# PEL Topics Index

## Emacs Reference Cards

☝With PEL you can access these via the `<f11> ? e r` key sequence.
See ∑ Help/Info

These are links to the PDF version of official English version of the quick reference cards for GNU Emacs and popular external packages. PEL documents Emacs key bindings as well, these cards provide useful complement to what PEL provides.

| | | | | | |
|---|---|---|---|---|---|
| Emacs | Calc | Gnus | Magit Cheatsheet | Org | Viper |
| Emacs survival card | Dired | Gnus booklet | Magit Ref-card | | VIP |

## ➢ PEL Overview

- PEL repo
- PEL Readme
- PEL Manual
- PEL NEWS

This table holds links to the PEL file tables. Each cell holds a hyperlink to the GitHub hosted raw PDF table.

☝For the best user experience, use a browser that can render PDF directly instead of downloading.
- Mozilla Firefox (version > 78) does that perfectly. You may need to activate a plug-in for other browsers.
- With that in place, you can browse through all the PDFs quickly and reach a vast amount of information quickly.

☝From within Emacs open this topic index PDF by typing the `<f11> ? <f1>` key sequence. More help topics with `<f11> ? p` keys.

☝The symbols, **colour** coding and various other conventions are described in the ➢Legend PDF.

- General Information.
- Development Information
- Migration Guide

| | | | | | |
|---|---|---|---|---|---|
| ➢Legend | ➢Recommended Emacs User Option | | ➢Themes | | |
| ➢PEL | iMenu/Speedbar support | | PEL Naming Conventions | | |
| ➢CRiSP ⇏ Emacs | | | | | |

## OS Desktop Key Bindings

(Bindings that don't clash with PEL)

| | | | | | |
|---|---|---|---|---|---|
| | macOS Keys | Ubuntu 16.04 Desktop Keys | | | |
| | terminal settings | Mint 20 Desktop Keys | | | |

## Feature Comparisons

| | | | | | |
|---|---|---|---|---|---|
| Completion Modes Compatibility | | Speedbar/iMenu Mode Compatibility | | Shells/Terminals Comparisons | |

## Key Prefixes & Suffixes

| | | | | | |
|---|---|---|---|---|---|
| ∑ Modifier Keys | | ∑ Numkeypad | ➢PEL | Keys - Fn | Keys - F11 |

## ∑ Emacs Features

See a Guided Tour of Emacs.

The PEL tables named at right ☛ describe the Emacs commands and key bindings for generic Emacs concepts and features.

Emacs commands can be executed by name or bound to key sequences. The commands may have ***arguments*** and keys can express them.
See:
- Emacs Keys
- Numeric Arguments

You can also:
- Run Command by Name

Emacs uses a concept of modes.
See:
- Emacs Major and Minor Modes
  - Major Modes
  - Minor Modes
  - Choosing Modes

PEL provides several key sequences to toggle minor modes, described in the relevant PDFs.

The links that start with only ∑ Emacs generic features, the blue links are external packages. The green links are mostly PEL extensions.

| | | | | | |
|---|---|---|---|---|---|
| ∑ Abbreviations | ∑ Cursor | ∑ Filling/ Justification | 𝔓𝔩- Lispy | ∑ Scrolling | ∑ Time Tracking |
| ∑ Align | ∑ Customize | ∑ Frames | ∑ Marking | ∑ Search/Replace | ∑ Transpose |
| ∑ Auto-Completion | ∑ Cut & Paste | ∑ Grep | ∑ Menus | ∑ Semantic | ∑𝔵 Treemacs |
| ∑ Autosave/Backup | ∑ Diff & Merge | ∑ Help/Info | ∑ Mode Line | ∑ Sessions | ∑ Undo/Redo/ Repeat/Arg |
| ∑ Bookmarks | ∑ Dired | ∑ Hide/Show | ∑ Mouse | ∑ Shells, REPLs & terminal emulators | ∑ VCS-Git 𝔵Magit |
| ∑ Buffers | ∑ Display - Lines | ∑ Highlight (colors) | ∑ Narrowing | ∑𝔵 Smartparens | ∑ VCS-Mercurial |
| ∑ Case Conversions | ∑ Drawing | ∑ ibuffer-mode | ∑ Navigation | ∑ Sorting | ∑ VCS-Subversion |
| ∑ Closing/ Suspending | ∑ Enriched Text | ∑ Indentation | ∑ Outline | ∑ Speedbar | ∑ Web |
| ∑ Comments | ∑ Faces/Fonts | ∑ Input Method | ∑ Packages | ∑ Spell Checking | ∑ Whitespace |
| ∑ Completion/Input | ∑P Fast Startup | ∑ Inserting Text | ∑𝔵 Projectile | ∑ SyntaxCheck | ∑ Windows |
| ∑ Counting | ∑ File-mngt | ∑ Key-Chords | ∑ Rectangles | T Templates | ∑ Xref - Cross References |
| ∑Ⓜ CUA | ∑ File/Directory Variables | ∑ Keyboard Macros | ∑ Registers | ∑ Text Modes | |

## 𝔵𝔓𝔩 - Emacs Lisp concepts & tools

| | | | | | |
|---|---|---|---|---|---|
| 𝔵 ERT (Emacs Lisp Regression Testing) | | 𝔵 Hooks | 𝔵※ - Emacs Lisp Types | | |

## XRef - Cross Reference Tools

See also: ∑ Xref

Emacs supports various cross reference mechanisms described in the ∑ Xref table. These mechanisms take advantage of various external tools and integrate with them. Notes about those tools are available in the tables listed in this section. 🚧 This is work in progress.

