

# The leszcz Reference Manual

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# 1 Systems

The main system appears first, followed by any subsystem dependency.

## 1.1 leszcz

Main entry and logic of leszcz.

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### Dependencies

- alexandria (system).
- cl-ppcre (system).
- local-time (system).
- bordeaux-threads (system).
- [leszcz-types], page 3 (system).
- [leszcz-constants], page 3 (system).
- [raylib], page 4 (system).
- [gui], page 4 (system).
- [net], page 4 (system).

**Source** [leszcz.asd], page 7.

### Child Components

- [leszcz.lisp], page 8 (file).
- [bot.lisp], page 11 (file).

## 1.2 leszcz-types

### Dependency

[leszcz-constants], page 3 (system).

**Source** [leszcz-types.asd], page 7.

### Child Component

[leszcz-types.lisp], page 12 (file).

## 1.3 leszcz-constants

### Dependencies

- alexandria (system).
- local-time (system).

**Source** [leszcz-constants.asd], page 7.

### Child Component

[leszcz-constants.lisp], page 13 (file).

## 1.4 raylib

### Dependencies

- `cffi` (system).
- `cffi-libffi` (system).

**Source** [raylib.asd], page 7.

### Child Component

[raylib.lisp], page 14 (file).

## 1.5 gui

some GUI functions for leszcz.

**Author** Krzysztof Michałczyk <kpm@krzysckh.org>

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### Dependencies

- [raylib], page 4 (system).
- [leszcz-types], page 3 (system).
- [leszcz-constants], page 3 (system).
- `cl-ppcre` (system).

**Source** [gui.asd], page 7.

### Child Component

[gui.lisp], page 16 (file).

## 1.6 net

Network protocol implementation for leszcz.

**Author** Krzysztof Michałczyk <kpm@krzysckh.org>

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### Dependencies

- [leszcz-types], page 3 (system).
- [leszcz-constants], page 3 (system).
- [fast], page 4 (system).
- `alexandria` (system).
- `cl-ppcre` (system).
- `usocket` (system).

**Source** [net.asd], page 7.

### Child Component

[net.lisp], page 17 (file).

## 1.7 fast

Faster board operations for leszcz.

**Author** Krzysztof Michałczyk <kpm@krzysckh.org>

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**Dependencies**

- [leszcz-types], page 3 (system).
- [leszcz-constants], page 3 (system).
- alexandria (system).
- cl-ppcre (system).

**Source** [fast.asd], page 8.

**Child Component**

[fast.lisp], page 18 (file).



## 2 Files

Files are sorted by type and then listed depth-first from the systems components trees.

### 2.1 Lisp

#### 2.1.1 `leszcz/leszcz.asd`

**Source** [leszcz.asd], page 7.

**Parent Component**  
[leszcz], page 3 (system).

**ASDF Systems**  
[leszcz], page 3.

#### 2.1.2 `leszcz-types/leszcz-types.asd`

**Source** [leszcz-types.asd], page 7.

**Parent Component**  
[leszcz-types], page 3 (system).

**ASDF Systems**  
[leszcz-types], page 3.

#### 2.1.3 `leszcz-constants/leszcz-constants.asd`

**Source** [leszcz-constants.asd], page 7.

**Parent Component**  
[leszcz-constants], page 3 (system).

**ASDF Systems**  
[leszcz-constants], page 3.

#### 2.1.4 `raylib/raylib.asd`

**Source** [raylib.asd], page 7.

**Parent Component**  
[raylib], page 4 (system).

**ASDF Systems**  
[raylib], page 4.

#### 2.1.5 `gui/gui.asd`

**Source** [gui.asd], page 7.

**Parent Component**  
[gui], page 4 (system).

**ASDF Systems**  
[gui], page 4.

#### 2.1.6 `net/net.asd`

**Source** [net.asd], page 7.

**Parent Component**  
[net], page 4 (system).

**ASDF Systems**  
[net], page 4.

### 2.1.7 fast/fast.asd

**Source** [fast.asd], page 8.

**Parent Component**  
[fast], page 4 (system).

**ASDF Systems**  
[fast], page 4.

### 2.1.8 leszcz/leszcz.lisp

**Source** [leszcz.asd], page 7.

**Parent Component**  
[leszcz], page 3 (system).

**Packages** [leszcz], page 23.

#### Public Interface

- [\*current-game\*], page 37 (special variable).
- [\*current-screen\*], page 37 (special variable).
- [game-turn], page 57 (method).
- [game-turn-black-p], page 57 (method).
- [game-turn-white-p], page 57 (method).
- [main], page 45 (function).
- [thread], page 39 (macro).

#### Internals

- [%local-player-vs-player], page 77 (function).
- [%main], page 77 (function).
- [%player-vs-bot], page 77 (function).
- [%test-main], page 77 (function).
- [\*current-board-evaluation\*], page 72 (special variable).
- [\*threads\*], page 72 (special variable).
- [+bishop-offsets+], page 70 (constant).
- [+hlm/last-from+], page 72 (special variable).
- [+hlm/last-to+], page 72 (special variable).
- [+king-moves+], page 70 (constant).
- [+knight-moves+], page 70 (constant).
- [+queen-offsets+], page 70 (constant).
- [+rook-offsets+], page 70 (constant).
- [animate-menu-bg], page 77 (function).
- [ask-for-upgrade-type], page 77 (function).
- [base-texture-of], page 78 (function).
- [bb->move-lst], page 78 (function).
- [cleanup-threads!], page 78 (function).
- [connect-to-master], page 78 (function).
- [coords->point], page 78 (function).
- [display-draw], page 78 (function).

- [display-mate], page 79 (function).
- [dmh/font-size], page 73 (special variable).
- [dmh/height], page 73 (special variable).
- [dmh/rect], page 73 (special variable).
- [dmh/show], page 73 (special variable).
- [dmh/xpad], page 73 (special variable).
- [draw-game], page 79 (function).
- [draw-move-history], page 79 (function).
- [draw-piece], page 79 (function).
- [draw-piece/anim-frame], page 73 (special variable).
- [draw-piece/anim-frame-ticker], page 73 (special variable).
- [draw-piece/piece-on-point], page 73 (special variable).
- [draw-time], page 79 (function).
- [dt/font-size], page 73 (special variable).
- [enposition-moveset], page 79 (function).
- [f/], page 79 (function).
- [fb-filter-check-moves], page 76 (macro).
- [fb-filter-check-moves\*], page 76 (macro).
- [fb-point-checked-p], page 80 (function).
- [fb1-king-of], page 81 (function).
- [fen->game], page 81 (function).
- [filter-own-pieces], page 81 (function).
- [game->fen], page 81 (function).
- [game-check-for-mates], page 88 (method).
- [game-do-move], page 81 (function).
- [game-main-loop], page 81 (function).
- [game-update-points-cache], page 88 (method).
- [game-update-possible-moves-cache], page 88 (method).
- [generate-sliding-moves], page 82 (function).
- [hasp], page 82 (function).
- [highlight-last-move], page 82 (function).
- [highlight-possible-moves], page 82 (function).
- [initialize-game], page 82 (function).
- [initialize-window!], page 82 (function).
- [king-of], page 82 (function).
- [lst->pos], page 82 (function).
- [maybe-castling-moves], page 83 (function).
- [maybe-drag], page 83 (function).
- [maybe-drag/capturer], page 73 (special variable).
- [maybe-drag/piece], page 74 (special variable).
- [maybe-draw-eval], page 83 (function).
- [maybe-move-bot], page 83 (function).
- [maybe-receive-something], page 83 (function).

- [maybe-reverse], page 77 (macro).
- [maybe-set-cursor], page 83 (function).
- [maybe-switch-sides], page 83 (function).
- [maybe-switch-sides/capturer], page 74 (special variable).
- [maybe-trap-floats], page 77 (macro).
- [menu/bg-dark], page 74 (special variable).
- [menu/bg-light], page 74 (special variable).
- [menu/frame-ctr], page 74 (special variable).
- [menu/frame-ctr-magic], page 74 (special variable).
- [menu/frame-ctr-mod], page 74 (special variable).
- [move->algebraic], page 83 (function).
- [move-possible-p], page 83 (function).
- [new--point-checked-p], page 84 (function).
- [old--point-checked-p], page 84 (function).
- [piece->char], page 84 (function).
- [piece-at-point], page 84 (function).
- [place], page 90 (type).
- [point-checked-p], page 84 (function).
- [pos->lst], page 84 (function).
- [position-of], page 84 (function).
- [possible-moves-for], page 84 (function).
- [pre--possible-moves-for], page 84 (function).
- [pre--possible-moves-for/pawn], page 84 (function).
- [pre--possible-moves-for/upgrade], page 85 (function).
- [print-castle-rules], page 85 (function).
- [safe-piece-type], page 77 (macro).
- [shade--screen], page 85 (function).
- [shade-screen], page 85 (function).
- [show-point-at-cursor], page 85 (function).
- [slow-filter-check-moves], page 86 (function).
- [start-master-server], page 86 (function).
- [unshade-screen], page 86 (function).
- [ut/make-texture-lambda], page 86 (function).
- [ut/pad-size], page 75 (special variable).
- [ut/upgrade-bishop-texture], page 75 (special variable).
- [ut/upgrade-knight-texture], page 75 (special variable).
- [ut/upgrade-queen-texture], page 75 (special variable).
- [ut/upgrade-rook-texture], page 76 (special variable).
- [ut/upgrade-size], page 76 (special variable).
- [v2+], page 86 (function).
- [v2-], page 86 (function).

### 2.1.9 `leszcz/bot.lisp`

**Source** `[leszcz.asd]`, page 7.

**Parent Component**

`[leszcz]`, page 3 (system).

**Internals**

- `[*bonus-table*]`, page 72 (special variable).
- `[*bot-random-state*]`, page 72 (special variable).
- `[*rev-bonus-table*]`, page 72 (special variable).
- `[*transposition-table*]`, page 72 (special variable).
- `[*zobrist-black-to-move*]`, page 72 (special variable).
- `[*zobrist-table*]`, page 72 (special variable).
- `[+bishop-value+]`, page 70 (constant).
- `[+knight-value+]`, page 70 (constant).
- `[+pawn-value+]`, page 70 (constant).
- `[+queen-value+]`, page 70 (constant).
- `[+rook-value+]`, page 70 (constant).
- `[copy-game]`, page 78 (function).
- `[copy-piece]`, page 78 (function).
- `[count-bonuses]`, page 78 (function).
- `[count-material-of]`, page 78 (function).
- `[enumerate]`, page 76 (macro).
- `[evaluate-position]`, page 79 (function).
- `[game--search]`, page 81 (function).
- `[game-search]`, page 82 (function).
- `[hash-zobrist]`, page 82 (function).
- `[initialize-zobrist]`, page 82 (function).
- `[piece->zobrist-hash-enum]`, page 84 (function).
- `[rand64]`, page 85 (function).
- `[z-black-bishop]`, page 71 (constant).
- `[z-black-king]`, page 71 (constant).
- `[z-black-knight]`, page 71 (constant).
- `[z-black-pawn]`, page 71 (constant).
- `[z-black-queen]`, page 71 (constant).
- `[z-black-rook]`, page 71 (constant).
- `[z-white-bishop]`, page 71 (constant).
- `[z-white-king]`, page 71 (constant).
- `[z-white-knight]`, page 71 (constant).
- `[z-white-pawn]`, page 71 (constant).
- `[z-white-queen]`, page 71 (constant).
- `[z-white-rook]`, page 71 (constant).

### 2.1.10 leszcz-types/leszcz-types.lisp

**Source** [leszcz-types.asd], page 7.

**Parent Component**

[leszcz-types], page 3 (system).

