

# PEL Topics Index

Note: with PEL, type [<f11>](#) [<f1>](#) to open this PDF 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.

<b>Emacs</b>	<b>Calc</b>	<b>Gnus</b>	<b><a href="#">Magit Cheatsheet</a></b>	<b>Org</b>	<b><a href="#">Viper</a></b>
<b><a href="#">Emacs survival card</a></b>	<b><a href="#">Dired</a></b>	<b><a href="#">Gnus booklet</a></b>	<b><a href="#">Magit Ref-card</a></b>		<b><a href="#">VIP</a></b>

## ➤ PEL Overview

- [PEL repo](#)
- [PEL Readme](#)
- [PEL Manual](#)
- [PEL NEWS](#) 
- [Discussions](#)

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 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](#).









<b>&gt;Legend</b>	<b>&gt;Recommended Emacs User Option</b>	<b>&gt;Themes</b>	
<b>&gt;PEL</b>	<b> iMenu/Speedbar support</b>	<b> PEL Naming Conventions</b>	
<b>&gt;CRiSP ↔ Emacs</b>			

## OS Desktop Key Bindings

## (Bindings that don't clash with PEL)

<a href="#">🍏 macOS Fct Keys</a>	<a href="#">🍏 macOS Keys</a>	<a href="#"> <u>Ubuntu 16.04 Desktop Keys</u></a>		
	<a href="#">🍏 terminal settings</a>	<a href="#"> <u>Mint 20 Desktop Keys</u></a>		

## Feature Comparisons

 <u>Completion Modes Compatibility</u>		 <u>Speedbar/iMenu Mode Compatibility</u>		 <u>Shells/Terminals Comparisons</u>	
 <u>Modifier Keys</u>		 <u>Num keypad</u>		 <u>Keys - Fn</u>	
		 <u>&gt;PEL</u>		 <u>Keys - F11</u>	

## Σ Emacs Features

- A Guided Tour of Emacs.
- Awesome-Emacs
- MELPA and GNU ELPA

## 👉 Run Emacs daemon & client on macOS

The PEL tables listed at right describe Emacs commands & key bindings for concepts & features. The cell color is light-blue for major mode, light-red for minor mode

Emacs commands can be executed by name or bound to key sequences. The commands may have *arguments* and keys can express them.

- Emacs Keys
  - Numeric Arguments
- You can also:
- Run Command by Name

Emacs uses a concept of modes:

- Emacs Major and Minor Modes
  - Major Modes
  - Minor Modes
  - Choosing Modes




PEL provides key sequences to toggle minor modes.

Cells link titles starting with only <a href="#">M</a> are Emacs generic features, blue links are external packages. The green links are mostly PEL extensions.					
<a href="#">M Abbreviations</a>	<a href="#">M Diff &amp; Merge</a>	<a href="#">M Grep</a>	<a href="#">M Marking</a>	<a href="#">M Scrolling</a>	<a href="#">M Tab Bar</a>
<a href="#">M Align</a>	<a href="#">M Dired</a>	<a href="#">M Help/Info</a>	<a href="#">M Menus</a>	<a href="#">M Search/Replace</a>	<a href="#">T Templates</a>
<a href="#">M Auto-Completion</a>	<a href="#">M Display - Lines</a>	<a href="#">M Hide/Show</a>	<a href="#">M Mode Line</a>	<a href="#">M Sessions</a>	<a href="#">M Text Modes</a>
<a href="#">M Autosave/Backup</a>	<a href="#">M Drawing</a>	<a href="#">M Highlight (colors)</a>	<a href="#">M Mouse</a>	<a href="#">M start Shells/REPLs</a>	<a href="#">M Time Tracking</a>
<a href="#">M Bookmarks</a>	<a href="#">M Enriched Text</a>	<a href="#">M ibuffer-mode</a>	<a href="#">M Narrowing</a>	<a href="#">M shell-mode</a>	<a href="#">M Transpose text</a>
<a href="#">M Buffers</a>	<a href="#">M Faces/Fonts</a>	<a href="#">M Indentation</a>	<a href="#">M Navigation</a>	<a href="#">M term-mode</a>	<a href="#">M X Treemacs</a>
<a href="#">M Case Conversions</a>	<a href="#">M P Fast Startup</a>	<a href="#">M Input Method</a>	<a href="#">M Outline</a>	<a href="#">M eat-mode</a>	<a href="#">M Undo/Redo</a>
<a href="#">M Close/Suspend</a>	<a href="#">M File Encoding</a>	<a href="#">M Inserting Text</a>	<a href="#">M Packages</a>	<a href="#">M vterm-mode</a>	<a href="#">M VCS-Git X Magit</a>
<a href="#">M Comments</a>	<a href="#">M File-mngt</a>	<a href="#">M Key-Chords</a>	<a href="#">M X Projectile</a>	<a href="#">M X Smartparens</a>	<a href="#">M VCS-Mercurial</a>
<a href="#">M Completion/Input</a>	<a href="#">M File/Dir Variables</a>	<a href="#">M Keyboard Macros</a>	<a href="#">M Rectangles</a>	<a href="#">M Sorting</a>	<a href="#">M VCS-Subversion</a>
<a href="#">M Counting</a>	<a href="#">M Fill/Justify</a>	<a href="#">M X - Lispy</a>	<a href="#">M Registers</a>	<a href="#">M Speedbar</a>	<a href="#">M Web</a>
<a href="#">M CUA</a>	<a href="#">M Frames</a>			<a href="#">M Spell Checking</a>	<a href="#">M Whitespace</a>
<a href="#">M Cursor</a>				<a href="#">M SyntaxCheck</a>	<a href="#">M Windows</a>
<a href="#">M Customize</a>					<a href="#">M Xref</a> - Cross Refs
<a href="#">M Cut &amp; Paste</a>					

