

# 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 must 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 in a page.

You should typeset the design of the cards with one macro the package provides, followed by another macro to write them on paper. Macros used to manage business cards are not the same as for index/flash cards. Business cards are all equal, one design is repeated many times in a page, but 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 cards you have and all them will be stored to be processed when you have finished adding them. However, index cards and flash cards are in essence the same; the package provides macros for “both” cases but they behave the same. Macros aliases for flash cards were added for completeness.

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\*This document corresponds to `elzcards` v1.20, dated 2015/04/26.

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

## 2 Usage

Please load your class (i.e. `article`) and load the package. *It does not have 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 would use:

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

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

- `\BusinessCard` and `\MakeBC` to typeset business cards, and
- `\IndexCard` and `\MakeIC` to typeset index cards and flash cards<sup>2</sup>.

### 2.1 Typesetting the cards

```
\BusinessCard \BusinessCard{\langle front side design \rangle}[\langle back side design \rangle]
```

To produce a business card, you should issue the command `\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>3</sup>. Everything you put inside {} and inside [] will be stored in a box and repeated in a grid until the page has been filled.

```
\IndexCard \IndexCard{\langle front side design \rangle}[\langle back side design \rangle]
```

```
\FlashCard \FlashCard{\langle front side design \rangle}[\langle back side design \rangle]
```

To produce an index/flash card you have `\IndexCard`<sup>4</sup>. This command has the same syntax as `\BusinessCard`, but it manages a stack of index/flash cards. You should execute it many times as cards you have to add all them into the stack. You can add the number of cards you want with many instances of `\IndexCard`. All these cards will be processed when you issue the `make` command, no matter how many pages are needed to print all them.

```
\CurrentIC \CurrentIC \CurrentFC
```

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

With `\CurrentIC` and `\TotalIC` you can access the counters associated with index/flash cards. `\CurrentIC` prints the number of the current index/flash card and `\TotalIC` print the total of card. For example, you can add something like `Card: \CurrentIC{} of \TotalIC` somewhere on the content of your cards.

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<sup>2</sup>Also the package provides the aliases `\FlashCard` and `\MakeFC` for your convenience when writing flash cards but they are the same as its corresponding index cards macros.

<sup>3</sup>There is no need to specify the `twoside` option when loading the class even if you are writing twosided cards, but you must compile your document twice.

<sup>4</sup>or `\FlashCard`, which is the same command.

## 2.2 Writing cards on paper

At this time, nothing has been written yet on the paper. The commands described on previous section only define contents of the cards; to write them on paper you should issue `\MakeBC` for business cards or `\MakeIC`<sup>5</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 a possible star and a key-val list of options, both optional with square brackets. The key-val options are intened to change sizes, gaps and crop options (as described on next section). The star means that the *make* command won't clear all cards it has processed. Normally, when you execute any of these *make* commands, a later execution of it will have no cards to process. If you issue a *make* command with a star \* you may later use the same *make* command every time you want without adding again the same set of cards. Otherwise, without \* all cards are purged.

## 2.3 key-val options: defining sizes, gaps, 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	<code>3.5in</code> in business cards, <code>5in</code> on index/flash cards
<code>vsizer=</code>	vertical size of each card	<code>2in</code> in business cards, <code>3in</code> on index/flash cards
<code>hgaps=</code>	horizontal gap between cards	<code>0pt</code>
<code>vgaps=</code>	vertical gap between cards	<code>0pt</code>
<code>segment length=</code>	segment (arista) of crop crosses	<code>1mm</code>
<code>dot size=</code>	diameter of crop dots	<code>1pt</code>
<code>line thickness=</code>	thickness of crop line	<code>0.1mm</code>
<code>crosses</code>	use crosses as crop marks	<code>true</code>
<code>dots</code>	use dots as crop marks	<code>false</code>
<code>lines</code>	use lines as crop marks	<code>false</code>

You may change whatever length on this list<sup>6</sup>. Everything you don't specify will be taken from its default value. As you can see, business cards and index/flash cards have different default sizes, but both can be changed with `hsizer` and `vsizer` 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 dots or lines you must specify it. Using lines you'll have lines between all cards, like a grill. This may 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 crop marks*.

