## The I3keys2e package LATEX $2\varepsilon$ option processing using LATEX $3 \text{ keys}^*$

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The key–value method for optional arguments is very popular, as it allows the class or package author to define a large number of options with a simple interface. The expl3 bundle of LaTeX3 base code includes the module l3keys for defining keys, but to use these when loading LaTeX  $2_{\varepsilon}$  packages and classes requires extra support. That support is provided by this small package, which is intended to enable LaTeX  $2_{\varepsilon}$  packages to benefit from the power of the LaTeX3 key–value system.

## 0.1 Creating and using keyval options

As with any key-value input, using key-value pairs as package or class options has two parts. The first stage is to define one or more keys, using the \keys\_define:nn function. For example, an option which simply stores a value would be created using:

```
\keys_define:nn { module }
{ option .set:N = \l_module_variable_tl }
```

On its own, this will not make the key an option for the package or class containing the definition. The second stage is therefore to process the current options, searching for applicable keys.

\ProcessKeysOptions

\ProcessKeysOptions {\( module \) \}

The \ProcessKeysOptions function is used to check the current option list against the keys defined for {\mathscr{module}}. Global (class) options and local (package) options are checked when this function is called in a package. Each option which does match a key name is then used to attempt to set the appropriate key using \keys\_set:nn. For example, the option defined earlier would be processed by the line

\ProcessKeysOptions { module }

<sup>\*</sup>This file describes v6512, last revised 2016/05/18.

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## \ProcessKeysPackageOptions

 $\verb|\ProcessKeysPackageOptions {| \langle module \rangle |}$ 

This function works in a similar manner to  $\ProcessKeysOptions$ . When used in a  $\End{Lambda}T_EX\ 2_{\mathcal{E}}$  package,  $\ProcessKeysPackageOptions$  will not examine any class options available. In contrast,  $\ProcessKeysOptions$  does parse class options (in common with the  $\End{Lambda}T_EX\ 2_{\mathcal{E}}$  kernel function  $\ProcessOptions$ ).

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