**Packages** [leszcz-types], page 30.

**Public Interface**

- [blackp], page 40 (function).
- [game], page 64 (class).
- [game-black-can-castle-kingside-p], page 49 (reader method).
- [(setf game-black-can-castle-kingside-p)], page 49 (writer method).
- [game-black-can-castle-queenside-p], page 49 (reader method).
- [(setf game-black-can-castle-queenside-p)], page 50 (writer method).
- [game-connection], page 50 (reader method).
- [(setf game-connection)], page 50 (writer method).
- [game-en-passant-target-square], page 50 (reader method).
- [(setf game-en-passant-target-square)], page 51 (writer method).
- [game-fb], page 51 (reader method).
- [(setf game-fb)], page 51 (writer method).
- [game-fullmove-clock], page 51 (reader method).
- [(setf game-fullmove-clock)], page 51 (writer method).
- [game-halfmove-clock], page 52 (reader method).
- [(setf game-halfmove-clock)], page 52 (writer method).
- [game-in-progress-p], page 52 (method).
- [game-interactive-p], page 52 (reader method).
- [(setf game-interactive-p)], page 52 (writer method).
- [game-move-history], page 53 (reader method).
- [(setf game-move-history)], page 53 (writer method).
- [game-pieces], page 53 (reader method).
- [(setf game-pieces)], page 53 (writer method).
- [game-points-cache], page 53 (reader method).
- [(setf game-points-cache)], page 54 (writer method).
- [game-possible-moves-cache], page 54 (reader method).
- [(setf game-possible-moves-cache)], page 54 (writer method).
- [game-result], page 54 (reader method).
- [(setf game-result)], page 55 (writer method).
- [game-side], page 55 (reader method).
- [(setf game-side)], page 55 (writer method).
- [game-tick], page 55 (method).
- [game-ticker], page 55 (reader method).
- [(setf game-ticker)], page 56 (writer method).
- [game-time-begin-turn], page 56 (reader method).
- [(setf game-time-begin-turn)], page 56 (writer method).



- [game-time-black], page 56 (reader method).
- [(setf game-time-black)], page 56 (writer method).
- [game-time-white], page 57 (reader method).
- [(setf game-time-white)], page 57 (writer method).
- [game-white-can-castle-kingside-p], page 57 (reader method).
- [(setf game-white-can-castle-kingside-p)], page 58 (writer method).
- [game-white-can-castle-queenside-p], page 58 (reader method).
- [(setf game-white-can-castle-queenside-p)], page 58 (writer method).
- [piece], page 68 (class).
- [piece-color], page 58 (reader method).
- [(setf piece-color)], page 59 (writer method).
- [piece-point], page 59 (reader method).
- [(setf piece-point)], page 59 (writer method).
- [piece-type], page 59 (reader method).
- [(setf piece-type)], page 59 (writer method).
- [point], page 69 (class).
- [point-x], page 60 (reader method).
- [(setf point-x)], page 60 (writer method).
- [point-y], page 60 (reader method).
- [(setf point-y)], page 60 (writer method).
- [print-object], page 60 (method).
- [print-object], page 60 (method).
- [print-object], page 60 (method).
- [whitep], page 49 (function).

### 2.1.11 leszcz-constants/leszcz-constants.lisp

**Source** [leszcz-constants.asd], page 7.

**Parent Component**

[leszcz-constants], page 3 (system).

**Packages** [leszcz-constants], page 27.

**Public Interface**

- [\*board-begin\*], page 36 (special variable).
- [\*board-size\*], page 37 (special variable).
- [\*color-bg-dark\*], page 37 (special variable).
- [\*color-bg-light\*], page 37 (special variable).
- [\*debug\*], page 37 (special variable).
- [\*window-height\*], page 37 (special variable).
- [\*window-hpad\*], page 37 (special variable).
- [\*window-width\*], page 37 (special variable).
- [\*window-wpad\*], page 37 (special variable).
- [+color-black+], page 37 (special variable).
- [+color-grayish+], page 38 (special variable).
- [+color-greenish+], page 38 (special variable).

- [`+color-purple+`], page 38 (special variable).
- [`+color-redish+`], page 38 (special variable).
- [`+color-white+`], page 38 (special variable).
- [`+inf`], page 35 (constant).
- [`+initial-fen+`], page 35 (constant).
- [`+piece-size+`], page 38 (special variable).
- [`+texture-size+`], page 38 (special variable).
- [`-inf`], page 36 (constant).
- [`alagard-data`], page 38 (special variable).
- [`black-texture-alist`], page 38 (special variable).
- [`black-texture-data-list`], page 38 (special variable).
- [`leszcz-logos-alist`], page 38 (special variable).
- [`let-values`], page 39 (macro).
- [`logo-data-alist`], page 39 (special variable).
- [`spleen-data`], page 39 (special variable).
- [`texture-options`], page 39 (special variable).
- [`white-texture-alist`], page 39 (special variable).
- [`white-texture-data-list`], page 39 (special variable).

### Internals

- [`black-texture-data-list-pixel`], page 73 (special variable).
- [`black-texture-data-list-sleek`], page 73 (special variable).
- [`file->vec`], page 81 (function).
- [`white-texture-data-list-pixel`], page 76 (special variable).
- [`white-texture-data-list-sleek`], page 76 (special variable).

### 2.1.12 raylib/raylib.lisp

**Source**     [`raylib.asd`], page 7.

#### Parent Component

[`raylib`], page 4 (system).

**Packages**   [`raylib`], page 21.

#### Public Interface

- [`*alagard*`], page 36 (special variable).
- [`*font*`], page 37 (special variable).
- [`+cursor-normal+`], page 35 (constant).
- [`+cursor-pointer+`], page 35 (constant).
- [`+texture-filter-anisotropic-16x+`], page 36 (constant).
- [`+texture-filter-anisotropic-4x+`], page 36 (constant).
- [`+texture-filter-anisotropic-8x+`], page 36 (constant).
- [`+texture-filter-bilinear+`], page 36 (constant).
- [`+texture-filter-point+`], page 36 (constant).
- [`+texture-filter-trilinear+`], page 36 (constant).
- [`begin-drawing`], page 40 (function).

- [begin-scissor-mode], page 40 (function).
- [begin-texture-mode], page 40 (function).
- [clear-background], page 40 (function).
- [close-window], page 40 (function).
- [color], page 69 (type).
- [draw-fps], page 41 (function).
- [draw-line], page 41 (function).
- [draw-rectangle], page 41 (function).
- [draw-rectangle-lines], page 41 (function).
- [draw-rectangle-lines-2], page 41 (function).
- [draw-text], page 41 (function).
- [draw-text-1], page 41 (function).
- [draw-text-2], page 41 (function).
- [draw-text-alagard], page 41 (function).
- [draw-text-alagard-centered], page 41 (function).
- [draw-texture], page 42 (function).
- [end-drawing], page 42 (function).
- [end-scissor-mode], page 42 (function).
- [end-texture-mode], page 42 (function).
- [floatize], page 44 (function).
- [get-char-pressed], page 44 (function).
- [get-chars-pressed], page 44 (function).
- [image->texture], page 44 (function).
- [init-window], page 44 (function).
- [key-down-p], page 44 (function).
- [key-down-p-1], page 44 (function).
- [key-pressed-p], page 45 (function).
- [key-pressed-p-1], page 45 (function).
- [load-font], page 45 (function).
- [load-font-from-memory], page 45 (function).
- [load-image-from-memory], page 45 (function).
- [load-textures], page 45 (function).
- [make-font], page 46 (function).
- [make-render-texture], page 46 (function).
- [make-texture], page 46 (function).
- [measure-text], page 46 (function).
- [measure-text-1], page 46 (function).
- [mouse-pos], page 46 (function).
- [mouse-pos-1], page 46 (function).
- [mouse-pressed-p], page 46 (function).
- [mouse-released-p], page 46 (function).
- [mouse-x], page 46 (function).
- [mouse-y], page 47 (function).

- [point-in-rect-p], page 47 (function).
- [screen->image], page 47 (function).
- [set-exit-key!], page 47 (function).
- [set-mouse-cursor!], page 47 (function).
- [set-target-fps!], page 48 (function).
- [set-texture-filter!], page 48 (function).
- [texture->image], page 48 (function).
- [translate-from-foreign], page 60 (method).
- [translate-from-foreign], page 61 (method).
- [translate-from-foreign], page 61 (method).
- [translate-from-foreign], page 61 (method).
- [translate-from-foreign], page 61 (method).
- [translate-into-foreign-memory], page 61 (method).
- [translate-into-foreign-memory], page 61 (method).
- [translate-into-foreign-memory], page 61 (method).
- [translate-into-foreign-memory], page 61 (method).
- [translate-into-foreign-memory], page 61 (method).
- [unload-image!], page 48 (function).
- [unload-render-texture!], page 48 (function).
- [unload-texture!], page 48 (function).
- [window-close-p], page 49 (function).
- [window-ready-p], page 49 (function).

### Internals

- [begin-drawing-1], page 78 (function).
- [end-drawing-1], page 79 (function).
- [make-trans], page 77 (macro).
- [set-mouse-cursor-1!], page 85 (function).
- [smc/current], page 74 (special variable).
- [type-color], page 88 (class).
- [type-color-p], page 86 (function).
- [type-font], page 88 (class).
- [type-glyph-info], page 88 (class).
- [type-image], page 88 (class).
- [type-rectangle], page 89 (class).
- [type-render-texture], page 89 (class).
- [type-texture], page 89 (class).
- [type-vec2], page 89 (class).

### 2.1.13 gui/gui.lisp

**Source** [gui.asd], page 7.

**Parent Component**

[gui], page 4 (system).

**Packages** [gui], page 32.

**Public Interface**

- [add-draw-hook], page 40 (function).
- [capturer], page 64 (class).
- [configure-menu], page 40 (function).
- [current-capturer], page 38 (special variable).
- [current-capturer-can-be-removed-p], page 41 (function).
- [delete-current-capturer!], page 41 (function).
- [keys-can-be-captured-p], page 45 (function).
- [mainloop-draw-hooks], page 39 (special variable).
- [make-button], page 45 (function).
- [make-button\*], page 45 (function).
- [remove-draw-hook], page 47 (function).
- [set-current-capturer!], page 47 (function).
- [switch-textures-to], page 48 (function).
- [text-button], page 48 (function).
- [texture-button], page 48 (function).
- [toplevel-console-listener], page 48 (function).

**Internals**

- [+color-grayish-2+], page 72 (special variable).
- [+color-hax0r-green+], page 72 (special variable).
- [capturer-can-be-removed-p], page 87 (reader method).
- [(setf capturer-can-be-removed-p)], page 87 (writer method).
- [capturer-delete], page 87 (reader method).
- [(setf capturer-delete)], page 87 (writer method).
- [maybe-configure-menu], page 83 (function).
- [tb/color-bg], page 74 (special variable).
- [tb/color-bg-hover], page 74 (special variable).
- [tb/color-margin], page 75 (special variable).
- [tb/color-text], page 75 (special variable).
- [tb/padx], page 75 (special variable).
- [toplevel-console], page 86 (function).
- [toplevel-console/capturer], page 75 (special variable).
- [toplevel-console/font-size], page 75 (special variable).
- [toplevel-console/height], page 75 (special variable).
- [toplevel-console/log], page 75 (special variable).
- [toplevel-console/state], page 75 (special variable).
- [unload-textures!], page 86 (function).

**2.1.14 net/net.lisp**

**Source** [net.asd], page 7.

**Parent Component**

[net], page 4 (system).

