

# The `elzcards` package\*

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## 1 Introduction

`elzcards` is a package meant to be an easy and flexible way to typeset business cards, index cards and flash cards, with -optional- back side. You should bother only by setting the paper size, margins and the design of your cards<sup>1</sup>. Everything else is done by `elzcards`.

It uses the printable area of the paper to print the cards, so it relies on `\textwidth` and `\textheight` (not on `\paperwidth` and `\paperheight`) to calculate how many cards fits on a page.

You should typeset the design of your cards with the macro provided for your case, depending on the type of card, followed by another macro to write them on the paper. Macros used to manage business cards are not the same as for index/flash cards because they are not the same thing. Business cards are all equal and they are repeated many times in a page. Index/flash cards are all different, so the macro to typeset index/flash cards manages a stack of cards. You should execute it many times as index/flash cards you have and all them will be stored internally to be processed when you have finished adding them.

Index cards and flash cards are in essence the same; the package provides macros for “both” cases but they behave the same. Macro aliases for flash cards were added for completeness.

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\*This document corresponds to `elzcards` v1.23, dated 2017/07/09.

<sup>1</sup>No predefined design is given; you must compose your cards.

## 2 Usage

Please load your class (i.e. `article`) and load the package (*it doesn't has options*).

```
\documentclass{article}
\usepackage{elzcards}
```

Now I'll recommend you inserting the `geometry` package and setting the margins according to

1. the desired size of your cards,
2. the paper you'll use,
3. the printable area of your printer.

For example, for the default business card size (3.5 inches x 2 inches) in a letter paper, you might use:

```
\usepackage[letterpaper,landscape,vmargin={0.25in,0.25in},hmargin={0.25in,0.25in}]
{geometry}
```

After `\beginning` your `{document}`, you have four principal macros to produce the cards you want. These macros are:

- `\BusinessCard` and `\IndexCard`<sup>2</sup> to typeset business cards and index cards.
- `\MakeBC` and `\MakeIC`<sup>3</sup> to write them on paper.

The package prints cropping marks to guide the cutting of the cards; these cutting marks may be crosses inside the printed area, segments outside the printed area, dots inside and outside the printed area, or continuous lines. You can change the length of that segments, thickness of lines, size of dots and colors of all these cutting marks.

### 2.1 Typesetting the cards

You typeset (compose) your cards using macros described in this subsection; your cards will be stored internally in boxes or stacks and will be processed later by issuing the appropriate macro (described in the following subsection). Only two commands: storing cards, and later processing them.

```
\BusinessCard \BusinessCard{<front side design>}[<back side design>]
```

To produce a business card, you should issue the macro `\BusinessCard`. What you write as the first argument (with braces) will be the card's front face design, and its second -optional- argument (with square brackets) is the card's back side<sup>4</sup>. Everything you put inside `{ }` and -optionally- inside `[ ]` will be stored in a box and nothing will be printed on the page until you issue a macro to process the cards and write them to the page (see the following subsection).

```
\IndexCard \IndexCard{<front side design>}[<back side design>]
```

```
\FlashCard \FlashCard{<front side design>}[<back side design>]
```

To compose an index/flash card you have to issue `\IndexCard`<sup>5</sup>. This command has the same syntax as `\BusinessCard`, but it manages a stack of index/flash cards. You must invoke it many times as cards you have to add all them into the stack. You can add the number of cards you by want executing `\IndexCard` or `\FlashCard` many times **no matter how many pages are needed to print all them**. All cards will

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<sup>2</sup>The package provides the alias `\FlashCard` for your convenience when writing flash cards but it is the same as `\IndexCard`.

<sup>3</sup>Also the package provides the alias `\MakeFC`.

<sup>4</sup>There is no need to specify the `twoside` option when loading your class (i.e. `article` of whatever) even if you are writing twosided cards, but you must compile your document twice to be added the `twoside` option automatically to the compilation.

<sup>5</sup>Or `\FlashCard`, which is the same command.

be stored and and won't be processed until you invoke the macro intended to process them, described on the next subsection.

```
\CurrentIC \CurrentFC
\CurrentFC \TotalIC \TotalFC
\TotalIC \TotalFC
```

With `\CurrentIC` and `\TotalIC`<sup>6</sup> you can access the counters associated with index/flash cards. When used **inside a card**, the macro `\CurrentIC` prints the number of the current index/flash card and `\TotalIC` prints the total of cards stored in the stack. For example, you can add something like `Card: \CurrentIC{}` or `\TotalIC` somewhere on the content of your card if you are writing some type of numbered index cards.

## 2.2 Writing cards on paper

At this time, nothing has been written on paper. The macros described on past section **only stores the contents of all cards**; to write them on paper you should issue `\MakeBC` for business cards or `\MakeIC`<sup>7</sup> for index/flash cards.

```
\MakeBC \MakeBC[*] [<key-val comma separated list of options>]
\MakeIC \MakeIC[*] [<key-val comma separated list of options>]
\MakeFC \MakeFC[*] [<key-val comma separated list of options>]
```

They have an optional star and a key-val list of options in square brackets. The key-val options are intended to change sizes, optional gaps between cards, and cutting options (these cutting or cropping options are described on next section). The star means that the *make* command won't clear the cards after processing them. Normally, when you execute any of these *make* commands, all cards processed are purged from memory and you must add them again to process them a second time. If you issue a *make* command with a star `*` you can use again a *make* command because the cards weren't removed from memory. Otherwise, without `*` all stacks and boxes will be cleared being ready to add a different set of cards.