## 2.4 Changing default values and options

You can change all the default behavior and values; it may be convenient instead of issuing *make* commands with parameters, specially if you typeset more than one set of cards in the same document, which uses the same lengths and are different than default values. Changing default values at some point of the document may 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:

---

<sup>5</sup>or `\MakeFC`, which is also an alias.

<sup>6</sup>All these key-val options except the latter three are LATEX length.

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

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

\BCgap \BCgap{<h-gap>}{<v-gap>}

\ICgap With \BCgap, \ICgap or \FCgap you can change the gap between cards. `elzcards` doesn't manage gaps differently between business cards and index/flash cards, like in the case of the above commands representing sizes. If you specify only one parameter, this will be taken as the gap in both directions. Key-val options: `hgap=` and `vgap=`.

\CrossSegment \CrossSegment{<segment length>}

This macro can be used to change the length of segments used as crop marks. Key-val option: `segment length=`.

\DotSize \DotSize{<dot size>}

With \DotSize you can change the diameter of the dots. Key-val option: `dot size=`

\LineThickness \LineThickness{<thickness>}

\LineThickness changes the default value of the thickness of the line. Key-val option: `line thickness=`.

\CropCrosses \CropCrosses

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

\CropDots \CropDots

This command make default drawing dots as crop marks. Key-val option: `dots`.

\CropCrosses \CropLines

This command make default drawing lines as crop marks. Key-val option: `lines`.

### 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.

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 following page you'll see the first set of business cards of the all-in-one included example:

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

bottom right corner ↘

bottom right corner ↘

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

The following example is included as `elzcards-example.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 \newcommand{\mycenter}[1]{%
6   top left corner\vfill\mbox{}%
7   \begin{center}\LARGE#1\end{center}%
8   \mbox{}\vfill \hfill bottom right corner}
9 \begin{document}
10 \BusinessCard{\mycenter{Business card \\ only front side \\ default options}}
11 \MakeBC
12 \BusinessCard{\mycenter{Business card \\ front side \\ other size: vertical \\
13   with thicker and longer crosses}}%
14 [\mycenter{Business card \\ front side \\ other size: vertical}]
15 \MakeBC[hsize=2in, vsize=3.5in, line thickness=1pt, segment length=0.5cm]
16 \BusinessCard{\mycenter{Business card \\ only front side \\ with dots}}
17 \MakeBC[dots]
18 \BusinessCard{\mycenter{Business card \\ only front side \\ with big dots and gaps}}
19 \MakeBC[dots, dot size=4pt, hgap=1.666cm, vgap=0.666cm]
20 \BusinessCard{\mycenter{Business card \\ only front side \\ with lines}}
21 \MakeBC[lines]
22 \BusinessCard{\mycenter{Business card \\ only front side \\ with thicker lines}}
23 \MakeBC[lines, line thickness=2pt]
24 \BusinessCard{\mycenter{Business card \\ front side \\ other size \\ with gaps}}%
25 [\mycenter{Business card \\ other size \\ back side}]
26 %% We can specify size also with \BCdim command, outsize of \MakeBC command:
27 \BCdim{74mm}{52mm}
28 \MakeBC[hgap=1.666cm, vgap=0.666cm]
29 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}%
30 [\mycenter{Index/flash card \CurrentIC{} of \TotalIC \\ back side}]
31 %% Note that not all cards has back side.
32 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}
33 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}
34 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}%
35 [\mycenter{Index/flash card \CurrentIC{} of \TotalIC \\ back side}]
36 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}
37 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}
38 \IndexCard{\mycenter{Index/flash card \\ front side \CurrentIC{} of \TotalIC}}
39 %% Now \MakeIC* instead of \MakeIC, so we can process them again with \MakeIC or \MakeIC*.
40 \MakeIC*
41 %% We define some default parameters instead of giving options to \MakeIC:
42 \ICgap{0.5cm}{0.5cm}
43 \CrossSegment{10pt}
44 \LineThickness{1pt}
45 %% \MakeIC* again because we did use \MakeIC* before:
46 \MakeIC*
47 \FCgap{0pt}{0pt} \FCgap is an alias to \ICgap.
48 \ICdim{6in}{4in}
49 \DotSize{1mm}
50 \CropDots
51 %% \CropCrosses
52 %% \CropLines
53 \MakeFC* \MakeFC is an alias to \MakeIC.
54 \end{document}
55 </!*ejemplo>
```

## 6 Implementation