**Packages** [net], page 33.

**Public Interface**

- [`+gdata-type+`], page 35 (constant).
- [`+hii-type+`], page 35 (constant).
- [`+invalid-type+`], page 35 (constant).
- [`+lgames-type+`], page 35 (constant).
- [`+move-type+`], page 35 (constant).
- [`+pgame-type+`], page 35 (constant).
- [`+ping-type+`], page 36 (constant).
- [`+port+`], page 36 (constant).
- [`+rdata-type+`], page 36 (constant).
- [`connect-to-server`], page 40 (function).
- [`from-s16`], page 44 (function).
- [`make-client-packet`], page 46 (function).
- [`maybe-receive-packet`], page 46 (function).
- [`packet->movedata`], page 47 (function).
- [`packet->name`], page 47 (function).
- [`packet-case`], page 39 (macro).
- [`packet-name->type`], page 47 (function).
- [`packet-of-type-p`], page 47 (function).
- [`receive-packet`], page 47 (function).
- [`start-server`], page 48 (function).
- [`to-s16`], page 48 (function).
- [`write-packets`], page 49 (function).

**Internals**

- [`if*`], page 76 (macro).
- [`ifz`], page 76 (macro).
- [`make-server-packet`], page 83 (function).
- [`p2p-connect-and-return-fen-and-side-data`], page 84 (function).
- [`rdata-packet->string`], page 85 (function).
- [`rdata-packets->string`], page 85 (function).
- [`receive-nickname`], page 85 (function).
- [`receive-packets`], page 85 (function).
- [`safe-sref`], page 85 (function).
- [`start-p2p-server`], page 86 (function).
- [`string->rdata`], page 86 (function).
- [`write-packet`], page 86 (function).

**2.1.15 fast/fast.lisp**

**Source**     [`fast.asd`], page 8.

**Parent Component**

[`fast`], page 4 (system).

**Packages**   [`fast`], page 28.

**Public Interface**

- [bit-at], page 40 (function).
- [bit-set-p], page 40 (function).
- [copy-fast-board], page 40 (function).
- [fast-board], page 61 (structure).
- [fast-board-1], page 63 (structure).
- [fast-board->game], page 42 (function).
- [fb-bishop], page 42 (reader).
- [(setf fb-bishop)], page 42 (writer).
- [fb-black], page 42 (reader).
- [(setf fb-black)], page 42 (writer).
- [fb-generate-bishop-moves], page 42 (function).
- [fb-generate-king-area], page 42 (function).
- [fb-generate-king-moves], page 42 (function).
- [fb-generate-knight-moves], page 43 (function).
- [fb-generate-queen-moves], page 43 (function).
- [fb-generate-rook-moves], page 43 (function).
- [fb-king], page 43 (reader).
- [(setf fb-king)], page 43 (writer).
- [fb-knight], page 43 (reader).
- [(setf fb-knight)], page 43 (writer).
- [fb-make-check-board], page 43 (function).
- [fb-pawn], page 43 (reader).
- [(setf fb-pawn)], page 43 (writer).
- [fb-queen], page 43 (reader).
- [(setf fb-queen)], page 43 (writer).
- [fb-rook], page 43 (reader).
- [(setf fb-rook)], page 43 (writer).
- [fb-white], page 44 (reader).
- [(setf fb-white)], page 44 (writer).
- [for-every-bb], page 39 (macro).
- [game->fast-board], page 44 (function).
- [logbitpr], page 39 (macro).
- [lognot64], page 45 (function).

**Internals**

- [copy-fast-board-1], page 78 (function).
- [fast-board-1-p], page 79 (function).
- [fast-board-p], page 79 (function).
- [fb--knight-check-board], page 79 (function).
- [fb--make-color-board], page 80 (function).
- [fb-bck-p], page 80 (reader).
- [(setf fb-bck-p)], page 80 (writer).
- [fb-bcq-p], page 80 (reader).

- [(setf fb-bcq-p)], page 80 (writer).
- [fb-display], page 80 (function).
- [fb-make-black-board], page 80 (function).
- [fb-make-piece-board], page 80 (function).
- [fb-make-white-board], page 80 (function).
- [fb-point], page 76 (macro).
- [fb-ticker], page 80 (reader).
- [(setf fb-ticker)], page 80 (writer).
- [fb-wck-p], page 81 (reader).
- [(setf fb-wck-p)], page 81 (writer).
- [fb-wcq-p], page 81 (reader).
- [(setf fb-wcq-p)], page 81 (writer).
- [fb1-at], page 76 (macro).
- [fb1-set-p], page 76 (macro).
- [make-fast-board], page 82 (function).
- [make-fast-board-1], page 83 (function).
- [pawn-magic-l], page 74 (special variable).
- [pawn-magic-r], page 74 (special variable).
- [set-bit!], page 77 (macro).
- [u64], page 77 (macro).
- [u64-max], page 70 (constant).



## 3 Packages

Packages are listed by definition order.

### 3.1 raylib

**Source** [raylib.lisp], page 14.

#### Use List

- alexandria.
- cffi.
- common-lisp.
- [leszcz-constants], page 27.

#### Used By List

- [gui], page 32.
- [leszcz], page 23.

#### Public Interface

- [\*alagard\*], page 36 (special variable).
- [\*font\*], page 37 (special variable).
- [+cursor-normal+], page 35 (constant).
- [+cursor-pointer+], page 35 (constant).
- [+texture-filter-anisotropic-16x+], page 36 (constant).
- [+texture-filter-anisotropic-4x+], page 36 (constant).
- [+texture-filter-anisotropic-8x+], page 36 (constant).
- [+texture-filter-bilinear+], page 36 (constant).
- [+texture-filter-point+], page 36 (constant).
- [+texture-filter-trilinear+], page 36 (constant).
- [begin-drawing], page 40 (function).
- [begin-scissor-mode], page 40 (function).
- [begin-texture-mode], page 40 (function).
- [clear-background], page 40 (function).
- [close-window], page 40 (function).
- [color], page 69 (type).
- [draw-fps], page 41 (function).
- [draw-line], page 41 (function).
- [draw-rectangle], page 41 (function).
- [draw-rectangle-lines], page 41 (function).
- [draw-rectangle-lines-2], page 41 (function).
- [draw-text], page 41 (function).
- [draw-text-1], page 41 (function).
- [draw-text-2], page 41 (function).
- [draw-text-alagard], page 41 (function).
- [draw-text-alagard-centered], page 41 (function).
- [draw-texture], page 42 (function).

- [end-drawing], page 42 (function).
- [end-scissor-mode], page 42 (function).
- [end-texture-mode], page 42 (function).
- [floatize], page 44 (function).
- [get-char-pressed], page 44 (function).
- [get-chars-pressed], page 44 (function).
- [image->texture], page 44 (function).
- [init-window], page 44 (function).
- [key-down-p], page 44 (function).
- [key-down-p-1], page 44 (function).
- [key-pressed-p], page 45 (function).
- [key-pressed-p-1], page 45 (function).
- [load-font], page 45 (function).
- [load-font-from-memory], page 45 (function).
- [load-image-from-memory], page 45 (function).
- [load-textures], page 45 (function).
- [make-font], page 46 (function).
- [make-render-texture], page 46 (function).
- [make-texture], page 46 (function).
- [measure-text], page 46 (function).
- [measure-text-1], page 46 (function).
- [mouse-pos], page 46 (function).
- [mouse-pos-1], page 46 (function).
- [mouse-pressed-p], page 46 (function).
- [mouse-released-p], page 46 (function).
- [mouse-x], page 46 (function).
- [mouse-y], page 47 (function).
- [point-in-rect-p], page 47 (function).
- [screen->image], page 47 (function).
- [set-exit-key!], page 47 (function).
- [set-mouse-cursor!], page 47 (function).
- [set-target-fps!], page 48 (function).
- [set-texture-filter!], page 48 (function).
- [texture->image], page 48 (function).
- [unload-image!], page 48 (function).
- [unload-render-texture!], page 48 (function).
- [unload-texture!], page 48 (function).
- [window-close-p], page 49 (function).
- [window-ready-p], page 49 (function).

## Internals

- [begin-drawing-1], page 78 (function).
- [end-drawing-1], page 79 (function).

- [make-trans], page 77 (macro).
- [set-mouse-cursor-1!], page 85 (function).
- [smc/current], page 74 (special variable).
- [type-color], page 88 (class).
- [type-color-p], page 86 (function).
- [type-font], page 88 (class).
- [type-glyph-info], page 88 (class).
- [type-image], page 88 (class).
- [type-rectangle], page 89 (class).
- [type-render-texture], page 89 (class).
- [type-texture], page 89 (class).
- [type-vec2], page 89 (class).

## 3.2 leszcz

**Source** [leszcz.lisp], page 8.

### Use List

- alexandria.
- bordeaux-threads.
- cl-ppcre.
- common-lisp.
- [fast], page 28.
- [gui], page 32.
- [leszcz-constants], page 27.
- [leszcz-types], page 30.
- local-time.
- [net], page 33.
- [raylib], page 21.

### Public Interface

[main], page 45 (function).

### Internals

- [%local-player-vs-player], page 77 (function).
- [%main], page 77 (function).
- [%player-vs-bot], page 77 (function).
- [%test-main], page 77 (function).
- [\*bonus-table\*], page 72 (special variable).
- [\*bot-random-state\*], page 72 (special variable).
- [\*current-board-evaluation\*], page 72 (special variable).
- [\*rev-bonus-table\*], page 72 (special variable).
- [\*threads\*], page 72 (special variable).
- [\*transposition-table\*], page 72 (special variable).
- [\*zobrist-black-to-move\*], page 72 (special variable).
- [\*zobrist-table\*], page 72 (special variable).

- [+bishop-offsets+], page 70 (constant).
- [+bishop-value+], page 70 (constant).
- [+hlm/last-from+], page 72 (special variable).
- [+hlm/last-to+], page 72 (special variable).
- [+king-moves+], page 70 (constant).
- [+knight-moves+], page 70 (constant).
- [+knight-value+], page 70 (constant).
- [+pawn-value+], page 70 (constant).
- [+queen-offsets+], page 70 (constant).
- [+queen-value+], page 70 (constant).
- [+rook-offsets+], page 70 (constant).
- [+rook-value+], page 70 (constant).
- [animate-menu-bg], page 77 (function).
- [ask-for-upgrade-type], page 77 (function).
- [base-texture-of], page 78 (function).
- [bb->move-lst], page 78 (function).
- [cleanup-threads!], page 78 (function).
- [connect-to-master], page 78 (function).
- [coords->point], page 78 (function).
- [copy-game], page 78 (function).
- [copy-piece], page 78 (function).
- [count-bonuses], page 78 (function).
- [count-material-of], page 78 (function).
- [display-draw], page 78 (function).
- [display-mate], page 79 (function).
- [dmh/font-size], page 73 (special variable).
- [dmh/height], page 73 (special variable).
- [dmh/rect], page 73 (special variable).
- [dmh/show], page 73 (special variable).
- [dmh/xpad], page 73 (special variable).
- [draw-game], page 79 (function).
- [draw-move-history], page 79 (function).
- [draw-piece], page 79 (function).
- [draw-piece/anim-frame], page 73 (special variable).
- [draw-piece/anim-frame-ticker], page 73 (special variable).
- [draw-piece/piece-on-point], page 73 (special variable).
- [draw-time], page 79 (function).
- [dt/font-size], page 73 (special variable).
- [enposition-moveset], page 79 (function).
- [enumerate], page 76 (macro).
- [evaluate-position], page 79 (function).
- [f/], page 79 (function).
- [fb-filter-check-moves], page 76 (macro).