## 2.3 key-val options: defining sizes, gaps and crop options

Both *make* commands accepts a key-val list of comma-separated options. These options are:

| Option                       | What changes?  | Default value                                       |
|------------------------------|--|---|
| <code>hsize=</code>          | horizontal size of each card   | 3.5in on business cards<br>5in on index/flash cards |
| <code>vsize=</code>          | vertical size of each card   | 2in on business cards<br>3in on index/flash cards   |
| <code>hgap=</code>           | horizontal gap between cards   | 0pt   |
| <code>vgap=</code>           | vertical gap between cards   | 0pt   |
| <code>segment length=</code> | segment length (arista) when marking with crosses or segments        | 1mm   |
| <code>line thickness=</code> | line thickness when marking with crosses, external segments or lines | 0.1mm   |
| <code>dot size=</code>       | diameter of crop dots  | 1pt   |
| <code>crosses</code>         | use crosses as cropping marks  | true  |
| <code>segments</code>        | use external segments as cropping marks                              | false   |
| <code>lines</code>           | use lines as cropping marks  | false   |
| <code>dots</code>            | use dots as cropping marks   | false   |
| <code>crop color</code>      | change color for cropping marks                                      | 90% red and 10% black                               |
| <code>no marks</code>        | do not print cropping marks  | false   |

<sup>6</sup>Or their FC versions, which are the same.

<sup>7</sup>Or `\MakeFC`, which is also an alias for convenience.

You can change whatever length on this list<sup>8</sup>. Everything you won't specify will be taken from its default value, so nothing is mandatory. As you can see, business cards and index/flash cards has different default sizes, but both can be changed with `hsize` and `vsize` in the `make` command. Both gaps are set by default to zero, meaning no distance between cards. The default crop mark is the cross (which really are segments and crosses); if you want external segments, dots or lines, you must specify one of them. Using lines you'll have lines between all cards, like a grid. This might be useful also if you want the line as the border of the card, part of the design itself of the card. *Back side cards will have no cutting marks, they aren't needed.*

## 2.4 Changing default values and default options

You can change all the default behavior and values; it might be convenient instead of issuing `make` commands with parameters, specially if you are writing more than one set of cards in the same document and they shares some not-default options. Changing default values at some point of the document might be preferred than calling these `make` commands with optional arguments over and over. This package provides commands to change all default values in whatever place of the document and that will apply to every card onwards:

`\BCdim`    `\BCdim{<h-size>}{<v-size>}`

This command `\BCdim` takes two arguments, the default horizontal and vertical size of business cards.  
Key-val options: `hsize=` and `vsize=`

`\ICdim`    `\ICdim{<h-size>}{<v-size>}`

`\FCdim`

With `\ICdim` or `\FCdim` you can change default size of index/flash cards, like as `\BCdim`.  
Key-val options: `hsize=` and `vsize=`

`\CardGap`    `\CardGap{<h-gap>}{<v-gap>}`

With `\CardGap` you can modify the default gap between cards. *If you specify only one parameter, this will be taken as the gap in both directions.*  
Key-val options: `hgap=` and `vgap=`

`\SegmentLength`    `\SegmentLength{<segment length>}`

This macro may be used to change the segment length when using crosses or external segments as cutting marks. Applies when using crosses or external segments as cutting guides.  
Key-val option: `segment length=`

`\LineThickness`    `\LineThickness{<line thickness>}`

`\LineThickness` changes the default thickness of the lines used for cutting the paper. Applies when using lines, crosses or segments as cutting guides.  
Key-val option: `line thickness=`

`\DotSize`    `\DotSize{<dot size>}`

With `\DotSize` you can alter the diameter of the dots printed as a cutting guide.  
Key-val option: `dot size=`

`\CropCrosses`    `\CropCrosses`

This command make default drawing crosses and segments as crop marks. *That's the default, but you can change it with the following two macros.*  
Key-val option: `crosses`

`\CropSegments`    `\CropSegments`

This command make default drawing *external* segments as crop marks. Unlike the crosses, there are no cutting marks printed on the internal part of paper, everything is printed on borders outside the printed area.  
Key-val option: `segments`

---

<sup>8</sup>All sizes and gaps on that list are lengths in the L<sup>A</sup>T<sub>E</sub>X sense.

|                           |                           |   |
|---------------------------|---------------------------|---|
| <code>\CropLines</code>   | <code>\CropLines</code>   | This command make default drawing lines as crop marks.<br><i>Key-val option: lines</i>  |
| <code>\CropDots</code>    | <code>\CropDots</code>    | This command make default drawing dots as crop marks.<br><i>Key-val option: dots</i>  |
| <code>\CropColor</code>   | <code>\CropColor</code>   | With <code>\CropColor</code> you can change the color used for cropping marks; the argument is the color name in the syntax of the <code>xcolor</code> package loaded with <code>usenames</code> and <code>dvipsnames</code> as its options.<br><i>Key-val option: crop color</i> |
| <code>\NoCropMarks</code> | <code>\NoCropMarks</code> | This command defaults not printing cutting marks.<br><i>Key-val option: no marks</i>  |

### 3 Final words

In the same document you can typeset many different sets of cards. You can combine business cards with index cards in the order you want; also using different sizes of cards, different gaps, designs, cropping options, and even changing the paper geometry with `\geometry`.

