AUCTeX Reference Card

(for version 11.86)

Conventions Used

Carriage Return or C-m	RET
Tabular or C-i	TAB
Linefeed or C-j	LFD

Shell Interaction

Run a command on the master file	C-c C-c
Run a command on the buffer	C-c C-b
Run a command on the region	C-c C-r
Fix the region	C-c C-t C-r
Kill job	C-c C-k
Recenter output buffer	C-c C-l
Next error in TeX/LaTeX session	C-c `
Toggle debug of bad boxes	C-c C-t C-b
Toggle debug of warnings	C-c C-t C-w
View output file	C-c C-v

Commands you can run on the master file (with C-c C-c) or the region (with C-c C-r) include the following (starred versions are not available in all modes):

TeX	*TeX
LaTeX	*LaTeX
ConTeXt (once)	*ConTeXt
ConTeXt Full	*ConTeXt Full
Makeinfo	*Makeinfo
Makeinfo with HTML output	*Makeinfo HTML
Appropriate previewer	View
Print the output	Print
BibTeX	BibTeX
MakeIndex	Index
LaCheck	Check
Make (PostScript) File	File
Ispell	Spell
Delete intermediate files	Clean
Delete all output files files	Clean All

TeXing options

TeX runs can come in various types, which may be toggled and are indicated in the mode line.

PDF/DVI mode	C-c C-t C-p
Stop on errors (Interactive mode)	C-c C-t C-i
I/O correlation (S. Specials, SyncTeX)	C-c C-t C-s

Miscellaneous

Read AUCTeX manual	C-c TAB
Math Mode	C-c ~
Reset Buffer	C-c C-n
Reset AUCTeX	C-u C-c C-n

Multifile Handling

Save Document	C-c C-d
Switch to master file or active buffer	C-c ^
Query for a master file	C-c _

Command Insertion

Insert Section	C-c C-s
Insert LaTeX environment	C-c C-e
Insert item	C-c LFD
Insert item (alias)	M-RET
Close LaTeX environment	C-c]
Insert TeX macro \{}	C-c C-m
Insert double brace	C-c {
Complete TeX macro	M-TAB
Smart "quote"	"
Smart "dollar"	$

Font Selection

Insert **bold** text	C-c C-f C-b
Insert *italics* text	C-c C-f C-i
Insert roman text	C-c C-f C-r
Insert *emphasized* text	C-c C-f C-e
Insert `typewriter` text	C-c C-f C-t
Insert *slanted* text	C-c C-f C-s
Insert Small Caps text	C-c C-f C-c
Delete font	C-c C-f C-d
Replace font	C-u C-c C-f ⟨key⟩

Source Formatting

Indent current line	TAB
Indent next line	LFD
Format a paragraph	M-q
Format a region	C-c C-q C-r
Format a section	C-c C-q C-s
Format an environment	C-c C-q C-e
Mark an environment	C-c .
Mark a section	C-c *
Comment or uncomment region	C-c ;
Comment or uncomment paragraph	C-c %

Math Mode

Variables

All math mode commands are under the prefix key specified by LaTeX-math-abbrev-prefix, default is "`".

You can define your own math mode commands by setting the variable LaTeX-math-list before loading LaTeX-math-mode.

Greek Letters

α	(\alpha)	a	υ	(\upsilon)	u
β	(\beta)	b	ϕ	(\phi)	f
γ	(\gamma)	g	χ	(\chi)	q
δ	(\delta)	d	ψ	(\psi)	y
ϵ	(\epsilon)	e	ω	(\omega)	w
ζ	(\zeta)	z	Δ	(\Delta)	D
η	(\eta)	h	Γ	(\Gamma)	G
θ	(\theta)	j	Θ	(\Theta)	Q
κ	(\kappa)	k	Λ	(\Lambda)	L
λ	(\lambda)	l	Ξ	(\Xi)	X
μ	(\mu)	m	Π	(\Pi)	P
ν	(\nu)	n	Σ	(\Sigma)	S
ξ	(\xi)	x	Υ	(\Upsilon)	U
π	(\pi)	p	Φ	(\Phi)	F
ρ	(\rho)	r	Ψ	(\Psi)	Y
σ	(\sigma)	s	Ω	(\Omega)	W
τ	(\tau)	t			