| | | | | | |
|---|---|---|---|---|---|
| Xref-Support | Xref-Backend | | | | |

## Build Tools & Preprocessor

PEL supports installation and partial setup of the following tools: ☛

PEL has support for several build tools but they are not all documented in a page.
- Nix 📦 Requires nix-mode external package 🔄 activated when **pel-use-nix-mode** user-option is tuned on.
- Tup 📦 Requires tup-mode external package 🔄 activated when **pel-use-tup** user-option is tuned on.

| | | | | | |
|---|---|---|---|---|---|
| 𝔓𝔩 - M4 | 𝔓𝔩 - Make | | | | |

## Data Serialization

| | | | | | |
|---|---|---|---|---|---|
| Ⓓ CWL | Ⓓ YAML | | | | |

## Data Modelling/ Specification

| | | | | | |
|---|---|---|---|---|---|
| Ⓢ ASN.1 asn1-mode | Ⓢ MIB snmp-mode | Ⓢ YANG | | | |

## Hardware Description Languages

| | | | | | |
|---|---|---|---|---|---|
| Verilog 🚧future | VHDL 🚧future | | | | |

## Text Markup Languages

| | | | | | |
|---|---|---|---|---|---|
| Ⓜ AsciiDoc | Ⓜ Markdown | Ⓜ Org-Mode | Ⓜ reStructuredText | | |

## • Graphics Markup

| | | | | | |
|---|---|---|---|---|---|
| Ⓜ Graphviz Dot | Ⓜ MscGen | Ⓜ PlantUML | | | |

## Programming Languages

**Main Paradigm of Programming Language Families**
- ***Actor Model:*** Ⓐ
- ***Concatenative*** Ⓚ
- ***Concurrent:*** ⓒ
- ***Functional:*** ⓕ ***Pure:*** Ⓕ
- ***Imperative:*** ⓘ ***or no token***
- ***Object Oriented*** ∞
- ***Has Syntactic Macros:*** ⓜ

- The programming languages supported by PEL are listed here in alphabetical order.
- PEL also provides basic support for other programming languages not listed here.
- Emacs supports other programming languages directly, not listed here.

**Future support** for Crystal, Elm, Kotlin, Lua, Purescript, ReasonML, Seed7, Typescript, Zig and documentation of support for Ada, Fortran, Javascript, Java, Modula, Pascal (based on my need for them or requests (if any)).

Emacs has major mode support for several programming languages. PEL currently adds extra support for some of them, listed below.

| | | | | | |
|---|---|---|---|---|---|
| BEAM Programming Languages | *Functional Languages* | Javascript target | Lisp Family Languages | Lisp-like Languages | Command Line Scripting Languages |
| Curly Bracket Languages | Java Virtual Machine Languages | ML Family Languages | Scheme Language Dialects | Stack Based Languages | OS App Control Scripting Languages |

The following lists the programming languages in alphabetical order.
- The cell colours give a coarse indication of the programming language family(ies).

| | | | | | |
|---|---|---|---|---|---|
| 𝔓𝔩- AppleScript | Common Lisp ⓕⓜ | 𝔓𝔩 - Forth Ⓚ | 𝔓𝔩 - Janet ⓘⓕⓜ | 𝔓𝔩 - Nim ⓜ | 𝔓𝔩 - Ruby |
| Ada 🚧future | Crystal 🚧future | Fortran 🚧future | Java 🚧future | 𝔓𝔩 - OCaml ⓘⓕ | 𝔓𝔩 - Rust |
| 𝔓𝔩 - Arc ⓕⓜ | 𝔓𝔩 - D ⓘⓕⒶ | 𝔓𝔩 - Gambit ⓕⓜ | 𝔓𝔩 - Javascript 🚧 | Pascal 🚧future | 𝔓𝔩 - Scheme ⓕⓜ |
| 𝔓𝔩 - C | Eiffel 🚧future | 𝔓𝔩 - Gerbil ⓕⓜⒶ | 𝔓𝔩 - Julia ⓜ | 𝔓𝔩 - Perl | Seed7 🚧future |
| 𝔓𝔩 - C++ | 𝔓𝔩 - Elm 🚧future Ⓕ | 𝔓𝔩 - GNU Guile ⓕⓜ | Kotlin 🚧future | 𝔓𝔩 - Python | 𝔓𝔩 - Tcl 🚧future ⓕⓘ |
| 𝔓𝔩 - Chez ⓕⓜ | 𝔓𝔩 - Elixir ⓒⓜⓕⒶ | 𝔓𝔩 - Gleam | 𝔓𝔩 - LFE ⓒⓜⓕⒶ | 𝔓𝔩 - Purescript Ⓕ | 𝔓𝔩 - Typescript 🚧 |
| 𝔓𝔩 - Chibi ⓕⓜ | 𝔵𝔓𝔩 - Emacs Lisp | 𝔓𝔩 - Go | Lua 🚧future | 𝔓𝔩 - Racket ⓕⓜ | 𝔓𝔩 - UNIX Shell |
| 𝔓𝔩 - Chicken ⓕⓜ | 𝔓𝔩 - Erlang ⓒⓕⒶ | 𝔓𝔩 - Haskell Ⓕ | Modula 🚧future | 𝔓𝔩 - ReasonML 🚧 | 𝔓𝔩 - V |
| 𝔓𝔩 - Clojure ⓕⓜ | Factor Ⓚⓕ∞ⓜ | 𝔓𝔩 - Hy *(python)* ⓜ | 𝔓𝔩 - NetRexx | 𝔓𝔩 - REXX | Zig 🚧future |