If only one card has back side, the whole document behaves like a twosided document, i.e. it will swap horizontal margins and will have interleaved blank pages when a set of cards has only front side; this is the behavior of `twoside` option but you don't have to specify it by hand in `\documentclass` even when having cards with back side.

Take into account that this is L<sup>A</sup>T<sub>E</sub>X, so you can define your own commands and use them inside the `\BusinessCard` and `\IndexCard` macros, like in examples with macro `\mycenter`.

### 4 Sample output of a business card

In the next page you'll see the first set of business cards of the all-in-one included example whose code is the following:

```

\documentclass{article}
\usepackage{elzcards}
\usepackage{geometry}
\geometry{vmargin={0.5in,0.5in},hmargin={0.75in,0.75in}}
\newcommand{\mycenter}[1]{%
  \vspace*{2pt}\hspace*{2pt}$\narrow$ top left corner\vfill
  \begin{center}\LARGE#1\end{center}%
  \vfill\hfill bottom right corner $\searrow$\hspace*{2pt}\vspace*{2pt}}
\begin{document}
\BusinessCard{\mycenter{Business card \\ only front side \\ default options}}%
\MakeBC
\end{document}

```

top left corner

top left corner

L

Business card  
only front side  
default options

Business card  
only front side  
default options

top left corner

bottom right corner top left corner

bottom right corner

Business card  
only front side  
default options

Business card  
only front side  
default options

top left corner

bottom right corner top left corner

bottom right corner

Business card  
only front side  
default options

Business card  
only front side  
default options

top left corner

bottom right corner top left corner

bottom right corner

Business card  
only front side  
default options

Business card  
only front side  
default options

top left corner

bottom right corner top left corner

bottom right corner

Business card  
only front side  
default options

Business card  
only front side  
default options

r

bottom right corner

bottom right corner

## 5 Code of the all-in-one example included

The following example is included as `elzcards-examples.tex`.

```
1 (*ejemplo)
2 \documentclass{article}
3 \usepackage{elzcards}
4 \usepackage[landscape,letterpaper,vmargin={0.25in,0.25in},hmargin={0.25in,0.25in}]{geometry}
5
6 \newcommand{\mycenter}[1]{%
7   \vspace*{2pt}\hspace*{2pt}$\narrow$ top left corner\vfill
8   \begin{center}\LARGE#1\end{center}%
9   \vfill\hfill bottom right corner $\searrow$\hspace*{2pt}\vspace*{2pt}}
10
11 \begin{document}
12 %% Printing business cards with different options, showing all elzcards can do:
13 \BusinessCard{\mycenter{Business card \\\ only front side \\\ default options}}
14 \MakeBC
15
16 \BusinessCard{\mycenter{Business card \\\ front side \\\ vertical shaped \\\
17   with thicker and longer external segments}}%
18   [\mycenter{Business card \\\ back side \\\ vertical shaped}]
19 \MakeBC[segments,hsz=2in, vsize=3.5in, line thickness=1pt, segment length=0.5cm]
20
21 \BusinessCard{\mycenter{Business card \\\ only front side \\\ with dots}}
22 %% Using \MakeBC* to avoid purging the card from memory:
23 \MakeBC*[dots]
24
25 %% We can do \MakeBC again because we've used \MakeBC* before:
26 \MakeBC[crop color=blue]
27
28 \BusinessCard{\mycenter{Business card \\\ only front side \\\ with big dots and gaps}}
29 \MakeBC[dots, dot size=4pt, hgap=1.666cm, vgap=0.666cm]
30
31 \BusinessCard{\mycenter{Business card \\\ only front side \\\ with lines}}
32 \MakeBC[crop color=green, lines]
33
34 \BusinessCard{\mycenter{Business card \\\ only front side \\\ with thicker lines}}
35 \MakeBC[lines, line thickness=2pt]
36
37 \BusinessCard{\mycenter{Business card \\\ only front side \\\ without cropping marks}}
38 \MakeBC[no marks]
39
40 \BusinessCard{\mycenter{Business card \\\ front side \\\ other size \\\ with gaps}}%
41   [\mycenter{Business card \\\ back side \\\ other size \\\ with gaps}]
42 %% We can specify the size also with \BCdim command; this will make default that change onwards:
43 \BCdim{74mm}{52mm}
44 \MakeBC[segments,hgap=1.666cm, vgap=0.666cm]
45
46 %% Testing with index/flash cards:
47 \IndexCard{\mycenter{Index/flash card \\\ front side \CurrentIC{} of \TotalIC{}}}%
48   [\mycenter{Index/flash card \CurrentIC{} of \TotalIC \\\ back side}]
49 %% Note that not all cards has back side.
50 \IndexCard{\mycenter{Index/flash card \\\ only front side \CurrentIC{} of \TotalIC{}}
51 \IndexCard{\mycenter{Index/flash card \\\ only front side \CurrentIC{} of \TotalIC{}}
52 \IndexCard{\mycenter{Index/flash card \\\ front side \CurrentIC{} of \TotalIC{}}}%
53   [\mycenter{Index/flash card \CurrentIC{} of \TotalIC \\\ back side}]
54 \IndexCard{\mycenter{Index/flash card \\\ only front side \CurrentIC{} of \TotalIC{}}
55 \IndexCard{\mycenter{Index/flash card \\\ only front side \CurrentIC{} of \TotalIC{}}
56 \IndexCard{\mycenter{Index/flash card \\\ only front side \CurrentIC{} of \TotalIC{}}
```

```

57 %% Now \MakeIC* instead of \MakeIC,
58 %% so we can process the same set of cards again with \MakeIC or \MakeIC*.
59 \MakeIC*
60
61 %% We redefine some default parameters instead of giving options to \MakeIC:
62 \CardGap{0.5cm}{0.5cm}
63 \SegmentLength{10pt}
64 \LineThickness{1pt}
65 \CropColor{Orange}
66 \CropSegments
67 %% \MakeIC* again because we did use \MakeIC* before and the cards weren't cleared:
68 \MakeIC*[hsize=2.5in,vsize=1.5in]
69
70 %% We redefine again some default parameters:
71 \CardGap{Opt}{Opt}
72 \ICdim{4in}{2in}
73 \DotSize{1mm}
74 \CropDots
75 %% Also we can change some other defaults with
76 %% \CropCrosses, \CropLines, \NoCropMarks and \CropColor.
77 %% \MakeFC is an alias to \MakeIC:
78 \MakeFC*[hgap=Opt, vgap=Opt]
79 \end{document}
80 </ejemplo>