- [fb-filter-check-moves\*], page 76 (macro).
- [fb-point-checked-p], page 80 (function).
- [fb1-king-of], page 81 (function).
- [fen->game], page 81 (function).
- [filter-own-pieces], page 81 (function).
- [game--search], page 81 (function).
- [game->fen], page 81 (function).
- [game-check-for-mates], page 87 (generic function).
- [game-do-move], page 81 (function).
- [game-main-loop], page 81 (function).
- [game-search], page 82 (function).
- [game-update-points-cache], page 88 (generic function).
- [game-update-possible-moves-cache], page 88 (generic function).
- [generate-sliding-moves], page 82 (function).
- [hash-zobrist], page 82 (function).
- [hasp], page 82 (function).
- [highlight-last-move], page 82 (function).
- [highlight-possible-moves], page 82 (function).
- [initialize-game], page 82 (function).
- [initialize-window!], page 82 (function).
- [initialize-zobrist], page 82 (function).
- [king-of], page 82 (function).
- [lst->pos], page 82 (function).
- [maybe-castling-moves], page 83 (function).
- [maybe-drag], page 83 (function).
- [maybe-drag/capturer], page 73 (special variable).
- [maybe-drag/piece], page 74 (special variable).
- [maybe-draw-eval], page 83 (function).
- [maybe-move-bot], page 83 (function).
- [maybe-receive-something], page 83 (function).
- [maybe-reverse], page 77 (macro).
- [maybe-set-cursor], page 83 (function).
- [maybe-switch-sides], page 83 (function).
- [maybe-switch-sides/capturer], page 74 (special variable).
- [maybe-trap-floats], page 77 (macro).
- [menu/bg-dark], page 74 (special variable).
- [menu/bg-light], page 74 (special variable).
- [menu/frame-ctr], page 74 (special variable).
- [menu/frame-ctr-magic], page 74 (special variable).
- [menu/frame-ctr-mod], page 74 (special variable).
- [move->algebraic], page 83 (function).
- [move-possible-p], page 83 (function).
- [new--point-checked-p], page 84 (function).

- [old--point-checked-p], page 84 (function).
- [piece->char], page 84 (function).
- [piece->zobrist-hash-enum], page 84 (function).
- [piece-at-point], page 84 (function).
- [place], page 90 (type).
- [point-checked-p], page 84 (function).
- [pos->lst], page 84 (function).
- [position-of], page 84 (function).
- [possible-moves-for], page 84 (function).
- [pre--possible-moves-for], page 84 (function).
- [pre--possible-moves-for/pawn], page 84 (function).
- [pre--possible-moves-for/upgrade], page 85 (function).
- [print-castle-rules], page 85 (function).
- [rand64], page 85 (function).
- [safe-piece-type], page 77 (macro).
- [shade--screen], page 85 (function).
- [shade-screen], page 85 (function).
- [show-point-at-cursor], page 85 (function).
- [slow-filter-check-moves], page 86 (function).
- [start-master-server], page 86 (function).
- [unshade-screen], page 86 (function).
- [ut/make-texture-lambda], page 86 (function).
- [ut/pad-size], page 75 (special variable).
- [ut/upgrade-bishop-texture], page 75 (special variable).
- [ut/upgrade-knight-texture], page 75 (special variable).
- [ut/upgrade-queen-texture], page 75 (special variable).
- [ut/upgrade-rook-texture], page 76 (special variable).
- [ut/upgrade-size], page 76 (special variable).
- [v2+], page 86 (function).
- [v2-], page 86 (function).
- [z-black-bishop], page 71 (constant).
- [z-black-king], page 71 (constant).
- [z-black-knight], page 71 (constant).
- [z-black-pawn], page 71 (constant).
- [z-black-queen], page 71 (constant).
- [z-black-rook], page 71 (constant).
- [z-white-bishop], page 71 (constant).
- [z-white-king], page 71 (constant).
- [z-white-knight], page 71 (constant).
- [z-white-pawn], page 71 (constant).
- [z-white-queen], page 71 (constant).
- [z-white-rook], page 71 (constant).

### 3.3 leszcz-constants

**Source** [leszcz-constants.lisp], page 13.

**Use List**

- alexandria.
- common-lisp.

**Used By List**

- [fast], page 28.
- [gui], page 32.
- [leszcz], page 23.
- [leszcz-types], page 30.
- [net], page 33.
- [raylib], page 21.

**Public Interface**

- [\*board-begin\*], page 36 (special variable).
- [\*board-size\*], page 37 (special variable).
- [\*color-bg-dark\*], page 37 (special variable).
- [\*color-bg-light\*], page 37 (special variable).
- [\*current-game\*], page 37 (special variable).
- [\*current-screen\*], page 37 (special variable).
- [\*debug\*], page 37 (special variable).
- [\*window-height\*], page 37 (special variable).
- [\*window-hpad\*], page 37 (special variable).
- [\*window-width\*], page 37 (special variable).
- [\*window-wpad\*], page 37 (special variable).
- [+color-black+], page 37 (special variable).
- [+color-grayish+], page 38 (special variable).
- [+color-greenish+], page 38 (special variable).
- [+color-purple+], page 38 (special variable).
- [+color-redish+], page 38 (special variable).
- [+color-white+], page 38 (special variable).
- [+inf], page 35 (constant).
- [+initial-fen+], page 35 (constant).
- [+piece-size+], page 38 (special variable).
- [+texture-size+], page 38 (special variable).
- [-inf], page 36 (constant).
- [alagard-data], page 38 (special variable).
- [bishop], page 63 (slot).
- [black], page 62 (slot).
- [black-texture-alist], page 38 (special variable).
- [black-texture-data-list], page 38 (special variable).
- [king], page 64 (slot).
- [knight], page 63 (slot).

- [leszcz-logos-alist], page 38 (special variable).
- [let-values], page 39 (macro).
- [logo-data-alist], page 39 (special variable).
- [pawn], page 63 (slot).
- [queen], page 63 (slot).
- [rook], page 63 (slot).
- [spleen-data], page 39 (special variable).
- [texture-options], page 39 (special variable).
- [white], page 62 (slot).
- [white-texture-alist], page 39 (special variable).
- [white-texture-data-list], page 39 (special variable).

### Internals

- [black-texture-data-list-pixel], page 73 (special variable).
- [black-texture-data-list-sleek], page 73 (special variable).
- [file->vec], page 81 (function).
- [white-texture-data-list-pixel], page 76 (special variable).
- [white-texture-data-list-sleek], page 76 (special variable).

## 3.4 fast

**Source** [fast.lisp], page 18.

### Use List

- alexandria.
- cl-ppcre.
- common-lisp.
- [leszcz-constants], page 27.
- [leszcz-types], page 30.

### Used By List

- [leszcz], page 23.
- [net], page 33.

### Public Interface

- [bit-at], page 40 (function).
- [bit-set-p], page 40 (function).
- [copy-fast-board], page 40 (function).
- [fast-board], page 61 (structure).
- [fast-board-1], page 63 (structure).
- [fast-board->game], page 42 (function).
- [fb-bishop], page 42 (reader).
- [(setf fb-bishop)], page 42 (writer).
- [fb-black], page 42 (reader).
- [(setf fb-black)], page 42 (writer).
- [fb-generate-bishop-moves], page 42 (function).
- [fb-generate-king-area], page 42 (function).



- [fb-generate-king-moves], page 42 (function).
- [fb-generate-knight-moves], page 43 (function).
- [fb-generate-queen-moves], page 43 (function).
- [fb-generate-rook-moves], page 43 (function).
- [fb-king], page 43 (reader).
- [(setf fb-king)], page 43 (writer).
- [fb-knight], page 43 (reader).
- [(setf fb-knight)], page 43 (writer).
- [fb-make-check-board], page 43 (function).
- [fb-pawn], page 43 (reader).
- [(setf fb-pawn)], page 43 (writer).
- [fb-queen], page 43 (reader).
- [(setf fb-queen)], page 43 (writer).
- [fb-rook], page 43 (reader).
- [(setf fb-rook)], page 43 (writer).
- [fb-white], page 44 (reader).
- [(setf fb-white)], page 44 (writer).
- [for-every-bb], page 39 (macro).
- [game->fast-board], page 44 (function).
- [logbitpr], page 39 (macro).
- [lognot64], page 45 (function).

### Internals

- [copy-fast-board-1], page 78 (function).
- [fast-board-1-p], page 79 (function).
- [fast-board-p], page 79 (function).
- [fb--knight-check-board], page 79 (function).
- [fb--make-color-board], page 80 (function).
- [fb-bck-p], page 80 (reader).
- [(setf fb-bck-p)], page 80 (writer).
- [fb-bcq-p], page 80 (reader).
- [(setf fb-bcq-p)], page 80 (writer).
- [fb-display], page 80 (function).
- [fb-make-black-board], page 80 (function).
- [fb-make-piece-board], page 80 (function).
- [fb-make-white-board], page 80 (function).
- [fb-point], page 76 (macro).
- [fb-ticker], page 80 (reader).
- [(setf fb-ticker)], page 80 (writer).
- [fb-wck-p], page 81 (reader).
- [(setf fb-wck-p)], page 81 (writer).
- [fb-wcq-p], page 81 (reader).
- [(setf fb-wcq-p)], page 81 (writer).

- [fb1-at], page 76 (macro).
- [fb1-set-p], page 76 (macro).
- [make-fast-board], page 82 (function).
- [make-fast-board-1], page 83 (function).
- [pawn-magic-l], page 74 (special variable).
- [pawn-magic-r], page 74 (special variable).
- [set-bit!], page 77 (macro).
- [u64], page 77 (macro).
- [u64-max], page 70 (constant).

### 3.5 lescz-types

**Source** [leszcz-types.lisp], page 12.

#### Use List

- common-lisp.
- [leszcz-constants], page 27.
- local-time.

#### Used By List

- [fast], page 28.
- [gui], page 32.
- [leszcz], page 23.
- [net], page 33.

#### Public Interface

- [blackp], page 40 (function).
- [game], page 64 (class).
- [game-black-can-castle-kingside-p], page 49 (generic reader).
- [(setf game-black-can-castle-kingside-p)], page 49 (generic writer).
- [game-black-can-castle-queenside-p], page 49 (generic reader).
- [(setf game-black-can-castle-queenside-p)], page 50 (generic writer).
- [game-connection], page 50 (generic reader).
- [(setf game-connection)], page 50 (generic writer).
- [game-en-passant-target-square], page 50 (generic reader).
- [(setf game-en-passant-target-square)], page 50 (generic writer).
- [game-fb], page 51 (generic reader).
- [(setf game-fb)], page 51 (generic writer).
- [game-fullmove-clock], page 51 (generic reader).
- [(setf game-fullmove-clock)], page 51 (generic writer).
- [game-halfmove-clock], page 52 (generic reader).
- [(setf game-halfmove-clock)], page 52 (generic writer).
- [game-in-progress-p], page 52 (generic function).
- [game-interactive-p], page 52 (generic reader).
- [(setf game-interactive-p)], page 52 (generic writer).
- [game-move-history], page 53 (generic reader).

- [(setf game-move-history)], page 53 (generic writer).
- [game-pieces], page 53 (generic reader).
- [(setf game-pieces)], page 53 (generic writer).
- [game-points-cache], page 53 (generic reader).
- [(setf game-points-cache)], page 54 (generic writer).
- [game-possible-moves-cache], page 54 (generic reader).
- [(setf game-possible-moves-cache)], page 54 (generic writer).
- [game-result], page 54 (generic reader).
- [(setf game-result)], page 54 (generic writer).
- [game-side], page 55 (generic reader).
- [(setf game-side)], page 55 (generic writer).
- [game-tick], page 55 (generic function).
- [game-ticker], page 55 (generic reader).
- [(setf game-ticker)], page 55 (generic writer).
- [game-time-begin-turn], page 56 (generic reader).
- [(setf game-time-begin-turn)], page 56 (generic writer).
- [game-time-black], page 56 (generic reader).
- [(setf game-time-black)], page 56 (generic writer).
- [game-time-white], page 57 (generic reader).
- [(setf game-time-white)], page 57 (generic writer).
- [game-turn], page 57 (generic function).
- [game-turn-black-p], page 57 (generic function).
- [game-turn-white-p], page 57 (generic function).
- [game-white-can-castle-kingside-p], page 57 (generic reader).
- [(setf game-white-can-castle-kingside-p)], page 58 (generic writer).
- [game-white-can-castle-queenside-p], page 58 (generic reader).
- [(setf game-white-can-castle-queenside-p)], page 58 (generic writer).
- [piece], page 68 (class).
- [piece-color], page 58 (generic reader).
- [(setf piece-color)], page 58 (generic writer).
- [piece-point], page 59 (generic reader).
- [(setf piece-point)], page 59 (generic writer).
- [piece-type], page 59 (generic reader).
- [(setf piece-type)], page 59 (generic writer).
- [point], page 69 (class).
- [point-x], page 59 (generic reader).
- [(setf point-x)], page 60 (generic writer).
- [point-y], page 60 (generic reader).
- [(setf point-y)], page 60 (generic writer).
- [whitep], page 49 (function).