Symbols

$\rightarrow$	(\rightarrow)	C-f	$\supseteq$	(\supseteq)	]
$\leftarrow$	(\leftarrow)	C-b	$\emptyset$	(\emptyset)	0
$\uparrow$	(\uparrow)	C-p	$\setminus$	(\setminus)	\
$\downarrow$	(\downarrow)	C-n	$\cup$	(\cup)	+
$\leq$	(\leq)	<	$\cap$	(\cap)	-
$\geq$	(\geq)	>	$\langle$	(\langle)	(
$\tilde{x}$	(\tilde)	~	$\rangle$	(\rangle)	)
∇	(\nabla)	N	exp	(\exp)	C-e
∞	(\infty)	I	sin	(\sin)	C-s
$\forall$	(\forall)	A	cos	(\cos)	C-c
$\exists$	(\exists)	E	sup	(\sup)	C-^
/	(\not)	/	inf	(\inf)	C-_
$\in$	(\in)	i	det	(\det)	C-d
$\times$	(\times)	*	lim	(\lim)	C-l
$\cdot$	(\cdot)	.	tan	(\tan)	C-t
$\subset$	(\subset)	{	$\hat{x}$	(\hat)	^
$\supset$	(\supset)	}	$\vee$	(\vee)	|
$\subseteq$	(\subseteq)	[	$\wedge$	(\wedge)	&

Miscellaneous

cal letters	c ⟨letter⟩

preview-latex

Activation

preview-latex is part of AUCTeX. If it is active, you should see an entry "Preview" in the menu bar when editing LaTeX files. If you have a "LaTeX", but no "Preview" menu, add the following to your `.emacs` file:

```
(load "preview-latex.el" nil t t)
```

Usage and keybindings

preview-latex operation only affects the display of the buffer, not its contents. It runs only on demand, using the target DVI or PDF files in the process. The first command in the following list (also on the toolbar button) will (as applicable) repreview an active region or a single modified preview, toggle the visibility of an unmodified preview or generate previews for a surrounding buffer area up to the next preview.

Preview at point	`C-c C-p C-p`
Preview environment	`C-c C-p C-e`
Preview region	`C-c C-p C-r`
Preview buffer	`C-c C-p C-b`
Preview document	`C-c C-p C-d`
Remove previews at point	`C-c C-p C-c C-d`
Remove previews from region	`C-c C-p C-c C-r`
Remove previews from buffer	`C-c C-p C-c C-b`
Remove previews from document	`C-c C-p C-c C-d`
Cache preamble	`C-c C-p C-f`
Switch off preamble cache	`C-c C-p C-c C-f`
Read Texinfo manual	`C-c C-p TAB`
Copy region as MML	`C-c C-p C-w`

The last keysequence will copy a region with previews into the kill buffer in a form fit for sending in Emacs' message-mode.

Customization within Emacs

You can use `M-x customize-variable RET` or the "Preview/ Customize" menu for customization. Worthwhile settings:

If you have dvipng available:
Set to `dvipng` `preview-image-type`

Keep counter values when regenerating single previews:
Set to `t` `preview-preserve-counters`

Cache/Don't cache preamble without query (preamble caching is done using `mylatex.ltx` and might not always work. Use the appropriate key sequences for overriding the following setting):
Set to `t/nil` `preview-auto-cache-preamble`

Customization from LaTeX

Customization is done in the document preamble (you need to load `preview.sty` explicitly) or in `prauctex.cfg` (which should load the system prauctex.cfg first). Commands:

Preview macro	`\PreviewMacro[{`⟨args⟩`}]{`⟨macro⟩`}`
Preview env	`\PreviewEnvironment[{`⟨args⟩`}]{`⟨env⟩`}`
Skip macro	`\PreviewMacro*[{`⟨args⟩`}]{`⟨macro⟩`}`
Skip env	`\PreviewEnvironment*[{`⟨args⟩`}]{`⟨env⟩`}`