```
56 {*package}
57 \NeedsTeXFormat{LaTeX2e}[1995/12/01]
58 \ProvidesPackage{elzcards}[2015/04/26 v1.20 ELZ cards]
59
60 \RequirePackage{calc}
61 \RequirePackage{xparse}
62 \RequirePackage{keyval}
63
64 \newif\if@elzc@guias
65 \newif\if@elzc@puntos
66 \newif\if@elzc@lineas
67 \newif\if@elzc@tarjeta
68 \newif\if@elzc@tarjetaconreverso
69 \newif\if@elzc@fichaconreverso
70 \newif\if@elzc@conreverso
71 \newif\if@elzc@reverso
72
73 \newlength{\elzc@TarjXdim}
74 \newlength{\elzc@TarjYdim}
75 \newlength{\elzc@SeparaX}
76 \newlength{\elzc@SeparaY}
77 \newlength{\elzc@TempLen}
78 \newlength{\elzc@TempUnitLength}
79 \newlength{\elzc@DefTPXdim}
80 \newlength{\elzc@DefTPYdim}
81 \newlength{\elzc@DefFichaXdim}
82 \newlength{\elzc@DefFichaYdim}
83 \newlength{\elzc@DefSeparaX}
84 \newlength{\elzc@DefSeparaY}
85 \newlength{\elzc@DefArista}
86 \newlength{\elzc@DefPunto}
87 \newlength{\elzc@DefLinea}
88
89 \newcounter{elzc@TarjXdim}
90 \newcounter{elzc@TarjYdim}
91 \newcounter{elzc@PapelX}
92 \newcounter{elzc@PapelY}
93 \newcounter{elzc@NumX}
94 \newcounter{elzc@NumY}
95 \newcounter{elzc@NumXY}
96 \newcounter{elzc@ContX}
97 \newcounter{elzc@ContY}
98 \newcounter{elzc@PosX}
99 \newcounter{elzc@PosY}
100 \newcounter{elzc@SeparaX}
101 \newcounter{elzc@SeparaY}
102 \newcounter{elzc@XInicial}
103 \newcounter{elzc@RestoX}
104 \newcounter{elzc@Punto}
105 \newcounter{elzc@Arista}
106 \newcounter{elzc@Fichas}
107 \newcounter{elzc@FichaActual}
108 \newcounter{elzc@TempNumX}
109 \newcounter{elzc@TempNumY}
110 \newcounter{elzc@TempMarcaX}
111 \newcounter{elzc@TempMarcaY}
112 \newcounter{elzc@TempFichaActualRev}
```