## 3.6 gui

**Source** [gui.lisp], page 16.

### Use List

- alexandria.
- cl-ppcre.
- common-lisp.
- [leszcz-constants], page 27.
- [leszcz-types], page 30.
- [raylib], page 21.

### Used By List

[leszcz], page 23.

### Public Interface

- [add-draw-hook], page 40 (function).
- [capturer], page 64 (class).
- [configure-menu], page 40 (function).
- [current-capturer], page 38 (special variable).
- [current-capturer-can-be-removed-p], page 41 (function).
- [delete-current-capturer!], page 41 (function).
- [keys-can-be-captured-p], page 45 (function).
- [mainloop-draw-hooks], page 39 (special variable).
- [make-button], page 45 (function).
- [make-button\*], page 45 (function).
- [remove-draw-hook], page 47 (function).
- [set-current-capturer!], page 47 (function).
- [switch-textures-to], page 48 (function).
- [text-button], page 48 (function).
- [texture-button], page 48 (function).
- [toplevel-console-listener], page 48 (function).

### Internals

- [+color-grayish-2+], page 72 (special variable).
- [+color-hax0r-green+], page 72 (special variable).
- [capturer-can-be-removed-p], page 87 (generic reader).
- [(setf capturer-can-be-removed-p)], page 87 (generic writer).
- [capturer-delete], page 87 (generic reader).
- [(setf capturer-delete)], page 87 (generic writer).
- [maybe-configure-menu], page 83 (function).
- [tb/color-bg], page 74 (special variable).
- [tb/color-bg-hover], page 74 (special variable).
- [tb/color-margin], page 75 (special variable).
- [tb/color-text], page 75 (special variable).
- [tb/padx], page 75 (special variable).
- [toplevel-console], page 86 (function).

- [toplevel-console/capturer], page 75 (special variable).
- [toplevel-console/font-size], page 75 (special variable).
- [toplevel-console/height], page 75 (special variable).
- [toplevel-console/log], page 75 (special variable).
- [toplevel-console/state], page 75 (special variable).
- [unload-textures!], page 86 (function).

### 3.7 net

**Source** [net.lisp], page 17.

#### Use List

- alexandria.
- cl-ppcre.
- common-lisp.
- [fast], page 28.
- [leszcz-constants], page 27.
- [leszcz-types], page 30.
- usocket.

#### Used By List

[leszcz], page 23.

#### Public Interface

- [+gdata-type+], page 35 (constant).
- [+hii-type+], page 35 (constant).
- [+invalid-type+], page 35 (constant).
- [+lgames-type+], page 35 (constant).
- [+move-type+], page 35 (constant).
- [+pgame-type+], page 35 (constant).
- [+ping-type+], page 36 (constant).
- [+port+], page 36 (constant).
- [+rdata-type+], page 36 (constant).
- [connect-to-server], page 40 (function).
- [from-s16], page 44 (function).
- [make-client-packet], page 46 (function).
- [maybe-receive-packet], page 46 (function).
- [packet->movedata], page 47 (function).
- [packet->name], page 47 (function).
- [packet-case], page 39 (macro).
- [packet-name->type], page 47 (function).
- [packet-of-type-p], page 47 (function).
- [receive-packet], page 47 (function).
- [start-server], page 48 (function).
- [to-s16], page 48 (function).
- [write-packets], page 49 (function).

**Internals**

- [if\*], page 76 (macro).
- [ifz], page 76 (macro).
- [make-server-packet], page 83 (function).
- [p2p-connect-and-return-fen-and-side-data], page 84 (function).
- [rdata-packet->string], page 85 (function).
- [rdata-packets->string], page 85 (function).
- [receive-nickname], page 85 (function).
- [receive-packets], page 85 (function).
- [safe-sref], page 85 (function).
- [start-p2p-server], page 86 (function).
- [string->rdata], page 86 (function).
- [write-packet], page 86 (function).

## 4 Definitions

Definitions are sorted by export status, category, package, and then by lexicographic order.

### 4.1 Public Interface

#### 4.1.1 Constants

<code>+cursor-normal+</code>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>+cursor-pointer+</code>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>+gdata-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>+hii-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>+inf</code>	[Constant]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+initial-fen+</code>	[Constant]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+invalid-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>+lgames-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>+move-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>+pgame-type+</code>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	

<b>+ping-type+</b>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<b>+port+</b>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<b>+rdata-type+</b>	[Constant]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<b>+texture-filter-anisotropic-16x+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>+texture-filter-anisotropic-4x+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>+texture-filter-anisotropic-8x+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>+texture-filter-bilinear+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>+texture-filter-point+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>+texture-filter-trilinear+</b>	[Constant]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>-inf</b>	[Constant]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	

#### 4.1.2 Special variables

<b>*alagard*</b>	[Special Variable]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>*board-begin*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	



<b>*board-size*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*color-bg-dark*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*color-bg-light*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*current-game*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>*current-screen*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>*debug*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*font*</b>	[Special Variable]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<b>*window-height*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*window-hpad*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*window-width*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>*window-wpad*</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<b>+color-black+</b>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	

<code>+color-grayish+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+color-greenish+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+color-purple+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+color-redish+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+color-white+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+piece-size+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>+texture-size+</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>alagard-data</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>black-texture-alist</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>black-texture-data-list</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>current-capturer</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>leszcz-logos-alist</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	

<code>logo-data-alist</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>mainloop-draw-hooks</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>spleen-data</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>texture-options</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>white-texture-alist</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>white-texture-data-list</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	

### 4.1.3 Macros

<code>for-every-bb</code> ( <i>as n &amp;body b</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>let-values</code> ( <i>bindings &amp;body b</i> )	[Macro]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>logbitpr</code> ( <i>n bit &amp;key type-size</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>packet-case</code> ( <i>p &amp;body cases</i> )	[Macro]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>thread</code> ( <i>name &amp;body b</i> )	[Macro]
<b>Package</b> bordeaux-threads.	
<b>Source</b> [leszcz.lisp], page 8.	

#### 4.1.4 Ordinary functions

<code>add-draw-hook</code> ( <i>fn</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>begin-drawing</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>begin-scissor-mode</code> ( <i>x y w h</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>begin-texture-mode</code> ( <i>txt</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>bit-at</code> ( <i>n bit &amp;key type-size</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>bit-set-p</code> ( <i>n bit &amp;key type-size</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>blackp</code> ( <i>p</i> )	[Function]
<b>Package</b> [leszcz-types], page 30.	
<b>Source</b> [leszcz-types.lisp], page 12.	
<code>clear-background</code> ( <i>color</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>close-window</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>configure-menu</code> ()	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>connect-to-server</code> ( <i>ip nickname</i> )	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>copy-fast-board</code> ( <i>fb</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	

<code>current-capturer-can-be-removed-p ()</code>	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>delete-current-capturer! ()</code>	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>draw-fps (x y)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-line (x1 y1 x2 y2 c)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-rectangle (x y w h c)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-rectangle-lines (x y w h c)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-rectangle-lines-2 (rec thick color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-text (text x y font-size color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-text-1 (text x y font-size color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-text-2 (font text pos font-size spacing color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-text-alagard (text x y font-size color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>draw-text-alagard-centered (text center-x y font-size color)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	

<code>draw-texture</code> ( <i>texture src dst origin rotation tint</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>end-drawing</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>end-scissor-mode</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>end-texture-mode</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>fast-board-&gt;game</code> ( <i>fb</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-bishop</code> ( <i>instance</i> )	[Reader]
<code>(setf fb-bishop)</code> ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[bishop], page 63.	
<code>fb-black</code> ( <i>instance</i> )	[Reader]
<code>(setf fb-black)</code> ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[black], page 62.	
<code>fb-generate-bishop-moves</code> ( <i>fb px py color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-generate-king-area</code> ( <i>px py</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-generate-king-moves</code> ( <i>fb px py color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	

<code>fb-generate-knight-moves</code> ( <i>fb px py color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-generate-queen-moves</code> ( <i>fb px py color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-generate-rook-moves</code> ( <i>fb px py color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-king</code> ( <i>instance</i> )	[Reader]
( <code>setf fb-king</code> ) ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[king], page 64.	
<code>fb-knight</code> ( <i>instance</i> )	[Reader]
( <code>setf fb-knight</code> ) ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[knight], page 63.	
<code>fb-make-check-board</code> ( <i>fb color</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>fb-pawn</code> ( <i>instance</i> )	[Reader]
( <code>setf fb-pawn</code> ) ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[pawn], page 63.	
<code>fb-queen</code> ( <i>instance</i> )	[Reader]
( <code>setf fb-queen</code> ) ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>Target Slot</b>	
[queen], page 63.	
<code>fb-rook</code> ( <i>instance</i> )	[Reader]
( <code>setf fb-rook</code> ) ( <i>instance</i> )	[Writer]
<b>Package</b> [fast], page 28.	

<b>Source</b>	[fast.lisp], page 18.	
<b>Target Slot</b>	[rook], page 63.	
fb-white ( <i>instance</i> )		[Reader]
(setf fb-white) ( <i>instance</i> )		[Writer]
<b>Package</b>	[fast], page 28.	
<b>Source</b>	[fast.lisp], page 18.	
<b>Target Slot</b>	[white], page 62.	
floatize ( <i>l</i> )		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
from-s16 ( <i>b1 b2</i> )		[Function]
<b>Package</b>	[net], page 33.	
<b>Source</b>	[net.lisp], page 17.	
game->fast-board ( <i>g</i> )		[Function]
<b>Package</b>	[fast], page 28.	
<b>Source</b>	[fast.lisp], page 18.	
get-char-pressed ()		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
get-chars-pressed ()		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
image->texture ( <i>img</i> )		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
init-window ( <i>width height title</i> )		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
key-down-p ( <i>ch</i> )		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	
key-down-p-1 ( <i>c</i> )		[Function]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	



key-pressed-p ( <i>ch</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
key-pressed-p-1 ( <i>c</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
keys-can-be-captured-p ( <i>self</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
load-font ( <i>data size &amp;key type loaded-font-hash</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
load-font-from-memory ( <i>type data data-size font-size codepoints codepoint-count</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
load-image-from-memory ( <i>type data data-size</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
load-textures ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
lognot64 ( <i>a</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
main ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
make-button ( <i>text-or-texture &amp;key height width background-color font-data font-hash text-draw-fn</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
make-button* ( <i>text-or-texture &amp;key height width background-color identifier font-data font-hash text-draw-fn</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	

- `make-client-packet` (*type &key hii-nickname move-x1 move-y1 move-x2 move-y2 move-upgrade-type move-upgrade-p gdata-drawp gdata-draw-ok gdata-surrender gdata-eval gdata-eval-data*) [Function]  
**Package** [net], page 33.  
**Source** [net.lisp], page 17.
- `make-font` (*font-data data-type font-size n-codepoints*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `make-render-texture` (*width height*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `make-texture` (*texture-data data-type*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `maybe-receive-packet` (*conn*) [Function]  
**Package** [net], page 33.  
**Source** [net.lisp], page 17.
- `measure-text` (*font text font-size spacing*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `measure-text-1` (*font text font-size spacing*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `mouse-pos` () [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `mouse-pos-1` () [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `mouse-pressed-p` (*b*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `mouse-released-p` (*b*) [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.
- `mouse-x` () [Function]  
**Package** [raylib], page 21.  
**Source** [raylib.lisp], page 14.