Diverting material from float environments
Snarf stuff `\PreviewSnarfEnvironment[{`⟨args⟩`}]{`⟨env⟩`}`

Values to be used within ⟨args⟩:

Optional argument	`[]`
Mandatory argument	`{}`
Optional star	`*`
Conditionals	`?`⟨token⟩`{`⟨if found⟩`}{`⟨if not found⟩`}`
Skip next token	`-`
Transformation	`#{`⟨macro args⟩`}{`⟨replacement⟩`}`

More options and explanations can be found in `preview.dvi` or the Texinfo manual.

Folding Source Display

Toggle folding mode	`C-c C-o C-f`
Hide all items in buffer	`C-c C-o C-b`
Hide all items in region	`C-c C-o C-r`
Hide all items in paragraph	`C-c C-o C-p`
Hide current macro	`C-c C-o C-m`
Hide current environment	`C-c C-o C-e`
Show all items in buffer	`C-c C-o b`
Show all items in region	`C-c C-o r`
Show all items in paragraph	`C-c C-o p`
Show current item	`C-c C-o i`
Hide or show current item	`C-c C-o C-o`

Outlining TeX Documents

AUCTeX supports outline mode by defining section, subsection, etc. as heading levels. You can use `M-x outline-minor-mode RET` to toggle outline minor mode. All outline minor mode commands are under the prefix key specified by outline-minor-mode-prefix, default is "C-c @".

Hide all of buffer except headings	`C-c @ C-t`
Show all text in buffer	`C-c @ C-a`
Hide body following this heading	`C-c @ C-c`
Show body following this heading	`C-c @ C-e`
Hide subtree	`C-c @ C-d`
Show subtree	`C-c @ C-s`
All subheadings visible	`C-c @ C-k`
next visible heading	`C-c @ C-n`
previous visible heading	`C-c @ C-p`
forward to next subheading	`C-c @ C-f`
backward to next subheading	`C-c @ C-b`
up one heading level	`C-c @ C-u`

RefTeX

Activation

RefTeX is part of [X]Emacs. To activate and make it interact with AUCTeX, insert the following lines in .emacs.

```
(add-hook 'latex-mode-hook 'turn-on-reftex)
(add-hook 'LaTeX-mode-hook 'turn-on-reftex)
(setq reftex-plug-into-auctex t)
```

Table of Contents

The table of contents is a structured view of the entire document. It contains the sections, and optionally labels, index entries, and file boundaries.

Show the table of contents[1]	`C-c =`
Recenter *toc* buffer to here[1]	`C-c -`

Crossreferences, Citations, Index

Insert unique label[1]	`C-c (`
Reference a label[1]	`C-c )`
Insert citation with key selection	`C-c [`
... prompt for optional arguments	`C-u C-c [`
Index word at point with default macro	`C-c /`
Insert an index entry	`C-c <`
Add word to index phrases	`C-c \`
Visit index phrases buffer	`C-c |`
Compile and display index	`C-c >`
View cross reference[1]	`C-c &`
View cross reference with mouse	`S-mouse-2`
View cross reference from BibTeX file	`C-c &`

Standard keys in special buffers

RefTeX's special buffers have many active keys. The common ones are:

Display summary of active keys	`?`
Select this item	`RET`
Rescan the document	`r`
Display location in other window	`SPC`
Follow mode	`f`

Multifile actions

Since RefTeX scans the entire (multifile) document, it can provide commands that act on all files of a document. Check the `Ref->Global Actions` menu for these commands.

Variables

To tell reftex about your own macro definitions, customize the variables

```
reftex-label-alist
reftex-section-lecels
reftex-index-macros
reftex-cite-format
```

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[1] An argument of `C-u` triggers a document scan first. This can be necessary if file content and RefTeX's knowledge are no longer consistent.