OpenSCAD CheatSheet v2014.03

Syntax

var = value;

module name(…) { … }
name();

function name(…) = …
name();

include <….scad>

use <….scad>

2D

circle(radius | d=diameter)

square(size,center)

square([width,height],center)

polygon([points])

polygon([points],[paths])

3D

sphere(radius | d=diameter)

cube(size)

cube([width,depth,height])

cylinder(h,r|d,center)

cylinder(h,r1|d1,r2|d2,center)

polyhedron(points, triangles, convexity)

Transformations

translate([x,y,z])

rotate([x,y,z])

scale([x,y,z])

resize([x,y,z],auto)

mirror([x,y,z])

multmatrix(m)

color("colorname")

color([r, g, b, a])

hull()

minkowski()

Boolean operations

union()

difference()

intersection()

Modifier Characters

*	disable
!	show only
#	highlight
%	transparent

Mathematical

abs

sign

sin

cos

tan

acos

asin

atan

atan2

floor

round

ceil

ln

len

log

pow

sqrt

exp

rands

min

max

Functions

lookup

str

chr

search

version

version_num

norm

cross

parent_module(idx)

Other

echo(…)

for (i = [start:end]) { … }

for (i = [start:step:end]) { … }

for (i = […,…,…]) { … }

intersection_for(i = [start:end]) { … }

intersection_for(i = [start:step:end]) { … }

intersection_for(i = […,…,…]) { … }

if (…) { … }

assign (…) { … }

import("….stl")

linear_extrude(height,center,convexity,twist,slices)

rotate_extrude(convexity)

surface(file = "….dat",center,convexity)

projection(cut)

render(convexity)

children([idx])

Special variables

$fa	minimum angle
$fs	minimum size
$fn	number of fragments
$t	animation step

Links

- Official website
- Code | Issues
- Manual
- MCAD library
- Other links