## ⌘ - Emacs Lisp concepts & tools







**XRef - Cross**  
See also: [Σ 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.

 <u>Xref-Support</u>	 <u>Xref-Frontend</u>	 <u>Xref-Backend</u>			
---	--	---	--	--	--

PEL supports installation and partial setup of the following tools:

## Build Tools & Preprocessor

PEL has support for several build tools but they are not all documented in a page. <ul style="list-style-type: none"> <li>• <b>Nix</b>  Requires <b>nix-mode</b> external package  activated when <b>pel-use-nix-mode</b> user-option is tuned on.</li> <li>• <b>Tup</b>  Requires <b>tup-mode</b> external package  activated when <b>pel-use-tup</b> user-option is tuned on.</li> </ul>					<b>Command Line Scripting Languages:</b>  <b>bash, sh, zsh</b>  Utility: <b>GNU readline</b>
<b>Ⓜ</b> <b>M4</b>	<b>Ⓜ</b> <b>Make</b> <b>gmake</b>				
<b>Ⓓ</b> <b>CWL</b>	<b>Ⓓ</b> <b>YAML</b>				
<b>Ⓔ</b> <b>ASN.1</b> <b>asn1-mode</b>	<b>Ⓔ</b> <b>MIB</b> <b>snmp-mode</b>	<b>Ⓔ</b> <b>YANG</b>			
Verilog 	VHDL 				

## Data Serialization

<b>④ CWL</b>	<b>④ YAML</b>				Utility: <b>GNU readline</b>
<b>⑤ ASN.1 <u>asn1-mode</u></b>	<b>⑤ MIB <u>snmp-mode</u></b>	<b>⑤ YANG</b>			

## Data Modelling/ Specification

🔗 ASN.1 <b>asn1-mode</b>	🔗 MIB <b>snmp-mode</b>	🔗 <b>YANG</b>		
Verilog 🚧🚧🚧future	VHDL 🚧🚧🚧future			

## Text Markup Languages

<a href="#"><u>M AsciiDoc</u></a>	<a href="#"><u>M Markdown</u></a>	<a href="#"><u>M Org-Mode</u></a>	<a href="#"><u>M reStructuredText</u></a>	OS App Control Scripting Languages
<a href="#"><u>M Graphviz Dot</u></a>	<a href="#"><u>M MscGen</u></a>	<a href="#"><u>M PlantUML</u></a>		

## Programming Languages

## Main Paradigm of Programming Language Families

















































- **Actor Model:** (A)
- **Concatenative** (K)
- **Concurrent:** (C)
- **Functional:** (f) **Pure:** (F)
- **Imperative:** (i) or no token
- **Object Oriented** (o)
- **Has Syntactic Macros:** (m)

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

<b><u>BEAM Programming Languages</u></b>	<b><u>Functional Languages</u></b>	Javascript target	<b><u>Lisp Family Languages</u></b>	Lisp-like Languages	
<b><u>Curly Bracket Languages</u></b>	<b><u>Java Virtual Machine Languages</u></b>	<b><u>ML Family Languages</u></b>	<b><u>Scheme Language Dialects</u></b>	<b><u>Stack Based Languages</u></b>	

The following lists the programming languages in alphabetical order.

- The cell colours give a coarse indication of the programming language family(ies).

Ada 	<b>ⒶI - D</b> 	<b>ⒶI - Gambit</b> 	<b>ⒶI - Janet</b> 	Objective-C 	Scala 
<b>ⒶI - Arc</b> 	Dart 	<b>ⒶI - Gerbil</b> 	Java 	<b>ⒶI - OCaml</b> 	<b>ⒶI - Scheme</b> 
<b>ⒶI - C</b>	Eiffel 	<b>ⒶI - GNU Guile</b> 	<b>ⒶI - Javascript</b> 	Pascal 	Seed7 
<b>ⒶI - C++</b>	<b>ⒶI - Elm</b>  	<b>ⒶI - Gleam</b>	<b>ⒶI - Julia</b> 	<b>ⒶI - Perl</b>	Swift 
<b>ⒶI - Chez</b> 	<b>ⒶI - Elixir</b> 	<b>ⒶI - Go</b>	Kotlin 	<b>ⒶI - Python</b>	<b>ⒶI - Tcl</b>  
<b>ⒶI - Chibi</b> 	<b>ⒶI - Emacs Lisp</b>	Groovy 	<b>ⒶI - LFE</b> 	<b>ⒶI - Purescript</b> 	<b>ⒶI - Typescript</b> 
<b>ⒶI - Chicken</b> 	<b>ⒶI - Erlang</b> 	<b>ⒶI - Haskell</b> 	Lua 	<b>ⒶI - Racket</b> 	<b>ⒶI - UNIX Shell</b>
<b>ⒶI - Clojure</b> 	<b>Factor</b> 	Haxe 	Modula 	<b>ⒶI - ReasonML</b> 	<b>ⒶI - V</b>
<b>Common Lisp</b> 	<b>ⒶI - Forth</b> 	<b>ⒶI - Hy</b> <i>(python)</i> 	<b>ⒶI - NetRexx</b>	<b>ⒶI - REXX</b>	Zig 
Crystal 	Fortran 		<b>ⒶI - Nim</b> 	<b>ⒶI - Ruby</b>	
				<b>ⒶI - Rust</b>	