```

## 6 Implementation

```

81 (*package)
82 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
83 \ProvidesPackage{elzcards}[2017/07/09 v1.23 ELZ cards]
84
85 \RequirePackage{calc}
86 \RequirePackage{xparse}
87 \RequirePackage{keyval}
88 \RequirePackage[usenames,dvipsnames]{xcolor}
89
90 \newif\if@elzc@cruces
91 \newif\if@elzc@segmentos
92 \newif\if@elzc@puntos
93 \newif\if@elzc@lineas
94 \newif\if@elzc@sinmarcas
95 \newif\if@elzc@tarjeta
96 \newif\if@elzc@tarjetaconreverso
97 \newif\if@elzc@fichaconreverso
98 \newif\if@elzc@conreverso
99 \newif\if@elzc@reverso
100
101 \newlength{\elzc@TarjXdim}
102 \newlength{\elzc@TarjYdim}
103 \newlength{\elzc@SeparaX}
104 \newlength{\elzc@SeparaY}
105 \newlength{\elzc@TempLen}
106 \newlength{\elzc@TempUnitLength}
107 \newlength{\elzc@DefTPXdim}
108 \newlength{\elzc@DefTPYdim}
109 \newlength{\elzc@DefFichaXdim}
110 \newlength{\elzc@DefFichaYdim}
111 \newlength{\elzc@DefSeparaX}
112 \newlength{\elzc@DefSeparaY}

```



```

113 \newlength{\elzc@DefArista}
114 \newlength{\elzc@DefPunto}
115 \newlength{\elzc@DefLinea}
116
117 \newcounter{elzc@TarjXdim}
118 \newcounter{elzc@TarjYdim}
119 \newcounter{elzc@PapelX}
120 \newcounter{elzc@PapelY}
121 \newcounter{elzc@NumX}
122 \newcounter{elzc@NumY}
123 \newcounter{elzc@NumXY}
124 \newcounter{elzc@ContX}
125 \newcounter{elzc@ContY}
126 \newcounter{elzc@PosX}
127 \newcounter{elzc@PosY}
128 \newcounter{elzc@SeparaX}
129 \newcounter{elzc@SeparaY}
130 \newcounter{elzc@XInicial}
131 \newcounter{elzc@RestoX}
132 \newcounter{elzc@Punto}
133 \newcounter{elzc@Arista}
134 \newcounter{elzc@Fichas}
135 \newcounter{elzc@FichaActual}
136 \newcounter{elzc@TempNumX}
137 \newcounter{elzc@TempNumY}
138 \newcounter{elzc@TempMarcaX}
139 \newcounter{elzc@TempMarcaY}
140 \newcounter{elzc@TempFichaActualRev}
141 \newcounter{elzc@TempInfo}
142
143 \def\elzc@aux@cruces{%
144 \@elzc@crucestrue\@elzc@segmentostrue\@elzc@puntosfalse\@elzc@lineasfalse\@elzc@sinmarcasfalse}
145 \def\elzc@aux@segmentos{%
146 \@elzc@crucesfalse\@elzc@segmentostrue\@elzc@puntosfalse\@elzc@lineasfalse\@elzc@sinmarcasfalse}
147 \def\elzc@aux@puntos{%
148 \@elzc@crucesfalse\@elzc@segmentosfalse\@elzc@puntostrue\@elzc@lineasfalse\@elzc@sinmarcasfalse}
149 \def\elzc@aux@lineas{%
150 \@elzc@crucesfalse\@elzc@segmentosfalse\@elzc@puntosfalse\@elzc@lineastrue\@elzc@sinmarcasfalse}
151 \def\elzc@aux@sinmarcas{%
152 \@elzc@crucesfalse\@elzc@segmentosfalse\@elzc@puntosfalse\@elzc@lineasfalse\@elzc@sinmarcastrue}
153
154 \define@key{ELZc}{hsize}{\setlength{\elzc@TarjXdim}{#1}}
155 \define@key{ELZc}{vsize}{\setlength{\elzc@TarjYdim}{#1}}
156 \define@key{ELZc}{hgap}{\setlength{\elzc@SeparaX}{#1}}
157 \define@key{ELZc}{vgap}{\setlength{\elzc@SeparaY}{#1}}
158 \define@key{ELZc}{segment length}{%
159 \setlength{\elzc@TempLen}{#1}\setcounter{elzc@Arista}{\elzc@TempLen}}
160 \define@key{ELZc}{dot size}{\setlength{\elzc@TempLen}{#1}\setcounter{elzc@Punto}{\elzc@TempLen}}
161 \define@key{ELZc}{line thickness}{\linethickness{#1}}
162 \define@key{ELZc}{crosses}[true]{\elzc@aux@cruces}
163 \define@key{ELZc}{segments}[true]{\elzc@aux@segmentos}
164 \define@key{ELZc}{dots}[true]{\elzc@aux@puntos}
165 \define@key{ELZc}{lines}[true]{\elzc@aux@lineas}
166 \define@key{ELZc}{crop color}{\def\elzc@ColorMarcas{#1}}
167 \define@key{ELZc}{no marks}[true]{\elzc@aux@sinmarcas}
168
169 \newcommand*\CurrentIC{\arabic{elzc@FichaActual}}
170 \newcommand*\TotalIC{\arabic{elzc@Fichas}}
171 \let\CurrentFC\CurrentIC
172 \let\TotalFC\TotalIC