```

113 \newcounter{elzc@TempInfo}
114
115 \define@key{ELZc}{hsize}{\setlength{\elzc@TarjXdim}{#1}}
116 \define@key{ELZc}{vsize}{\setlength{\elzc@TarjYdim}{#1}}
117 \define@key{ELZc}{hgap}{\setlength{\elzc@SeparaX}{#1}}
118 \define@key{ELZc}{vgap}{\setlength{\elzc@SeparaY}{#1}}
119 \define@key{ELZc}{segment length}{%
120   \setlength{\elzc@TempLen}{#1}\setcounter{elzc@Arista}{\elzc@TempLen}}
121 \define@key{ELZc}{dot size}{\setlength{\elzc@TempLen}{#1}\setcounter{elzc@Punto}{\elzc@TempLen}}
122 \define@key{ELZc}{line thickness}{\linethickness{#1}}
123 \define@key{ELZc}{crosses}[true]{\elzc@guiastrue\elzc@puntosfalse\elzc@lineasfalse}
124 \define@key{ELZc}{dots}[true]{\elzc@guiasfalse\elzc@puntostrue\elzc@lineasfalse}
125 \define@key{ELZc}{lines}[true]{\elzc@guiasfalse\elzc@puntosfalse\elzc@lineastrue}
126
127 \newcommand*{\CurrentIC}{\arabic{elzc@FichaActual}}
128 \let\CurrentFC\CurrentIC
129
130 \newcommand*{\TotalIC}{\arabic{elzc@Fichas}}
131 \let\TotalFC\TotalIC
132
133 \newcommand*{\BCdim}[2]{\setlength{\elzc@DefTPXdim}{#1}\setlength{\elzc@DefTPYdim}{#2}}
134
135 \newcommand*{\ICdim}[2]{\setlength{\elzc@DefFichaXdim}{#1}\setlength{\elzc@DefFichaYdim}{#2}}
136 \let\FCdim\ICdim
137
138 \NewDocumentCommand{\BCgap}{m g}{%
139   \setlength{\elzc@DefSeparaX}{#1}%
140   \IfValueTF{#2}{\setlength{\elzc@DefSeparaY}{#2}}{\setlength{\elzc@DefSeparaY}{#1}}%
141 \let\ICgap\BCgap
142 \let\FCgap\BCgap
143
144 \newcommand*{\CrossSegment}[1]{\setlength{\elzc@DefArista}{#1}}
145
146 \newcommand*{\DotSize}[1]{\setlength{\elzc@DefPunto}{#1}}
147
148 \newcommand*{\LineThickness}[1]{\setlength{\elzc@DefLinea}{#1}}
149
150 \newcommand*{\CropDots}{%
151   \def\elzc@DefMarcasCorte{\elzc@guiasfalse\elzc@puntostrue\elzc@lineasfalse}}
152
153 \newcommand*{\CropCrosses}{%
154   \def\elzc@DefMarcasCorte{\elzc@guiastrue\elzc@puntosfalse\elzc@lineasfalse}}
155
156 \newcommand*{\CropLines}{%
157   \def\elzc@DefMarcasCorte{\elzc@guiasfalse\elzc@puntosfalse\elzc@lineastrue}}
158
159 \NewDocumentCommand{\MakeBC}{s o}{%
160   \ifx\undefined\elzc@TarjetaAnverso
161     \PackageError{elzcards}{There are no business cards defined}{}%
162   \else
163     \elzc@tarjetatrue
164     \if\elzc@tarjetaconreverso\elzc@conreversotrue\else\elzc@conreversofalse\fi
165     \elzc@Predeterminados
166     \setlength{\elzc@TarjXdim}{\elzc@DefTPXdim}%
167     \setlength{\elzc@TarjYdim}{\elzc@DefTPYdim}%
168     \IfValueT{#2}{\setkeys{ELZc}{#2}}%
169     \elzc@Tarjetas
170     \IfBooleanF{#1}{\elzc@TodoCero}%
171   \fi}

```

