ExpName/expname.doc.info
ExpName/ExpName-D.dvi
ExpName/ExpName-D.dvi.info
ExpName/ExpName-D.guide
ExpName/ExpName-D.guide.info
ExpName/ExpName-E.dvi
ExpName/ExpName-E.dvi.info
ExpName/ExpName-E.guide
ExpName/ExpName-E.guide.info
ExpName/ListExp
ExpName/include/expname_lib.i
ExpName/include/fd/expname_lib.fd
ExpName/include/inline/expname.h
ExpName/include/libraries/expname.h
ExpName/include/libraries/expname.i
ExpName/include/pragmas/expname_pragmas.h
ExpName/include/proto/expname_protos.h
ExpName/libs/expname.library
ExpName.info
FILE_ID.DIZ
```

TRADEMARKS

The copyright and trademarks of all manufacturers and products mentioned are held by their owners.

If you do not agree with these copyright notes, you have to delete the ExpName packet and all related files immediately!

3 My Address

E-MAIL   Please send bug-reports, board descriptions, missing graphic OS, keyfiles, flames and so on to one of the following e-mail addresses:

```
rkoerber@tfh.dssd.sub.org
shred@eratosth.dssd.sub.org
a2h4ko@bg.bib.de   (until September 1996 only)
```

You can also visit my home page (until September 1996 only):

```
http://www.bg.bib.de/~a2h4ko
```
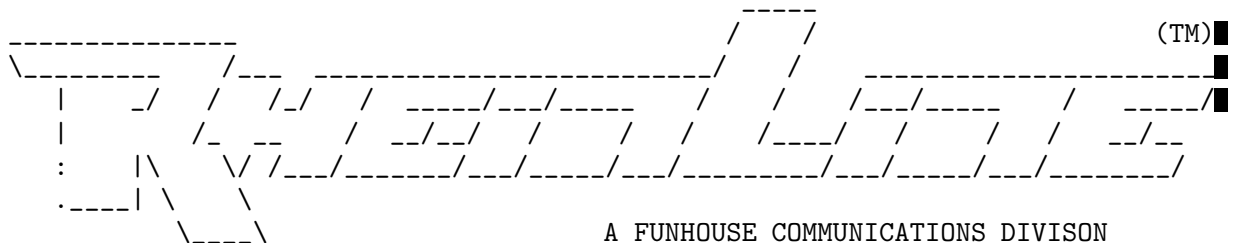
SNAIL MAIL

You can send me a snail mail letter, too. My address is:

```
Richard Körber
Hornstraße 20
51465 Bergisch Gladbach
Germany
```

Please enclose a "1 DM" stamp if you live in Germany and want to get a reply.

SUPPORT MAILBOX

You can get the latest releases from my support bbs:

```
                                                      _____
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        \____\                    A FUNHOUSE COMMUNICATIONS DIVISON

 Port 01: +49 (0)2204 - 61630  19.200      Port 02: +49 (0)2204 / 61499  19.200
 Port 03: +49 (0)2204 - 23856  28.800      Port 04: +49 (0)2204 / 61032  28.800
 Port 05: +49 (0)2204 - 61033  28.800      Port 06: +49 (0)2204 / 61034  14.400
 Port 07: +49 (0)2204 - 61035  16.800      Port 08: +49 (0)2204 / POINT  14.400
 Port 09: +49 (0)2204 - 962121 64.000      Port 10: +49 (0)2204 / 962122 64.000
```

4 Usage

It is very simple to use the expname.library.

If you want to get the name of a special expansion board, you can pass the manufacturer ID and product ID directly to `GetExpName()`. It is mandatory to provide NULL as a pointer to the ConfigDev parameter if you want to do so...

If you want to get the name of all expansion boards or of a special expansion board, you have to get a ConfigDev structure first. Pass this structure to `GetExpName()`, and voila... `:-)`

Additionally, `expname.library` V2+ offers to query system parameters like OS version, processor or memory size. To do so, you need to call `GetSysInfo()`, providing a buffer space and the ID code of the information you want to receive (see include file).

It is really that simple!

5 ListExp

ListExp is a small tool (my first one written in C `;-)`) which uses the `expname.library`. It lists all connected expansion boards, shows their names (if possible), their address and their size.

Try it out to see what `expname.library` can do. If there are entries which are introduced by a '`#`' instead of a name, you should send ASAP a description of the missing board to me... `:-)`

Appendix A Autodoc

NAME   GetExpName — get name of expansion board

SYNOPSIS

```
Success = GetExpName(ManufName,ProdName,ConfigDev,Manufacturer,
 D0.l                  A0.l    A1.l     A2.l      D0.w
           Product)
             D1.b

ULONG GetExpName(STRPTR,STRPTR,struct ConfigDev*,UWORD,UBYTE);
```

FUNCTION

Gets the name of the expansion and it's manufacturer.

INPUTS

ManufName

String to be filled with the manufacturer name. Must be at least 50 chars long (termination included).

ProdName   String to be filled with the product name. Must be at least 50 chars long (termination included).

ConfigDev

Pointer to ConfigDev structure (from `expansion.library`) or NULL.

Manufacturer

ID of the board's manufacturer, if ConfigDev is NULL.

Product   ID of the board's product number (depends on manufacturer), if ConfigDev is NULL.

RESULT

Success   True if both manufacturer and product are known. False if one of them was not known.

NOTE   If the manufacturer or the product is not known, the string will be filled with its number. I.e. it is NOT a real fault if this function fails; the strings can be used in any case...

If you provide a ConfigDev structure, `expname.library` may in some cases find out the name of a board even if it is not implemented.

This call is guaranteed to preserve all registers except D0.

BUGS   There are by far not all existing boards implemented. Please send the manufacturer id and name and the products id and name of all unknown boards to me. My E-Mail: `rkoerber@tfh.dssd.sub.org`.

SEE ALSO

NAME   GetSysInfo — get information about the system (V2)

SYNOPSIS