<code>mouse-y ()</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>packet-&gt;movedata (p)</code>	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>packet-&gt;name (p)</code>	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>packet-name-&gt;type (sym)</code>	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>packet-of-type-p (packet type)</code>	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>point-in-rect-p (point rec)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>receive-packet (conn)</code>	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>remove-draw-hook (name)</code>	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>screen-&gt;image ()</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>set-current-capturer! (c)</code>	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>set-exit-key! (k)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>set-mouse-cursor! (cursor &amp;key begin finalize)</code>	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	

<code>set-target-fps!</code> ( <i>fps</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>set-texture-filter!</code> ( <i>texture filter</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>start-server</code> ( <i>game-handler &amp;key mode fork fen opponent-side time</i> )	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>switch-textures-to</code> ( <i>sym</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>text-button</code> ( <i>x* y* w* h* text text-width &amp;key font-size text-draw-fn</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>texture-&gt;image</code> ( <i>img</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>texture-button</code> ( <i>x y w h texture &amp;key pad background-color</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>to-s16</code> ( <i>n</i> )	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
<code>toplevel-console-listener</code> ( <i>&amp;rest r</i> )	[Function]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>unload-image!</code> ( <i>img</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>unload-render-texture!</code> ( <i>rt</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>unload-texture!</code> ( <i>txt</i> )	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	

<code>whitep</code> ( <i>p</i> )	[Function]
<b>Package</b> [leszcz-types], page 30.	
<b>Source</b> [leszcz-types.lisp], page 12.	
<code>window-close-p</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>window-ready-p</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>write-packets</code> ( <i>conn packets</i> )	[Function]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	

#### 4.1.5 Generic functions

<code>game-black-can-castle-kingside-p</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-black-can-castle-kingside-p</code> ( <i>(game [game], page 64)</i> )	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[black-can-castle-kingside-p], page 66.	
<code>(setf game-black-can-castle-kingside-p)</code> ( <i>object</i> )	[Generic Writer]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>(setf game-black-can-castle-kingside-p)</code> ( <i>(game [game], page 64)</i> )	[Writer Method]
automatically generated writer method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[black-can-castle-kingside-p], page 66.	
<code>game-black-can-castle-queenside-p</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-black-can-castle-queenside-p</code> ( <i>(game [game], page 64)</i> )	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[black-can-castle-queenside-p], page 66.	

- (setf game-black-can-castle-queenside-p) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-black-can-castle-queenside-p) [Writer Method]  
 ((*game* [*game*], page 64))  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [black-can-castle-queenside-p], page 66.
- game-connection (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-connection ((*game* [*game*], page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [connection], page 67.
- (setf game-connection) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-connection) ((*game* [*game*], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [connection], page 67.
- game-en-passant-target-square (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-en-passant-target-square ((*game* [*game*],  
 page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [en-passant-target-square], page 66.
- (setf game-en-passant-target-square) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**

<p>(setf game-en-passant-target-square) ((game [game], page 64)) automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [en-passant-target-square], page 66.</p>	[Writer Method]
<p>game-fb (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p>game-fb ((game [game], page 64)) automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [fb], page 67.</p>	[Generic Reader]
<p>(setf game-fb) (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p>(setf game-fb) ((game [game], page 64)) automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [fb], page 67.</p>	[Generic Writer]
<p>game-fullmove-clock (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p>game-fullmove-clock ((game [game], page 64)) automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [fullmove-clock], page 67.</p>	[Generic Reader]
<p>(setf game-fullmove-clock) (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p>(setf game-fullmove-clock) ((game [game], page 64)) automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [fullmove-clock], page 67.</p>	[Generic Writer]
<p>(setf game-fullmove-clock) ((game [game], page 64)) automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b> [fullmove-clock], page 67.</p>	[Writer Method]

- `game-halfmove-clock` (*object*) [Generic Reader]
- Package** [leszcz-types], page 30.
- Methods**
- `game-halfmove-clock` (*(game [game], page 64)*) [Reader Method]  
 automatically generated reader method
- Source** [leszcz-types.lisp], page 12.
- Target Slot**  
 [halfmove-clock], page 67.
- `(setf game-halfmove-clock)` (*object*) [Generic Writer]
- Package** [leszcz-types], page 30.
- Methods**
- `(setf game-halfmove-clock)` (*(game [game], page 64)*) [Writer Method]  
 automatically generated writer method
- Source** [leszcz-types.lisp], page 12.
- Target Slot**  
 [halfmove-clock], page 67.
- `game-in-progress-p` (*g*) [Generic Function]
- Package** [leszcz-types], page 30.
- Methods**
- `game-in-progress-p` (*(g [game], page 64)*) [Method]  
**Source** [leszcz-types.lisp], page 12.
- `game-interactive-p` (*object*) [Generic Reader]
- Package** [leszcz-types], page 30.
- Methods**
- `game-interactive-p` (*(game [game], page 64)*) [Reader Method]  
 automatically generated reader method
- Source** [leszcz-types.lisp], page 12.
- Target Slot**  
 [interactive-p], page 68.
- `(setf game-interactive-p)` (*object*) [Generic Writer]
- Package** [leszcz-types], page 30.
- Methods**
- `(setf game-interactive-p)` (*(game [game], page 64)*) [Writer Method]  
 automatically generated writer method
- Source** [leszcz-types.lisp], page 12.
- Target Slot**  
 [interactive-p], page 68.



<code>game-move-history</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-move-history</code> ( <i>((game [game], page 64))</i> )	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[move-history], page 66.	
<code>(setf game-move-history)</code> ( <i>object</i> )	[Generic Writer]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>(setf game-move-history)</code> ( <i>((game [game], page 64))</i> )	[Writer Method]
automatically generated writer method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[move-history], page 66.	
<code>game-pieces</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-pieces</code> ( <i>((game [game], page 64))</i> )	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[pieces], page 66.	
<code>(setf game-pieces)</code> ( <i>object</i> )	[Generic Writer]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>(setf game-pieces)</code> ( <i>((game [game], page 64))</i> )	[Writer Method]
automatically generated writer method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[pieces], page 66.	
<code>game-points-cache</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-points-cache</code> ( <i>((game [game], page 64))</i> )	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[points-cache], page 67.	

- (setf game-points-cache) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-points-cache) ((*game* [*game*], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [points-cache], page 67.
- game-possible-moves-cache (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-possible-moves-cache ((*game* [*game*],  
 page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [possible-moves-cache], page 67.
- (setf game-possible-moves-cache) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-possible-moves-cache) ((*game* [*game*],  
 page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [possible-moves-cache], page 67.
- game-result (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-result ((*game* [*game*], page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [result], page 67.
- (setf game-result) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**

<p><code>(setf game-result) ((game [game], page 64))</code>  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [result], page 67.</p>	[Writer Method]
<p><code>game-side</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>game-side</code> ((<i>game</i> [game], page 64))  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [side], page 67.</p>	[Generic Reader]
<p><code>(setf game-side)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>(setf game-side)</code> ((<i>game</i> [game], page 64))  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [side], page 67.</p>	[Generic Writer]
<p><code>game-tick</code> (<i>g</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>game-tick</code> ((<i>g</i> [game], page 64))  <b>Source</b> [leszcz-types.lisp], page 12.</p>	[Generic Function]
<p><code>game-ticker</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>game-ticker</code> ((<i>game</i> [game], page 64))  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [ticker], page 66.</p>	[Generic Reader]
<p><code>(setf game-ticker)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p>	[Generic Writer]

- (setf game-ticker) ((*game* [*game*], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [ticker], page 66.
- game-time-begin-turn (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-time-begin-turn ((*game* [*game*], page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [time-begin-turn], page 68.
- (setf game-time-begin-turn) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-time-begin-turn) ((*game* [*game*],  
 page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [time-begin-turn], page 68.
- game-time-black (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-time-black ((*game* [*game*], page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [time-black], page 68.
- (setf game-time-black) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-time-black) ((*game* [*game*], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot**  
 [time-black], page 68.

<code>game-time-white</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-time-white</code> (( <i>game</i> [ <i>game</i> ], page 64))	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[time-white], page 68.	
<code>(setf game-time-white)</code> ( <i>object</i> )	[Generic Writer]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>(setf game-time-white)</code> (( <i>game</i> [ <i>game</i> ], page 64))	[Writer Method]
automatically generated writer method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[time-white], page 68.	
<code>game-turn</code> ( <i>g</i> )	[Generic Function]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-turn</code> (( <i>g</i> [ <i>game</i> ], page 64))	[Method]
<b>Source</b> [leszcz.lisp], page 8.	
<code>game-turn-black-p</code> ( <i>g</i> )	[Generic Function]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-turn-black-p</code> (( <i>g</i> [ <i>game</i> ], page 64))	[Method]
<b>Source</b> [leszcz.lisp], page 8.	
<code>game-turn-white-p</code> ( <i>g</i> )	[Generic Function]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-turn-white-p</code> (( <i>g</i> [ <i>game</i> ], page 64))	[Method]
<b>Source</b> [leszcz.lisp], page 8.	
<code>game-white-can-castle-kingside-p</code> ( <i>object</i> )	[Generic Reader]
<b>Package</b> [leszcz-types], page 30.	
<b>Methods</b>	
<code>game-white-can-castle-kingside-p</code> (( <i>game</i> [ <i>game</i> ], page 64))	[Reader Method]
automatically generated reader method	
<b>Source</b> [leszcz-types.lisp], page 12.	
<b>Target Slot</b>	
[white-can-castle-kingside-p], page 66.	

- (setf game-white-can-castle-kingside-p) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-white-can-castle-kingside-p) ((*game* [game], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot** [white-can-castle-kingside-p], page 66.
- game-white-can-castle-queenside-p (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- game-white-can-castle-queenside-p ((*game* [game], page 64)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot** [white-can-castle-queenside-p], page 66.
- (setf game-white-can-castle-queenside-p) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**
- (setf game-white-can-castle-queenside-p) ((*game* [game], page 64)) [Writer Method]  
 automatically generated writer method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot** [white-can-castle-queenside-p], page 66.
- piece-color (*object*) [Generic Reader]  
**Package** [leszcz-types], page 30.  
**Methods**
- piece-color ((*piece* [piece], page 68)) [Reader Method]  
 automatically generated reader method  
**Source** [leszcz-types.lisp], page 12.  
**Target Slot** [color], page 69.
- (setf piece-color) (*object*) [Generic Writer]  
**Package** [leszcz-types], page 30.  
**Methods**

<p><code>(setf piece-color)</code> (<i>piece</i> [<i>piece</i>], page 68)  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [<i>color</i>], page 69.</p>	[Writer Method]
<p><code>piece-point</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>piece-point</code> (<i>piece</i> [<i>piece</i>], page 68)  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [<i>point</i>], page 69.</p>	[Generic Reader]
<p><code>(setf piece-point)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>(setf piece-point)</code> (<i>piece</i> [<i>piece</i>], page 68)  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [<i>point</i>], page 69.</p>	[Generic Writer]
<p><code>piece-type</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>piece-type</code> (<i>piece</i> [<i>piece</i>], page 68)  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [<i>type</i>], page 68.</p>	[Generic Reader]
<p><code>(setf piece-type)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>(setf piece-type)</code> (<i>piece</i> [<i>piece</i>], page 68)  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [<i>type</i>], page 68.</p>	[Generic Writer]
<p><code>point-x</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p>	[Generic Reader]