```

```

173
174 \newcommand*{\BCdim}[2]{\setlength{\elzc@DefTPXdim}{#1}\setlength{\elzc@DefTPYdim}{#2}}
175 \newcommand*{\ICdim}[2]{\setlength{\elzc@DefFichaXdim}{#1}\setlength{\elzc@DefFichaYdim}{#2}}
176 \let\FCdim\ICdim
177
178 \NewDocumentCommand{\CardGap}{m g}{%
179 \setlength{\elzc@DefSeparaX}{#1}%
180 \IfValueTF{#2}{\setlength{\elzc@DefSeparaY}{#2}}{\setlength{\elzc@DefSeparaY}{#1}}}
181
182 \newcommand*{\SegmentLength}[1]{\setlength{\elzc@DefArista}{#1}}
183 \newcommand*{\DotSize}[1]{\setlength{\elzc@DefPunto}{#1}}
184 \newcommand*{\LineThickness}[1]{\setlength{\elzc@DefLinea}{#1}}
185
186 \newcommand*{\CropCrosses}{\def\elzc@DefMarcasCorte{\elzc@aux@cruces}}
187 \newcommand*{\CropSegments}{\def\elzc@DefMarcasCorte{\elzc@aux@segmentos}}
188 \newcommand*{\CropDots}{\def\elzc@DefMarcasCorte{\elzc@aux@puntos}}
189 \newcommand*{\CropLines}{\def\elzc@DefMarcasCorte{\elzc@aux@lineas}}
190 \newcommand*{\CropColor}[1]{\def\elzc@DefColorMarcas{#1}}
191 \newcommand*{\NoCropMarks}{\def\elzc@DefMarcasCorte{\elzc@aux@sinmarcas}}
192
193 \NewDocumentCommand{\MakeBC}{s o}{%
194 \ifx\undefined\@elzc@TarjetaAnverso
195 \PackageError{elzcards}{There are no business cards defined}{}%
196 \else
197 \@elzc@tarjetatrue
198 \if@elzc@tarjetaconreverso \@elzc@conreversotrue \else \@elzc@conreversofalse \fi
199 \elzc@Predeterminados
200 \setlength{\elzc@TarjXdim}{\elzc@DefTPXdim}%
201 \setlength{\elzc@TarjYdim}{\elzc@DefTPYdim}%
202 \IfValueTF{#2}{\setkeys{ELZc}{#2}}%
203 \elzc@Tarjetas
204 \IfBooleanF{#1}{\elzc@TodoCero}%
205 \fi}
206
207 \NewDocumentCommand{\MakeIC}{s o}{%
208 \ifnum \value{elzc@Fichas} = 0%
209 \PackageError{elzcards}{There are no index/flash cards in stack}{}%
210 \else
211 \@elzc@tarjetafalse
212 \if@elzc@fichaconreverso \@elzc@conreversotrue \else \@elzc@conreversofalse \fi
213 \elzc@Predeterminados
214 \setlength{\elzc@TarjXdim}{\elzc@DefFichaXdim}%
215 \setlength{\elzc@TarjYdim}{\elzc@DefFichaYdim}%
216 \IfValueTF{#2}{\setkeys{ELZc}{#2}}%
217 \elzc@Tarjetas
218 \IfBooleanF{#1}{\elzc@TodoCero*}%
219 \fi}
220 \let\MakeFC\MakeIC
221
222 \NewDocumentCommand{\BusinessCard}{+m +o}{%
223 \ifx\undefined\@elzc@TarjetaAnverso
224 \def\@elzc@TarjetaAnverso{#1}%
225 \IfValueTF{#2}{%
226 \@elzc@tarjetaconreversotrue
227 \def\@elzc@TarjetaReverso{#2}%
228 \immediate\write\@auxout{\string\@twosidetrue\string\@mparswitchtrue}}
229 {\def\@elzc@TarjetaReverso{}}
230 \else
231 \PackageError{elzcards}{There are business cards already defined}{}%
232 \fi}

