The bxcalcux package

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1 Overview

This package allows one to create a new unit of length that can be used in length expressions of the calc package. For example,

```
\newcalcunit{thou}{0.07227pt}% thousandth of inch
\setlength{\lengthA}{10thou}
```

will assign 0.72266 pt to `\lengthA`.[1]

Supported format LaTeX.

Supported engine Any engine with ε-TeX extension.

Prerequisite packages calc, etoolbox.

2 Package Loading

Use `\usepackage` as usual, with no options.

```
\usepackage{bxcalcux}
```

3 Usage

- `\newcalcunit{`⟨*unit*⟩`}{`⟨*length*⟩`}` : Declares a new unit ⟨*unit*⟩ as equal to ⟨*length*⟩. The unit name must consist only of alphabets. You can use relative units such as `0.5em` in ⟨*length*⟩, and such relative units are resolved when calc expressions are evaluated.
- `\DeclareCalcUnit{`⟨*unit*⟩`}{`⟨*text*⟩`}` : *(for TeXnicians)* Declares a new unit ⟨*unit*⟩ as equal to the unit expressed by a token list ⟨*text*⟩, which must form a "unit of dimen" (in TeX terminology). Here is an example.

  ```
  \DeclareCalcUnit{ls}{\baselineskip}% current line skip
  ```

4 Notices

- Usually unit names are treated as case-insensitive; but as exception, unit names with a single letter are case-sensitive.
- You must not create a unit name that coincides with a prefix of existing (built-in or created) units or any keywords that could be used in calc expressions (such as `plus`, `fil`, etc.); otherwise unexpected things would occur.

[1] Using `0.001in` instead of `0.07227pt` will give rather inaccurate results, since `0.001in` is evaluated to 0.7277 pt.