# The **processkv** package*

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**Abstract**

This file describes the processkv package that provides macros for processing of key-value-lists by calling a user-defined macro for each key-value-pair.

## Contents

## 1 Introduction

The keyval package provides the possibility of specifying macro arguments as `key=value`, where `key` is one of previously defined keys. Sometimes it is necessary not to have to define the keys in advance, but to specify arbitrary keys which are then processed.

This package provides the macro `\processkeyvalues` that calls a user-defined macro for each key-value-pair.

This package makes use of some internal macros of the package keyval. I hope this will not break someday . . .

## 2 Using the package

`\processkeyvalues` Usage: `\processkeyvalues {`⟨*keyvalue-list*⟩`} {`⟨*macro*⟩`}`.

The main macro of this package. It calls ⟨*macro*⟩ for each key-value-pair in ⟨*keyvalue-list*⟩. Macros in the list are not expanded.

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[*] This document corresponds to processkv.sty v1.0.1, dated 2004/08/09.

⟨*macro*⟩ can be any macro with two parameters, i.e:

```
\def\testmacro#1#2{%
  \message{Key = ‘#1’, value = ‘#2’}%
}
```

Or

```
\newcommand{\testmacro}[2]{%
  \message{Key = ‘#1’, value = ‘#2’}%
}
```

# 3 Implementation

## 3.1 Main macros

`\processkeyvalues` Usage: `\processkeyvalues {`⟨*keyvalue-list*⟩`} {`⟨*macro*⟩`}`.

Calls ⟨*macro*⟩ for each key-value-pair in the list. ⟨*macro*⟩ must have two parameters, ⟨*key*⟩ and ⟨*value*⟩.

```
\def\processkeyvalues#1#2{%
  \def\PKV@process{#2}%
  \PKV@do#1,\relax,%
}
```

## 3.2 Internal macros

`\PKV@do` Processes the list.

```
\def\PKV@do#1,{%
  \ifx\relax#1\empty\else%
  \PKV@split#1==\relax%
  \expandafter\PKV@do\fi%
}
```

`\PKV@split` Processes a key-value-pair of the list. Uses some macros of the keyval package.

```
\def\PKV@split#1=#2=#3\relax{%
  \KV@@sp@def\@tempa{#1}%
  \ifx\@tempa\@empty\else%
    \KV@@sp@def\@tempb{#2}%
    \expandafter\expandafter\expandafter\PKV@process%
      \expandafter\expandafter\expandafter{\expandafter\@tempa%
      \expandafter}\expandafter{\@tempb}%
  \fi%
}
```

# Change History

1.0.1
  General: Mangled macronames corrected. . . . . . . . . . . . . . . . . . . 1

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