<p><code>point-x</code> (<i>((point [point], page 69))</i>)  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [x], page 69.</p>	[Reader Method]
<p><code>(setf point-x)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>(setf point-x)</code> (<i>((point [point], page 69))</i>)  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [x], page 69.</p>	[Generic Writer]
<p><code>point-y</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>point-y</code> (<i>((point [point], page 69))</i>)  automatically generated reader method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [y], page 69.</p>	[Generic Reader]
<p><code>(setf point-y)</code> (<i>object</i>)</p> <p><b>Package</b> [leszcz-types], page 30.</p> <p><b>Methods</b></p> <p><code>(setf point-y)</code> (<i>((point [point], page 69))</i>)  automatically generated writer method</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p> <p><b>Target Slot</b>  [y], page 69.</p>	[Generic Writer]
<p><code>print-object</code> (<i>((g [game], page 64) s)</i>)</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p>	[Method]
<p><code>print-object</code> (<i>((p [point], page 69) s)</i>)</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p>	[Method]
<p><code>print-object</code> (<i>((p [piece], page 68) s)</i>)</p> <p><b>Source</b> [leszcz-types.lisp], page 12.</p>	[Method]
<p><code>translate-from-foreign</code> (<i>(pointer (type [type-rectangle], page 89))</i>)</p> <p><b>Package</b> cffi.</p> <p><b>Source</b> [raylib.lisp], page 14.</p>	[Method]

#### 4.1.6 Standalone methods



- `translate-from-foreign` (*pointer* (*type* [`type-vec2`], page 89)) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-from-foreign` (*pointer* (*type* [`type-texture`], page 89)) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-from-foreign` (*pointer* (*type* [`type-image`], page 88)) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-from-foreign` (*pointer* (*type* [`type-color`], page 88)) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-into-foreign-memory` (*l* (*type* [`type-rectangle`], page 89) *pointer*) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-into-foreign-memory` (*l* (*type* [`type-vec2`], page 89) *pointer*) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-into-foreign-memory` (*l* (*type* [`type-texture`], page 89) *pointer*) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-into-foreign-memory` (*l* (*type* [`type-image`], page 88) *pointer*) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.
- `translate-into-foreign-memory` (*l* (*type* [`type-color`], page 88) *pointer*) [Method]  
**Package** `cffi`.  
**Source** [`raylib.lisp`], page 14.

#### 4.1.7 Structures

- `fast-board` [Structure]  
**Package** [`fast`], page 28.  
**Source** [`fast.lisp`], page 18.  
**Direct superclasses**  
`structure-object`.

## Direct slots

black		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	fast:fast-board-1	
<b>Initform</b>	(make-instance (quote fast:fast-board-1))	
<b>Readers</b>	[fb-black], page 42.	
<b>Writers</b>	[(setf fb-black)], page 42.	
white		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	fast:fast-board-1	
<b>Initform</b>	(make-instance (quote fast:fast-board-1))	
<b>Readers</b>	[fb-white], page 44.	
<b>Writers</b>	[(setf fb-white)], page 44.	
ticker		[Slot]
<b>Type</b>	fixnum	
<b>Initform</b>	0	
<b>Readers</b>	[fb-ticker], page 80.	
<b>Writers</b>	[(setf fb-ticker)], page 80.	
wck-p		[Slot]
<b>Type</b>	boolean	
<b>Initform</b>	t	
<b>Readers</b>	[fb-wck-p], page 81.	
<b>Writers</b>	[(setf fb-wck-p)], page 81.	
wcq-p		[Slot]
<b>Type</b>	boolean	
<b>Initform</b>	t	
<b>Readers</b>	[fb-wcq-p], page 81.	
<b>Writers</b>	[(setf fb-wcq-p)], page 81.	
bck-p		[Slot]
<b>Type</b>	boolean	
<b>Initform</b>	t	
<b>Readers</b>	[fb-bck-p], page 80.	
<b>Writers</b>	[(setf fb-bck-p)], page 80.	
bcq-p		[Slot]
<b>Type</b>	boolean	
<b>Initform</b>	t	
<b>Readers</b>	[fb-bcq-p], page 80.	
<b>Writers</b>	[(setf fb-bcq-p)], page 80.	

<code>fast-board-1</code>		[Structure]
<b>Package</b>	[fast], page 28.	
<b>Source</b>	[fast.lisp], page 18.	
<b>Direct superclasses</b>	structure-object.	
<b>Direct slots</b>		
pawn		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	(unsigned-byte 64)	
<b>Initform</b>	0	
<b>Readers</b>	[fb-pawn], page 43.	
<b>Writers</b>	[(setf fb-pawn)], page 43.	
rook		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	(unsigned-byte 64)	
<b>Initform</b>	0	
<b>Readers</b>	[fb-rook], page 43.	
<b>Writers</b>	[(setf fb-rook)], page 43.	
knight		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	(unsigned-byte 64)	
<b>Initform</b>	0	
<b>Readers</b>	[fb-knight], page 43.	
<b>Writers</b>	[(setf fb-knight)], page 43.	
bishop		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	(unsigned-byte 64)	
<b>Initform</b>	0	
<b>Readers</b>	[fb-bishop], page 42.	
<b>Writers</b>	[(setf fb-bishop)], page 42.	
queen		[Slot]
<b>Package</b>	[leszcz-constants], page 27.	
<b>Type</b>	(unsigned-byte 64)	
<b>Initform</b>	0	
<b>Readers</b>	[fb-queen], page 43.	
<b>Writers</b>	[(setf fb-queen)], page 43.	

king [Slot]  
**Package** [leszcz-constants], page 27.  
**Type** (unsigned-byte 64)  
**Initform** 0  
**Readers** [fb-king], page 43.  
**Writers** [(setf fb-king)], page 43.

#### 4.1.8 Classes

capturer [Class]

**Package** [gui], page 32.  
**Source** [gui.lisp], page 16.

##### Direct methods

- [(setf capturer-can-be-removed-p)], page 87.
- [capturer-can-be-removed-p], page 87.
- [(setf capturer-delete)], page 87.
- [capturer-delete], page 87.

##### Direct slots

can-be-removed-p [Slot]

**Initform** t  
**Initargs** :can-be-removed-p  
**Readers** [capturer-can-be-removed-p], page 87.  
**Writers** [(setf capturer-can-be-removed-p)], page 87.

delete [Slot]

**Package** common-lisp.  
**Initform** (function (lambda nil t))  
**Initargs** :delete  
**Readers** [capturer-delete], page 87.  
**Writers** [(setf capturer-delete)], page 87.

game [Class]

**Package** [leszcz-types], page 30.  
**Source** [leszcz-types.lisp], page 12.

##### Direct methods

- [(setf game-black-can-castle-kingside-p)], page 49.
- [game-black-can-castle-kingside-p], page 49.
- [(setf game-black-can-castle-queenside-p)], page 50.
- [game-black-can-castle-queenside-p], page 49.
- [game-check-for-mates], page 88.
- [(setf game-connection)], page 50.
- [game-connection], page 50.

- [(setf game-en-passant-target-square)], page 51.
- [game-en-passant-target-square], page 50.
- [(setf game-fb)], page 51.
- [game-fb], page 51.
- [(setf game-fullmove-clock)], page 51.
- [game-fullmove-clock], page 51.
- [(setf game-halfmove-clock)], page 52.
- [game-halfmove-clock], page 52.
- [game-in-progress-p], page 52.
- [(setf game-interactive-p)], page 52.
- [game-interactive-p], page 52.
- [(setf game-move-history)], page 53.
- [game-move-history], page 53.
- [(setf game-pieces)], page 53.
- [game-pieces], page 53.
- [(setf game-points-cache)], page 54.
- [game-points-cache], page 53.
- [(setf game-possible-moves-cache)], page 54.
- [game-possible-moves-cache], page 54.
- [(setf game-result)], page 55.
- [game-result], page 54.
- [(setf game-side)], page 55.
- [game-side], page 55.
- [game-tick], page 55.
- [(setf game-ticker)], page 56.
- [game-ticker], page 55.
- [(setf game-time-begin-turn)], page 56.
- [game-time-begin-turn], page 56.
- [(setf game-time-black)], page 56.
- [game-time-black], page 56.
- [(setf game-time-white)], page 57.
- [game-time-white], page 57.
- [game-turn], page 57.
- [game-turn-black-p], page 57.
- [game-turn-white-p], page 57.
- [game-update-points-cache], page 88.
- [game-update-possible-moves-cache], page 88.
- [(setf game-white-can-castle-kingside-p)], page 58.
- [game-white-can-castle-kingside-p], page 57.
- [(setf game-white-can-castle-queenside-p)], page 58.
- [game-white-can-castle-queenside-p], page 58.
- [print-object], page 60.

## Direct slots

pieces		[Slot]
<b>Initargs</b>	:pieces	
<b>Readers</b>	[game-pieces], page 53.	
<b>Writers</b>	[(setf game-pieces)], page 53.	
move-history		[Slot]
<b>Initargs</b>	:move-history	
<b>Readers</b>	[game-move-history], page 53.	
<b>Writers</b>	[(setf game-move-history)], page 53.	
black-can-castle-queenside-p		[Slot]
<b>Initargs</b>	:bcq-p	
<b>Readers</b>	[game-black-can-castle-queenside-p], page 49.	
<b>Writers</b>	[(setf game-black-can-castle-queenside-p)], page 50.	
black-can-castle-kingside-p		[Slot]
<b>Initargs</b>	:bck-p	
<b>Readers</b>	[game-black-can-castle-kingside-p], page 49.	
<b>Writers</b>	[(setf game-black-can-castle-kingside-p)], page 49.	
white-can-castle-queenside-p		[Slot]
<b>Initargs</b>	:wcq-p	
<b>Readers</b>	[game-white-can-castle-queenside-p], page 58.	
<b>Writers</b>	[(setf game-white-can-castle-queenside-p)], page 58.	
white-can-castle-kingside-p		[Slot]
<b>Initargs</b>	:wck-p	
<b>Readers</b>	[game-white-can-castle-kingside-p], page 57.	
<b>Writers</b>	[(setf game-white-can-castle-kingside-p)], page 58.	
en-passant-target-square		[Slot]
<b>Initargs</b>	:en-passant-target-square	
<b>Readers</b>	[game-en-passant-target-square], page 50.	
<b>Writers</b>	[(setf game-en-passant-target-square)], page 51.	
ticker		[Slot]
<b>Type</b>	fixnum	
<b>Initform</b>	(the fixnum 0)	
<b>Initargs</b>	:ticker	
<b>Readers</b>	[game-ticker], page 55.	
<b>Writers</b>	[(setf game-ticker)], page 56.	

<b>possible-moves-cache</b>	[Slot]
<b>Initargs</b> :possible-moves-cache	
<b>Readers</b> [game-possible-moves-cache], page 54.	
<b>Writers</b> [(setf game-possible-moves-cache)], page 54.	
<b>side</b>	[Slot]
<b>Initargs</b> :side	
<b>Readers</b> [game-side], page 55.	
<b>Writers</b> [(setf game-side)], page 55.	
<b>points-cache</b>	[Slot]
<b>Initargs</b> :points-cache	
<b>Readers</b> [game-points-cache], page 53.	
<b>Writers</b> [(setf game-points-cache)], page 54.	
<b>halfmove-clock</b>	[Slot]
<b>Initform</b> 0	
<b>Initargs</b> :halfmove-clock	
<b>Readers</b> [game-halfmove-clock], page 52.	
<b>Writers</b> [(setf game-halfmove-clock)], page 52.	
<b>fullmove-clock</b>	[Slot]
<b>Initform</b> 1	
<b>Initargs</b> :fullmove-clock	
<b>Readers</b> [game-fullmove-clock], page 51.	
<b>Writers</b> [(setf game-fullmove-clock)], page 51.	
<b>result</b>	[Slot]
<b>Initform</b> (quote leszcz-constants:in-progress)	
<b>Initargs</b> :result	
<b>Readers</b> [game-result], page 54.	
<b>Writers</b> [(setf game-result)], page 55.	
<b>connection</b>	[Slot]
<b>Initargs</b> :connection	
<b>Readers</b> [game-connection], page 50.	
<b>Writers</b> [(setf game-connection)], page 50.	
<b>fb</b>	[Slot]
<b>Initargs</b> :fb	
<b>Readers</b> [game-fb], page 51.	
<b>Writers</b> [(setf game-fb)], page 51.	