```

172
173 \NewDocumentCommand{\MakeIC}{s o}{%
174   \ifnum \value{elzc@Fichas} = 0
175     \PackageError{elzcards}{There are no index/flash cards in stack}{}%
176   \else
177     @elzc@tarjetafalse
178     \if@elzc@fichaonreverso @elzc@conreversotru e \else @elzc@conreversofalse \fi
179     \elzc@Predeterminados
180     \setlength{\elzc@TarjXdim}{\elzc@DefFichaXdim}%
181     \setlength{\elzc@TarjYdim}{\elzc@DefFichaYdim}%
182     \IfValueT{#2}{\setkeys{ELZc}{#2}}%
183     \elzc@Tarjetas
184     \IfBooleanF{#1}{\elzc@TodoCero*}%
185   \fi
186 \let\MakeFC\MakeIC
187
188 \NewDocumentCommand{\BusinessCard}{+m +o}{%
189   \def\elzc@TarjetaAnverso{#1}%
190   \IfValueTF{#2}{%
191     @elzc@tarjetaonreversotru e
192     \def\elzc@TarjetaReverso{#2}%
193     \immediate\write{\auxout{\string\twosidetrue\string\mparswitchtrue}}%
194   }{\def\elzc@TarjetaReverso{}}%
195
196 \NewDocumentCommand{\IndexCard}{+m +o}{%
197   \addtocounter{elzc@Fichas}{1}%
198   \expandafter\def\csname elzc@FichaAnverso\romannumeral\value{elzc@Fichas}\endcsname{#1}%
199   \IfValueTF{#2}{%
200     @elzc@fichaonreversotru e
201     \expandafter\def\csname elzc@FichaReverso\romannumeral\value{elzc@Fichas}\endcsname{#2}%
202     \immediate\write{\auxout{\string\twosidetrue\string\mparswitchtrue}}%
203   }{\expandafter\def\csname elzc@FichaReverso\romannumeral\value{elzc@Fichas}\endcsname{}}%
204 \let\FlashCard\IndexCard
205
206 \newcommand*{\elzc@Cuadricula}{%
207   \setlength{\elzc@TempUnitLength}{\unitlength}%
208   \setlength{\unitlength}{1sp}%
209   \setlength{\parindent}{0pt}%
210   \thispagestyle{empty}%
211   \setcounter{elzc@NumX}{0}%
212   \setcounter{elzc@NumY}{0}%
213   \setcounter{elzc@TempNumX}{0}%
214   \setcounter{elzc@TempNumY}{0}%
215   \setcounter{elzc@TarjXdim}{\elzc@TarjXdim}%
216   \setcounter{elzc@TarjYdim}{\elzc@TarjYdim}%
217   \setcounter{elzc@Separax}{\elzc@Separax}%
218   \setcounter{elzc@Separay}{\elzc@Separay}%
219   \setcounter{elzc@PapelX}{\textwidth}%
220   \setcounter{elzc@PapelY}{\textheight}%
221   \loop \ifnum\value{elzc@TempNumX} < \value{elzc@PapelX}%
222     \advance\value{elzc@TempNumX} by \value{elzc@TarjXdim}%
223     \addtocounter{elzc@NumX}{1}%
224     \addtocounter{elzc@TempNumX}{\value{elzc@Separax}}%
225   \repeat
226   \loop \ifnum\value{elzc@TempNumY} < \value{elzc@PapelY}%
227     \advance\value{elzc@TempNumY} by \value{elzc@TarjYdim}%
228     \addtocounter{elzc@NumY}{1}%
229     \addtocounter{elzc@TempNumY}{\value{elzc@Separay}}%
230   \repeat

```