```
        Buffer = GetSysInfo(Buffer,Type,Reserved)
         D0.l                 A0.l  D0.l   D1.l

        STRPTR GetSysInfo(STRPTR,ULONG,ULONG);
```

FUNCTION

Gets information about the current system environment. This function is fully DraCo compatible!

INPUTS

Buffer   String to be filled with the information string. Must be at least 50 chars long (including termination).

Type   Information type. These types are known in V2:

EXPTYPE_SYSTEM

What system is used?
("Amiga","DraCo")

EXPTYPE_CPU

What kind of CPU is available?
(68000,68010,68020,...68060)

EXPTYPE_FPU

What kind of FPU is available?
(—,68881,68882,68040,68060)

EXPTYPE_MMU

What kind of MMU is available?
(—,68852,68030,68040,68060)

EXPTYPE_OSVER

What OS version is used?
(e.g. "V39.106")

EXPTYPE_EXECVER

What exec version is used?
(e.g. "V39.47")

EXPTYPE_WBVER

What WorkBench version is used?
(e.g. "V39.29", "—" if not available)

EXPTYPE_ROMSIZE

Size of AmigaOS ROM
(e.g. "512KB")

```
EXPTYPE_CHIPSET
```
> What Chipset is available?
> (e.g. "ECS","AGA","DraCo")

```
EXPTYPE_GFXSYS
```
> What Graphic Board System is used?
> (e.g. "CyberGraphX")

```
EXPTYPE_CHIPRAM
```
> Size of complete Chip RAM
> (e.g. "~2MB")

```
EXPTYPE_FASTRAM
```
> Size of complete Fast RAM
> (e.g. "12MB")

```
EXPTYPE_RAM
```
> Size of complete System RAM
> (e.g. "~14MB")

`Reserved`   Reserved for future use, always provide 0 here!

RESULT

`Buffer`   Pointer to the provided buffer if everything went fine, NULL otherwise.

NOTE   This call is guaranteed to preserve all registers except D0.

BUGS

SEE ALSO

Appendix B Known bugs

ExpName was written on an Amiga 4000/o3o/882/MMU, Kick 3.0, 14 MB RAM, FastLane 1GB HD, MaestroPro, Toccata, BSC MultiIO, CyberVision 4MB.

THESE BUGS ARE CURRENTLY KNOWN

- Some of the manufacturers have assigned one ID to two different boards. In this case, expname.library could result a board name that does not match to your hardware. Though it is not my fault, I'll try a bugfix very soon.

THESE ENFORCER HITS OR MUNGWALL HITS ARE KNOWN

- None :^)

Appendix C History

V 1.0

- First release
- 4 boards implemented

V 1.1

- 18 boards implemented

V 1.2

- 27 boards implemented

V 1.3

- 28 boards implemented
- Faster search algorithm
- Improved ListExp: shows board size and if board is shut down

V 1.4

- 47 boards implemented

V 1.5

- 76 boards implemented
- ListExp: now it should work correctly if expname.library is not available

V 1.6

- 132 boards implemented
- Added an algorithm that tries to find out the name of the expansion board if no product name is available.
- Added GCC inline include file.
- Revised the documentation
- Translated documentation into Texinfo.
- German version of the documentation is available

V 2.0

- 157 boards implemented
- New function `GetSysInfo()`: returns information strings about the system.
- `ListExp` improved to the new features
- GCC inline was faulty.

V 2.1

- 160 boards implemented

- Bugfix: ShowConfig crashed after starting V2.0 of this library
- `GetSysInfo()` now returns information about memory size
- `boards.library` replacement written

V 2.2

- 161 boards implemented
- Bugfix: expname crashed on unknown boards or manufacturers

V 2.3

- 166 boards implemented
- improved FPU recognition
- OS version now supports SKick [Federico Villata]
- boards.library replacement is not supported any more (explicit request of it's author)

Appendix D Credits

I wish to send my best regards to the following people:

Sven Arke for supporting me with his BBS

Frank Wille
            for the marvellous `PhxAss` assembler.

Kössi   for his plenty of boards, his TexInfo help and his debugging talent!

Thomas Kessler
            for ShowConfigEnh and his ideas.

Amiga Technologies
            for the Amiga revival. You're doing a VERY good job! Keep on...

. . .and for their contributions (in order of appearance):

Norbert Dimpfl, Markus Pietz, Kai Rode, Martin Wietfeld, Thomas Andersson, Jörn Asmussen, Lutz Legero, Mika Lundell, Jürgen Ofner, Thomas Schürger, 'ALV', Gunther Mannigel, Heiko Polig, Chris Painter, Patrick Thato, Rask Lambertsen, Jan Rembser, Michael Hartmann, Petter Lindquist, Johan Sundstrom, Ralph Wermke, Alexander Fichtner, Matthias Bethke, Fred Hamilton, Andre Schenk, Daniel Adolfsson, Geert Uytterhoeven, Colin Thompson, Bernd Kösling, Milco Veljanoski, Patrick Hess, Beno Zidaric, Ramiro Garcia, Jens Langner, Dirk Hebisch, Henrik Tikanvaara, Sascha Reissner, Jakob Ölund, Bengt Jensie, Dave Clarke, '2bros', Peter Mattsson, Henrik Wetterstrom, Federico Villata

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

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