```

```

233
234 \NewDocumentCommand{\IndexCard}{+m +o}{%
235 \addtocounter{elzc@Fichas}{1}%
236 \expandafter\def\csname @elzc@FichaAnverso\romannumeral\value{elzc@Fichas}\endcsname{#1}%
237 \IfValueTF{#2}{%
238 \@elzc@fichaconreversotrue
239 \expandafter\def\csname @elzc@FichaReverso\romannumeral\value{elzc@Fichas}\endcsname{#2}%
240 \immediate\write\@auxout{\string\@twosidetrue\string\@mparswitchtrue}}
241 {\expandafter\def\csname @elzc@FichaReverso\romannumeral\value{elzc@Fichas}\endcsname{}}
242 \let\FlashCard\IndexCard
243
244 \newcommand*{\elzc@Cuadrricula}{%
245 \setlength{\elzc@TempUnitLength}{\unitlength}%
246 \setlength{\unitlength}{1sp}%
247 \setlength{\parindent}{0pt}%
248 \thispagestyle{empty}%
249 \setcounter{elzc@NumX}{0}%
250 \setcounter{elzc@NumY}{0}%
251 \setcounter{elzc@TempNumX}{0}%
252 \setcounter{elzc@TempNumY}{0}%
253 \setcounter{elzc@TarjXdin}{\elzc@TarjXdin}%
254 \setcounter{elzc@TarjYdin}{\elzc@TarjYdin}%
255 \setcounter{elzc@SeparaX}{\elzc@SeparaX}%
256 \setcounter{elzc@SeparaY}{\elzc@SeparaY}%
257 \setcounter{elzc@PapelX}{\textwidth}%
258 \setcounter{elzc@PapelY}{\textheight}%
259 \loop \ifnum\value{elzc@TempNumX} < \value{elzc@PapelX}%
260 \advance\value{elzc@TempNumX} by \value{elzc@TarjXdin}{%
261 \addtocounter{elzc@NumX}{1}%
262 \addtocounter{elzc@TempNumX}{\value{elzc@SeparaX}}}%
263 \repeat
264 \loop \ifnum\value{elzc@TempNumY} < \value{elzc@PapelY}%
265 \advance\value{elzc@TempNumY} by \value{elzc@TarjYdin}{%
266 \addtocounter{elzc@NumY}{1}%
267 \addtocounter{elzc@TempNumY}{\value{elzc@SeparaY}}}%
268 \repeat
269 \addtocounter{elzc@TempNumX}{-\value{elzc@SeparaX}}%
270 \addtocounter{elzc@TempNumY}{-\value{elzc@SeparaY}}%
271 \ifnum\value{elzc@TempNumX} > \value{elzc@PapelX}%
272 \addtocounter{elzc@NumX}{-1}%
273 \fi
274 \ifnum\value{elzc@TempNumY} > \value{elzc@PapelY}%
275 \addtocounter{elzc@NumY}{-1}%
276 \fi
277 \setcounter{elzc@NumXY}{\value{elzc@NumX} * \value{elzc@NumY}}%
278 \setcounter{elzc@ContX}{-1}%
279 \setcounter{elzc@ContY}{-1}%
280 \setcounter{elzc@RestoX}{- \value{elzc@PapelX} + \value{elzc@NumX} *%
281 (\value{elzc@TarjXdin} + \value{elzc@SeparaX}) - \value{elzc@SeparaX}}%
282 \elzc@Informacion
283 \begin{picture}(\value{elzc@PapelX}, \value{elzc@PapelY})(\value{elzc@XInicial}, 0)%
284 \loop \ifnum\value{elzc@ContY} < \value{elzc@NumY} \advance\value{elzc@ContY} by 1{%
285 \loop \ifnum\value{elzc@ContX} < \value{elzc@NumX} \advance\value{elzc@ContX} by 1{%
286 \if@elzc@reverso
287 \setcounter{elzc@PosX}{(\value{elzc@NumX} - \value{elzc@ContX} - 1) * \value{elzc@TarjXdin}%
288 + (\value{elzc@NumX} - \value{elzc@ContX} - 1) * \value{elzc@SeparaX}}%
289 \else
290 \setcounter{elzc@PosX}{\value{elzc@ContX} * (\value{elzc@TarjXdin} + \value{elzc@SeparaX}}%
291 \fi
292 \setcounter{elzc@PosY}{\value{elzc@ContY} * (\value{elzc@TarjYdin} + \value{elzc@SeparaY}}%