```

231 \addtocounter{elzc@TempNumX}{-\value{elzc@SeparaX}}%
232 \addtocounter{elzc@TempNumY}{-\value{elzc@SeparaY}}%
233 \ifnum\value{elzc@TempNumX} > \value{elzc@PapelX}%
234 \addtocounter{elzc@NumX}{-1}%
235 \fi
236 \ifnum\value{elzc@TempNumY} > \value{elzc@PapelY}%
237 \addtocounter{elzc@NumY}{-1}%
238 \fi
239 \setcounter{elzc@NumXY}{\value{elzc@NumX} * \value{elzc@NumY}}%
240 \setcounter{elzc@ContX}{-1}%
241 \setcounter{elzc@ContY}{-1}%
242 \setcounter{elzc@RestoX}{- \value{elzc@PapelX} + \value{elzc@NumX} *
243 (\value{elzc@TarjXdim} + \value{elzc@SeparaX}) - \value{elzc@SeparaX}}%
244 \elzc@Informacion
245 \begin{picture}(\value{elzc@PapelX}, \value{elzc@PapelY})(\value{elzc@XInicial}, 0)%
246 \loop \ifnum\value{elzc@ContY} < \value{elzc@NumY} \advance\value{elzc@ContY} by 1{%
247 \loop \ifnum\value{elzc@ContX} < \value{elzc@NumX} \advance\value{elzc@ContX} by 1{%
248 \if@elzc@reverso
249 \setcounter{elzc@PosX}{(\value{elzc@NumX} - \value{elzc@ContX} - 1) * \value{elzc@TarjXdim}}%
250 + (\value{elzc@NumX} - \value{elzc@ContX} - 1) * \value{elzc@SeparaX}}%
251 \else
252 \setcounter{elzc@PosX}{\value{elzc@ContX} * (\value{elzc@TarjXdim} + \value{elzc@SeparaX})}}%
253 \fi
254 \setcounter{elzc@PosY}{\value{elzc@ContY} * (\value{elzc@TarjYdim} + \value{elzc@SeparaY})}}%
255 \ifnum \value{elzc@ContX} < \value{elzc@NumX}%
256 \ifnum \value{elzc@ContY} < \value{elzc@NumY}%
257 \put(\value{elzc@PosX}, \value{elzc@PosY}){%
258 \makebox(\value{elzc@TarjXdim}, \value{elzc@TarjYdim}){%
259 \setlength{\unitlength}{\elzc@TempUnitLength}}%
260 \parbox[t]{\elzc@TarjYdim}{\elzc@TarjXdim}{%
261 \if@elzc@tarjeta
262 \if@elzc@reverso @elzc@TarjetaReverso \else @elzc@TarjetaAnverso \fi
263 \else
264 \ifnum\value{elzc@FichaActual} < \value{elzc@Fichas}%
265 \addtocounter{elzc@FichaActual}{1}%
266 \addtocounter{elzc@TempFichaActualRev}{1}%
267 \if@elzc@reverso
268 \expandafter\csname @elzc@FichaReverso\romannumeral\value{elzc@FichaActual}\endcsname
269 \else
270 \expandafter\csname @elzc@FichaAnverso\romannumeral\value{elzc@FichaActual}\endcsname
271 \fi
272 \fi
273 \fi}}}}}%
274 \fi
275 \fi
276 \if@elzc@reverso \else \elzc@CalculaMarcas \fi
277 }\repeat
278 }\repeat
279 \end{picture}}
280
281 \newcommand*\elzc@Tarjetas{%
282 {\pagestyle{empty}\cleardoublepage}%
283 \elzc@Cuadricula
284 \if@elzc@conreverso
285 @_elzc@reversotrue
286 \if@elzc@tarjeta \else \addtocounter{elzc@FichaActual}{-\value{elzc@TempFichaActualRev}}\fi
287 \setcounter{elzc@XInicial}{\value{elzc@RestoX}}%
288 \clearpage
289 \elzc@Cuadricula

```

