

ISBN with EAN13 barcodes

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Abstract

This package is used for printing EAN13 barcodes including the ISBN according to its specification valid after January 1st 2007. The format of the ISBN has changed and it is now equal to the EAN number. It seems that the font for writing ISBN is unspecified.

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1 Requirements

The package is just a \LaTeX interface with a small hack for `ean13.tex` developed by Petr Olšák. This file is available from CTAN and \TeX Live. It is hopefully included in other main \TeX distributions. The package also requires `KVOPTIONS` and `KEYVAL` which are standard parts of all \LaTeX distributions.

2 Usage

The package is intended to be used as an auxilliary tool for book typesetting. It therefore accepts all information as package options. However, it may sometimes be useful to produce several ISBN bar codes within the same file. In such a case you can supply arguments to the macros directly.

The package is loaded by:

```
\usepackage[options]{ean13isbn}
```

The options and commands are described in the following text.

2.1 Option ISBN

This option defines the ISBN. Its format is the string ISBN followed by an equal sign and the required ISBN in the exact form in which it should be displayed.

2.2 Size options

The bar code can be displayed in several sizes. The preferred size is selected by specifying its name. The list of normalized sizes is shown in Table 1. The default size is SC2.

Table 1: EAN13 size options

Mag.	Module	Option	Mag.	Module	Option	Mag.	Module	Option
0.800	0.264 mm	SC0	1.200	0.396 mm	SC4	1.650	0.544 mm	SC7a
0.818	0.270 mm	SC0a	1.250	0.412 mm	SC4a	1.700	0.561 mm	SC7b
0.850	0.281 mm	SC0b	1.300	0.429 mm	SC5	1.750	0.577 mm	SC7c
0.900	0.297 mm	SC1	1.350	0.445 mm	SC5a	1.800	0.594 mm	SC8
0.950	0.313 mm	SC1a	1.400	0.462 mm	SC5b	1.850	0.610 mm	SC8a
1.000	0.330 mm	SC2	1.450	0.478 mm	SC5c	1.900	0.627 mm	SC8b
1.050	0.346 mm	SC2a	1.500	0.495 mm	SC6	1.950	0.643 mm	SC8c
1.100	0.363 mm	SC3	1.550	0.511 mm	SC6a	2.000	0.660 mm	SC9
1.150	0.379 mm	SC3a	1.600	0.528 mm	SC7	2.120	0.700 mm	SC10

2.3 Option help

This option prints the text version of Table 1 in the log file.

2.4 Command \ISBN

This command prints the text ISBN followed by a space and the ISBN value as specified in the option list. The ISBN is printed in the current font. It makes no sense to use this command if ISBN was not specified as the package option. In such a case the command will display an error.

2.5 Command \EANisbn

This command produces the bar code including ISBN using information entered as the package options. The command, however, accepts an optional argument within square brackets. These

argument have the same format as the package options. The command is then executed inside a group. The optional arguments override those given as the package options and vanish after the command is executed.

2.6 Command `\EAN`

This is the original plain \TeX macro from `ean13.tex`. Use it in case you wish to print the bar code without an ISBN.

2.7 Configuration file

It is sometimes necessary to prepare a book and its cover. They are defined in separate files yet it is not practical to write the same ISBN at two places. The package therefore reads file `ean13isbn.cfg` from the working directory (it does not look into the standard \LaTeX search path). The file should set keys in the `zwean` group. Its contents may be:

```
\ProvidesFile{ean13isbn.cfg}
\setkeys{zwean}{SC0,ISBN=978-80-86619-23-1}
```

The files for both the book and its cover will then just include the package without any options.

3 Examples

In order to typeset this manual the package was loaded by the following command:

```
\usepackage[ISBN=978-80-85955-35-4,SC0]{ean13isbn}
```

We can thus print the ISBN. Issuing just the command `\ISBN` yields the text:

ISBN 978-80-85955-35-4

The bar code will be produced in the smallest size if we use `\EANisbn` without an optional argument:



We may produce a bar code for a different ISBN at a different size if the information is given in the optional argument. Thus `\EANisbn[SC5b,ISBN=978-80-7340-097-2]` will produce:



Now we make a slightly larger barcode for the ISBN given as the package option by using `\EANisbn[SC3]`:



We can also print a bar code for another ISBN at the size given as the package option using `\EANisbn[ISBN=978-80-7340-097-2]`:



Finally we print just the EAN bar code. Its size is always defined by the package option. Notice the mandatory spaces in the command syntax:

```
\EAN 978-80-7340-097-2
```

The result is:



4 Notice

The plain TeX file `ean13.tex` uses the following “unprotected” macros: `\X`, `\ocrb`, `\ocrbsmall`, `\barheight`, `\bcorr`, `\numlines`, `\numdigit`, `\A`, `\B`, `\EANbox` and others. Do not redefine them.

5 History

The version of 24 January 2021 reflects recent changes in PSNFSS.

6 License

The package can be used and distributed according to the LaTeX Project Public License version 1.3 or later the text of which can be found at the `License.txt` file in the `doc` directory or at <http://www.latex-project.org/lppl.txt>

7 References

1. Petr Olšák: The EAN barcodes by TeX. TUGboat 15 (December 1994), No. 4, pp. 459–464. <http://www.tug.org/TUGboat/Articles/tb15-4/tb45olsa.pdf>
2. Petr Olšák: Čárové kódy EAN v TeXu. Zpravodaj Československého sdružení uživatelů TeXu, 6(2), 86–96 (1996). <http://bulletin.cstug.cz/bul962.shtml>
3. Adriana Benadiková, Stefan Mada and Stanislav Weinlich: *Čárové kódy, automatická identifikace (Barcodes, the Automatic Identification)*. Grada 1994, 272 pp., ISBN 80-85623-66-8.