```

```

293 \ifnum \value{elzc@ContX} < \value{elzc@NumX}%
294 \ifnum \value{elzc@ContY} < \value{elzc@NumY}%
295 \put(\value{elzc@PosX}, \value{elzc@PosY}){%
296 \makebox(\value{elzc@TarjXdim}, \value{elzc@TarjYdim}){%
297 \setlength{\unitlength}{\elzc@TempUnitLength}%
298 \parbox[t][\elzc@TarjYdim]{\elzc@TarjXdim}{%
299 \if@elzc@tarjeta
300 \if@elzc@reverso \@elzc@TarjetaReverso \else \@elzc@TarjetaAnverso \fi
301 \else
302 \ifnum\value{elzc@FichaActual} < \value{elzc@Fichas}%
303 \addtocounter{elzc@FichaActual}{1}%
304 \addtocounter{elzc@TempFichaActualRev}{1}%
305 \if@elzc@reverso
306 \expandafter\csname @elzc@FichaReverso\romannumeral\value{elzc@FichaActual}\endcsname
307 \else
308 \expandafter\csname @elzc@FichaAnverso\romannumeral\value{elzc@FichaActual}\endcsname
309 \fi
310 \fi
311 \fi}}}%
312 \fi
313 \fi
314 \if@elzc@reverso \else \elzc@CalculaMarcas \fi
315 }\repeat
316 }\repeat
317 \end{picture}}
318
319 \newcommand*{\elzc@Tarjetas}{%
320 {\pagestyle{empty}\clearpage}%
321 \elzc@Cuadrícula
322 \if@elzc@conreverso
323 \@elzc@reversotrue
324 \if@elzc@tarjeta \else \addtocounter{elzc@FichaActual}{-\value{elzc@TempFichaActualRev}}\fi
325 \setcounter{elzc@XInicial}{\value{elzc@RestoX}}%
326 \clearpage
327 \elzc@Cuadrícula
328 \setcounter{elzc@XInicial}{0}%
329 \@elzc@reversofalse
330 \fi
331 \if@elzc@tarjeta
332 \else
333 \setcounter{elzc@TempFichaActualRev}{0}%
334 \ifnum\value{elzc@FichaActual} < \value{elzc@Fichas}%
335 \elzc@Tarjetas
336 \fi
337 \setcounter{elzc@FichaActual}{0}%
338 \fi
339 \clearpage}
340
341 \NewDocumentCommand{\elzc@TodoCero}{s}{%
342 \IfBooleanTF{#1}{%
343 \setcounter{elzc@Fichas}{0}%
344 \@elzc@fichaconreversofalse}
345 {\let\@elzc@TarjetaAnverso\undefined
346 \let\@elzc@TarjetaReverso\undefined
347 \@elzc@tarjetaconreversofalse}}
348
349 \newcommand*{\elzc@Predeterminados}{%
350 \elzc@DefMarcasCorte
351 \setlength{\elzc@SeparaX}{\elzc@DefSeparaX}%
352 \setlength{\elzc@SeparaY}{\elzc@DefSeparaY}%

```

```

353 \setlength{\elzc@TempLen}{\elzc@DefArista}\setcounter{elzc@Arista}{\elzc@TempLen}%
354 \setlength{\elzc@TempLen}{\elzc@DefPunto}\setcounter{elzc@Punto}{\elzc@TempLen}%
355 \linethickness{\elzc@DefLinea}%
356 \let\elzc@ColorMarcas\elzc@DefColorMarcas}
357
358 \newcommand*\elzc@CalculaMarcas}{%
359 \setcounter{elzc@TempMarcaX}{\value{elzc@PosX}}%
360 \setcounter{elzc@TempMarcaY}{\value{elzc@PosY}}%
361 \ifnum \value{elzc@ContX} = \value{elzc@NumX}%
362 \else
363 \ifnum \value{elzc@ContY} = \value{elzc@NumY}%
364 \else
365 \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
366 \fi
367 \fi
368 \addtocounter{elzc@TempMarcaX}{-\value{elzc@SeparaX}}%
369 \ifnum \value{elzc@ContX} = 0%
370 \else
371 \ifnum \value{elzc@ContY} = \value{elzc@NumY}%
372 \else
373 \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
374 \fi
375 \fi
376 \addtocounter{elzc@TempMarcaY}{-\value{elzc@SeparaY}}%
377 \ifnum \value{elzc@ContX} = 0%
378 \else
379 \ifnum \value{elzc@ContY} = 0%
380 \else
381 \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
382 \fi
383 \fi
384 \addtocounter{elzc@TempMarcaX}{\value{elzc@SeparaX}}%
385 \ifnum \value{elzc@ContY} = 0%
386 \else
387 \ifnum \value{elzc@ContX} = \value{elzc@NumX}%
388 \else
389 \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
390 \fi
391 \fi}
392
393 \newcommand*\elzc@DibujaMarcas}[2]{%
394 \ifnum \value{elzc@ContX} = 0%
395 \if@elzc@segmentos\put(#1,#2){\color{\elzc@ColorMarcas}\line(-1,0){\value{elzc@Arista}}}\fi
396 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
397 \else
398 \ifnum \value{elzc@ContX} = \value{elzc@NumX}%
399 \if@elzc@segmentos\put(#1,#2){\color{\elzc@ColorMarcas}\line(2,0){\value{elzc@Arista}}}\fi
400 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
401 \else
402 \if@elzc@cruces
403 \put(#1,#2){\color{\elzc@ColorMarcas}\line(-1,0){\value{elzc@Arista}}}%
404 \put(#1,#2){\color{\elzc@ColorMarcas}\line(2,0){\value{elzc@Arista}}}%
405 \fi
406 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
407 \if@elzc@lineas
408 \put(#1,#2){\color{\elzc@ColorMarcas}\line(-1,0){\value{elzc@TarjXdim}}}%
409 \put(#1,#2){\color{\elzc@ColorMarcas}\line(2,0){\value{elzc@TarjXdim}}}%
410 \fi
411 \fi
412 \fi