```

290  \setcounter{elzc@XInicial}{0}%
291  \@elzc@reversofalse
292  \fi
293  \if@elzc@tarjeta
294  \else
295  \setcounter{elzc@TempFichaActualRev}{0}%
296  \ifnum\value{elzc@FichaActual} < \value{elzc@Fichas}%
297  \elzc@Tarjetas%
298  \fi
299  \setcounter{elzc@FichaActual}{0}%
300 \fi
301 \clearpage}
302
303 \NewDocumentCommand{\elzc@TodoCero}{s}{%
304  \IfBooleanTF{#1}{%
305  \setcounter{elzc@Fichas}{0}%
306  \@elzc@fichaconreversofalse}
307  {\let\@elzc@TarjetaAnverso\undefined
308  \let\@elzc@TarjetaReverso\undefined
309  \@elzc@tarjetaconreversofalse}}
310
311 \newcommand*{\elzc@Predeterminados}{%
312  \elzc@DefMarcasCorte
313  \setlength{\elzc@SeparaX}{\elzc@DefSeparaX}%
314  \setlength{\elzc@SeparaY}{\elzc@DefSeparaY}%
315  \setlength{\elzc@TempLen}{\elzc@DefArista}\setcounter{elzc@Arista}{\elzc@TempLen}%
316  \setlength{\elzc@TempLen}{\elzc@DefPunto}\setcounter{elzc@Punto}{\elzc@TempLen}%
317  \linethickness{\elzc@DefLinea}}
318
319 \newcommand*{\elzc@CalculaMarcas}{%
320  \setcounter{elzc@TempMarcaX}{\value{elzc@PosX}}%
321  \setcounter{elzc@TempMarcaY}{\value{elzc@PosY}}%
322  \ifnum \value{elzc@ContX} = \value{elzc@NumX}%
323  \else
324  \ifnum \value{elzc@ContY} = \value{elzc@NumY}%
325  \else
326  \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
327  \fi
328  \fi
329  \addtocounter{elzc@TempMarcaX}{-\value{elzc@SeparaX}}%
330  \ifnum \value{elzc@ContX} = 0%
331  \else
332  \ifnum \value{elzc@ContY} = \value{elzc@NumY}%
333  \else
334  \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
335  \fi
336  \fi
337  \addtocounter{elzc@TempMarcaY}{-\value{elzc@SeparaY}}%
338  \ifnum \value{elzc@ContX} = 0%
339  \else
340  \ifnum \value{elzc@ContY} = 0%
341  \else
342  \elzc@DibujaMarcas{\value{elzc@TempMarcaX}}{\value{elzc@TempMarcaY}}%
343  \fi
344  \fi
345  \addtocounter{elzc@TempMarcaX}{\value{elzc@SeparaX}}%
346  \ifnum \value{elzc@ContY} = 0%
347  \else
348  \ifnum \value{elzc@ContX} = \value{elzc@NumX}%

```

```

349 \else
350   \elzc@DibujaMarcas{\value{\elzc@TempMarcaX}}{\value{\elzc@TempMarcaY}}%
351 \fi
352 \fi}
353
354 \newcommand*{\elzc@DibujaMarcas}[2]{%
355   \ifnum \value{\elzc@ContX} = 0%
356     \if@elzc@guias\put(#1,#2){\line(-1,0){\value{\elzc@Arista}}}\fi
357     \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
358   \else
359     \ifnum \value{\elzc@ContX} = \value{\elzc@NumX}%
360       \if@elzc@guias\put(#1,#2){\line(2,0){\value{\elzc@Arista}}}\fi
361       \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
362     \else
363       \if@elzc@guias
364         \put(#1,#2){\line(-1,0){\value{\elzc@Arista}}}\%
365         \put(#1,#2){\line(2,0){\value{\elzc@Arista}}}\%
366       \fi
367       \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
368       \if@elzc@lineas
369         \put(#1,#2){\line(-1,0){\value{\elzc@TarjXdim}}}\%
370         \put(#1,#2){\line(2,0){\value{\elzc@TarjXdim}}}\%
371       \fi
372     \fi
373   \fi
374 \ifnum \value{\elzc@ContY} = 0%
375   \if@elzc@guias\put(#1,#2){\line(0,-1){\value{\elzc@Arista}}}\fi
376   \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
377 \else
378   \ifnum \value{\elzc@ContY} = \value{\elzc@NumY}%
379     \if@elzc@guias\put(#1,#2){\line(0,0){\value{\elzc@Arista}}}\fi
380     \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
381   \else
382     \if@elzc@guias
383       \put(#1,#2){\line(0,0){\value{\elzc@Arista}}}\%
384       \put(#1,#2){\line(0,-1){\value{\elzc@Arista}}}\%
385     \fi
386     \if@elzc@puntos\put(#1,#2){\circle*{\value{\elzc@Punto}}}\fi
387     \if@elzc@lineas
388       \put(#1,#2){\line(0,0){\value{\elzc@TarjYdim}}}\%
389       \put(#1,#2){\line(0,-1){\value{\elzc@TarjYdim}}}\%
390     \fi
391   \fi
392 \fi}
393
394 \newcommand*{\elzc@Informacion}{%
395   \message{^^JProcessing}%
396   \if@elzc@tarjeta
397     \message{business cards,}%
398   \else
399     \message{index/flash cards,}%
400     \setcounter{\elzc@TempInfo}{\value{\elzc@NumXY} + \value{\elzc@FichaActual}}%
401     \ifnum \value{\elzc@TempInfo} > \value{\elzc@Fichas}%
402       \setcounter{\elzc@TempInfo}{\value{\elzc@Fichas}}%
403     \fi
404     \addtocounter{\elzc@FichaActual}{1}%
405     \message{current=\arabic{\elzc@FichaActual}-\arabic{\elzc@TempInfo},}
406     total=\arabic{\elzc@Fichas},}%
407     \addtocounter{\elzc@FichaActual}{-1}%

```