<code>interactive-p</code>		[Slot]
<b>Initargs</b>	<code>:interactive-p</code>	
<b>Readers</b>	<code>[game-interactive-p]</code> , page 52.	
<b>Writers</b>	<code>[(setf game-interactive-p)]</code> , page 52.	
<code>time-begin-turn</code>		[Slot]
<b>Initform</b>	<code>(local-time:timestamp-to-unix (local-time:now))</code>	
<b>Initargs</b>	<code>:time-begin-turn</code>	
<b>Readers</b>	<code>[game-time-begin-turn]</code> , page 56.	
<b>Writers</b>	<code>[(setf game-time-begin-turn)]</code> , page 56.	
<code>time-white</code>		[Slot]
<b>Initform</b>	3600	
<b>Initargs</b>	<code>:time-white</code>	
<b>Readers</b>	<code>[game-time-white]</code> , page 57.	
<b>Writers</b>	<code>[(setf game-time-white)]</code> , page 57.	
<code>time-black</code>		[Slot]
<b>Initform</b>	3600	
<b>Initargs</b>	<code>:time-black</code>	
<b>Readers</b>	<code>[game-time-black]</code> , page 56.	
<b>Writers</b>	<code>[(setf game-time-black)]</code> , page 56.	
<code>piece</code>		[Class]
<b>Package</b>	<code>[leszcz-types]</code> , page 30.	
<b>Source</b>	<code>[leszcz-types.lisp]</code> , page 12.	
<b>Direct methods</b>		
•	<code>[(setf piece-color)]</code> , page 59.	
•	<code>[piece-color]</code> , page 58.	
•	<code>[(setf piece-point)]</code> , page 59.	
•	<code>[piece-point]</code> , page 59.	
•	<code>[(setf piece-type)]</code> , page 59.	
•	<code>[piece-type]</code> , page 59.	
•	<code>[print-object]</code> , page 60.	
<b>Direct slots</b>		
<code>type</code>		[Slot]
<b>Package</b>	<code>common-lisp</code> .	
<b>Initargs</b>	<code>:type</code>	
<b>Readers</b>	<code>[piece-type]</code> , page 59.	
<b>Writers</b>	<code>[(setf piece-type)]</code> , page 59.	



color		[Slot]
<b>Initargs</b>	:color	
<b>Readers</b>	[piece-color], page 58.	
<b>Writers</b>	[(setf piece-color)], page 59.	
point		[Slot]
<b>Initargs</b>	:point	
<b>Readers</b>	[piece-point], page 59.	
<b>Writers</b>	[(setf piece-point)], page 59.	
point		[Class]
<b>Package</b>	[leszcz-types], page 30.	
<b>Source</b>	[leszcz-types.lisp], page 12.	
<b>Direct methods</b>		
•	[(setf point-x)], page 60.	
•	[point-x], page 60.	
•	[(setf point-y)], page 60.	
•	[point-y], page 60.	
•	[print-object], page 60.	
<b>Direct slots</b>		
x		[Slot]
<b>Type</b>	fixnum	
<b>Initargs</b>	:x	
<b>Readers</b>	[point-x], page 60.	
<b>Writers</b>	[(setf point-x)], page 60.	
y		[Slot]
<b>Type</b>	fixnum	
<b>Initargs</b>	:y	
<b>Readers</b>	[point-y], page 60.	
<b>Writers</b>	[(setf point-y)], page 60.	

#### 4.1.9 Types

color ()		[Type]
<b>Package</b>	[raylib], page 21.	
<b>Source</b>	[raylib.lisp], page 14.	

## 4.2 Internals

### 4.2.1 Constants

<b>+bishop-offsets+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+bishop-value+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>+king-moves+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+knight-moves+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+knight-value+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>+pawn-value+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>+queen-offsets+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+queen-value+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>+rook-offsets+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+rook-value+</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>u64-max</b>	[Constant]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	

<b>z-black-bishop</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-black-king</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-black-knight</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-black-pawn</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-black-queen</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-black-rook</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-bishop</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-king</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-knight</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-pawn</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-queen</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>z-white-rook</b>	[Constant]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	

## 4.2.2 Special variables

<b>*bonus-table*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>*bot-random-state*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>*current-board-evaluation*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>*rev-bonus-table*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>*threads*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>*transposition-table*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>*zobrist-black-to-move*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>*zobrist-table*</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<b>+color-grayish-2+</b>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<b>+color-hax0r-green+</b>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<b>+hlm/last-from+</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<b>+hlm/last-to+</b>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	

<code>black-texture-data-list-pixel</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>black-texture-data-list-sleek</code>	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
<code>dmh/font-size</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>dmh/height</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>dmh/rect</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>dmh/show</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>dmh/xpad</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-piece/anim-frame</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-piece/anim-frame-ticker</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-piece/piece-on-point</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>dt/font-size</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>maybe-drag/capturer</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	

maybe-drag/piece	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
maybe-switch-sides/capturer	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
menu/bg-dark	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
menu/bg-light	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
menu/frame-ctr	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
menu/frame-ctr-magic	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
menu/frame-ctr-mod	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
pawn-magic-l	[Special Variable]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
pawn-magic-r	[Special Variable]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
smc/current	[Special Variable]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
tb/color-bg	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
tb/color-bg-hover	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	

<code>tb/color-margin</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>tb/color-text</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>tb/padx</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>toplevel-console/capturer</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>toplevel-console/font-size</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>toplevel-console/height</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>toplevel-console/log</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>toplevel-console/state</code>	[Special Variable]
<b>Package</b> [gui], page 32.	
<b>Source</b> [gui.lisp], page 16.	
<code>ut/pad-size</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>ut/upgrade-bishop-texture</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>ut/upgrade-knight-texture</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>ut/upgrade-queen-texture</code>	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	

ut/upgrade-rook-texture	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
ut/upgrade-size	[Special Variable]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
white-texture-data-list-pixel	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	
white-texture-data-list-sleek	[Special Variable]
<b>Package</b> [leszcz-constants], page 27.	
<b>Source</b> [leszcz-constants.lisp], page 13.	

### 4.2.3 Macros

enumerate ( <i>start &amp;body elements</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
fb-filter-check-moves ( <i>fb* color-accessor piece-accessor from bb</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
fb-filter-check-moves* ( <i>fb color piece-accessor x y bb</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
fb-point ( <i>fb color-accessor piece-accessor x y</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
fb1-at ( <i>fb1 x y</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
fb1-set-p ( <i>fb1 x y</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
if* ( <i>f a b</i> )	[Macro]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	
ifz ( <i>a b</i> )	[Macro]
<b>Package</b> [net], page 33.	
<b>Source</b> [net.lisp], page 17.	



<code>make-trans</code> ( <i>type stype slots</i> )	[Macro]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>maybe-reverse</code> ( <i>g pt</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>maybe-trap-floats</code> ( <b>&amp;body</b> <i>b</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>safe-piece-type</code> ( <i>p</i> )	[Macro]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>set-bit!</code> ( <i>thing bit to &amp;key type-size</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>u64</code> ( <i>n</i> )	[Macro]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<b>4.2.4 Ordinary functions</b>	
<code>%local-player-vs-player</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>%main</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>%player-vs-bot</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>%test-main</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>animate-menu-bg</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>ask-for-upgrade-type</code> ( <i>game upgraded-piece</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	

<code>base-texture-of</code> ( <i>thing</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>bb-&gt;move-1st</code> ( <i>bb</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>begin-drawing-1</code> ()	[Function]
<b>Package</b> [raylib], page 21.	
<b>Source</b> [raylib.lisp], page 14.	
<code>cleanup-threads!</code> ()	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>connect-to-master</code> ( <b>&amp;key</b> <i>server username</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>coords-&gt;point</code> ( <i>x y</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>copy-fast-board-1</code> ( <i>instance</i> )	[Function]
<b>Package</b> [fast], page 28.	
<b>Source</b> [fast.lisp], page 18.	
<code>copy-game</code> ( <i>g</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<code>copy-piece</code> ( <i>p</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<code>count-bonuses</code> ( <i>game</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<code>count-material-of</code> ( <i>ff</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [bot.lisp], page 11.	
<code>display-draw</code> ( <i>game</i> <b>&amp;optional</b> <i>why</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	

<code>display-mate</code> ( <i>game</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-game</code> ( <i>g</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-move-history</code> ( <i>g &amp;rest _</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-piece</code> ( <i>g p</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
<code>draw-time</code> ( <i>g &amp;rest _</i> )	[Function]
<b>Package</b> [leszcz], page 23.	
<b>Source</b> [leszcz.lisp], page 8.	
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<b>Source</b> [leszcz.lisp], page 8.	
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<b>Methods</b>	

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**Package** [leszcz], page 23.

**Methods**

`game-update-points-cache` ((*g* [*game*], page 64)) [Method]

**Source** [leszcz.lisp], page 8.

`game-update-possible-moves-cache` (*g*) [Generic Function]

**Package** [leszcz], page 23.

**Methods**

`game-update-possible-moves-cache` ((*g* [*game*], page 64)) [Method]

**Source** [leszcz.lisp], page 8.

#### 4.2.6 Classes

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**Package** [raylib], page 21.

**Source** [raylib.lisp], page 14.

**Direct superclasses**

- `foreign-struct-type`.
- `translatable-foreign-type`.

**Direct methods**

- `[translate-from-foreign]`, page 61.
- `[translate-into-foreign-memory]`, page 61.

`type-font` [Class]

**Package** [raylib], page 21.

**Source** [raylib.lisp], page 14.

**Direct superclasses**

- `foreign-struct-type`.
- `translatable-foreign-type`.

`type-glyph-info` [Class]

**Package** [raylib], page 21.

**Source** [raylib.lisp], page 14.

**Direct superclasses**

- `foreign-struct-type`.
- `translatable-foreign-type`.

`type-image` [Class]

**Package** [raylib], page 21.

**Source** [raylib.lisp], page 14.

- Direct superclasses**
- `foreign-struct-type`.
  - `translatable-foreign-type`.
- Direct methods**
- `[translate-from-foreign]`, page 61.
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- `type-rectangle` [Class]
- Package** `[raylib]`, page 21.
- Source** `[raylib.lisp]`, page 14.
- Direct superclasses**
- `foreign-struct-type`.
  - `translatable-foreign-type`.
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- Package** `[raylib]`, page 21.
- Source** `[raylib.lisp]`, page 14.
- Direct superclasses**
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  - `translatable-foreign-type`.
- `type-texture` [Class]
- Package** `[raylib]`, page 21.
- Source** `[raylib.lisp]`, page 14.
- Direct superclasses**
- `foreign-struct-type`.
  - `translatable-foreign-type`.
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- `type-vec2` [Class]
- Package** `[raylib]`, page 21.
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- Direct superclasses**
- `foreign-struct-type`.
  - `translatable-foreign-type`.
- Direct methods**
- `[translate-from-foreign]`, page 61.
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### 4.2.7 Types

`place ()` [Type]

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**Source** [leszcz.lisp], page 8.

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