```

```

413 \ifnum \value{elzc@ContY} = 0%
414 \if@elzc@segmentos\put(#1,#2){\color{\elzc@ColorMarcas}\line(0,-1){\value{elzc@Arista}}}\fi
415 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
416 \else
417 \ifnum \value{elzc@ContY} = \value{elzc@NumY}%
418 \if@elzc@segmentos\put(#1,#2){\color{\elzc@ColorMarcas}\line(0,0){\value{elzc@Arista}}}\fi
419 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
420 \else
421 \if@elzc@cruces
422 \put(#1,#2){\color{\elzc@ColorMarcas}\line(0,0){\value{elzc@Arista}}}%
423 \put(#1,#2){\color{\elzc@ColorMarcas}\line(0,-1){\value{elzc@Arista}}}%
424 \fi
425 \if@elzc@puntos\put(#1,#2){\color{\elzc@ColorMarcas}\circle*{\value{elzc@Punto}}}\fi
426 \if@elzc@lineas
427 \put(#1,#2){\color{\elzc@ColorMarcas}\line(0,0){\value{elzc@TarjYdim}}}%
428 \put(#1,#2){\color{\elzc@ColorMarcas}\line(0,-1){\value{elzc@TarjYdim}}}%
429 \fi
430 \fi
431 \fi}
432
433 \newcommand*{\elzc@Informacion}{%
434 \message{^^JProcessing}%
435 \if@elzc@tarjeta
436 \message{business cards,}%
437 \else
438 \message{index/flash cards,}%
439 \setcounter{elzc@TempInfo}{\value{elzc@NumXY} + \value{elzc@FichaActual}}%
440 \ifnum \value{elzc@TempInfo} > \value{elzc@Fichas}%
441 \setcounter{elzc@TempInfo}{\value{elzc@Fichas}}%
442 \fi
443 \addtocounter{elzc@FichaActual}{1}%
444 \message{current=\arabic{elzc@FichaActual}-\arabic{elzc@TempInfo},
445 total=\arabic{elzc@Fichas},}%
446 \addtocounter{elzc@FichaActual}{-1}%
447 \fi
448 \if@elzc@reverso\message{back side,^^J}\else\message{front side,^^J}\fi
449 \message{ per page: \arabic{elzc@NumXY} (\arabic{elzc@NumX}x\arabic{elzc@NumY}),}%
450 \message{ hsize=\the\elzc@TarjXdim, vsize=\the\elzc@TarjYdim,
451 hgap=\the\elzc@SeparaX, vgap=\the\elzc@SeparaY,^^J}%
452 \if@elzc@cruces
453 \message{ with crosses,}%
454 \setlength{\elzc@TempLen}{\value{elzc@Arista}sp}%
455 \message{segment length=\the\elzc@TempLen, line thickness=\the\@wholewidth.^^J}%
456 \fi
457 \if@elzc@segmentos
458 \message{ with segments,}%
459 \setlength{\elzc@TempLen}{\value{elzc@Arista}sp}%
460 \message{segment length=\the\elzc@TempLen, line thickness=\the\@wholewidth.^^J}%
461 \fi
462 \if@elzc@puntos
463 \message{ with dots,}%
464 \setlength{\elzc@TempLen}{\value{elzc@Punto}sp}%
465 \message{dot size=\the\elzc@TempLen.^^J}%
466 \fi
467 \if@elzc@lineas
468 \message{ with lines, line thickness=\the\@wholewidth.^^J}%
469 \fi
470 \if@elzc@sinmarcas
471 \message{ without cropping marks.^^J}%
472 \fi}

```

```
473
474 \setlength{\elzc@DefTPXdim}{3.5in}
475 \setlength{\elzc@DefTPYdim}{2in}
476 \setlength{\elzc@DefFichaXdim}{5in}
477 \setlength{\elzc@DefFichaYdim}{3in}
478 \setlength{\elzc@DefSeparaX}{0cm}
479 \setlength{\elzc@DefSeparaY}{0cm}
480 \setlength{\elzc@DefArista}{1mm}
481 \setlength{\elzc@DefPunto}{1pt}
482 \setlength{\elzc@DefLinea}{0.1mm}
483 \CropColor{Red!90!Black}
484 \CropCrosses
485
486 \InputIfFileExists{\jobname.aux}{}\relax
487
488 \end{package}
```

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# Change History

|   |        |  |   |
|---|--------|--|---|
| v1.00   |        | have the possibility of being processed again.   | 1 |
| First release as a class.   | .....  | 09. Added informational output to log and console about what is being processed.   | 1 |
| v1.20   |        | 10. Added macros to change default crop behavior.  | 1 |
| 01. Changes in <code>.dtx</code> header and spaces on embedded <code>.ins</code> file. Now it should compile with pdf $\TeX$ to produce only package files. | ... 1  | v1.23  |   |
| 02. It isn't a class anymore. Now is a package.   | 1      | 11. Added an option to not printing cutting marks.   | 1 |
| 03. Supports adjustable gaps between cards.   | ... 1  | 12. Renamed <code>\BCgap</code> to <code>\CardGap</code> and obviously removed the aliases <code>\ICgap</code> and <code>\FCgap</code> . | 1 |
| 04. Added commands to control default values of optional arguments of <code>make</code> commands.   | ... 1  | 13. Added support for colors on cropping marks.  | 1 |
| 05. <code>\unitlength</code> is handled transparently.  | .... 1 | 14. Added support for external segments as cropping marks.   | 1 |
| 06. Added key-val package to drop positional parameters and stars on <code>make</code> commands.  | ... 1  | 15. Renamed macro <code>\CrossSegment</code> to <code>\SegmentLength</code> .  | 1 |
| 07. Added <code>\BusinessCard</code> command instead of defining the card's design with <code>\MakeBC</code> .  | .... 1 |  |   |
| 08. Added optional stars on <code>make</code> commands to allow not clearing the cards in order to  |        |  |   |