

**Appendix**

Table 1: conversion table

$2^n$	fraction	decimal float	binary float
$2^0$	1	1	1.0
$2^{-1}$	1/2	0.5	0.1
$2^{-2}$	1/4	0.25	0.01
$2^{-3}$	1/8	0.125	0.001
$2^{-4}$	1/16	0.0625	0.0001
$2^{-5}$	1/32	0.03125	0.0000 1
$2^{-6}$	1/64	0.015625	0.0000 01
$2^{-7}$	1/128	0.0078125	0.0000 001
$2^{-8}$	1/256	0.00390625	0.0000 0001