```

408 \fi
409 \if@elzc@reverso\message{back side,^^J}\else\message{front side,^^J}\fi
410 \message{ per page: \arabic{elzc@NumXY} (\arabic{elzc@NumX}x\arabic{elzc@NumY}), }%
411 \message{ hsize=\the\elzc@TarjXdim, vsize=\the\elzc@TarjYdim,
412 hgap=\the\elzc@SeparaX, vgap=\the\elzc@SeparaY,^^J}%
413 \if@elzc@guias
414 \message{ with crosses,}%
415 \setlength{\elzc@TempLen}{\value{elzc@Arista}sp}%
416 \message{segment length=\the\elzc@TempLen, line thickness=\the\@wholewidth.^^J}%
417 \fi
418 \if@elzc@puntos
419 \message{ with dots,}%
420 \setlength{\elzc@TempLen}{\value{elzc@Punto}sp}%
421 \message{dot size=\the\elzc@TempLen.^^J}%
422 \fi
423 \if@elzc@lineas
424 \message{ with lines, line thickness=\the\@wholewidth.^^J}%
425 \fi}
426
427 \setlength{\elzc@DefTPXdim}{3.5in}
428 \setlength{\elzc@DefTPYdim}{2in}
429 \setlength{\elzc@DefFichaXdim}{5in}
430 \setlength{\elzc@DefFichaYdim}{3in}
431 \setlength{\elzc@DefSeparax}{0cm}
432 \setlength{\elzc@DefSeparay}{0cm}
433 \setlength{\elzc@DefArista}{1mm}
434 \setlength{\elzc@DefPunto}{1pt}
435 \setlength{\elzc@DefLinea}{0.1mm}
436 \CropCrosses
437
438 \InputIfFileExists{\jobname.aux}{}{\relax
439
440 </package>

```

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## Change History

v1.00		
General: First release as a class.	. . . . .	1
v1.20		
General: 01. Changes in <code>.dtx</code> header and spaces on embedded <code>.ins</code> file. Now it should compile with pdftEX to produce only package files. . .	1	06. Added key-val package to drop positional parameters and stars on <i>make</i> commands. . .
02. It isn't a class anymore. Now is a package. .	1	07. Added <code>\BusinessCard</code> command instead of defining the card's design with <code>\MakeBC</code> . . .
03. Supports adjustable gaps between cards. .	1	08. Added optional stars on <i>make</i> commands to allow not clearing the cards in order to have the possibility of being processed again. . .
04. Added commands to control default values of optional arguments of <i>make</i> commands. .	1	09. Added informational output to log and con- sole about what is being processed. . .
05. <code>\unitlength</code> is handled transparently. . .	1	10. Added macros to change default crop be- havior. . .