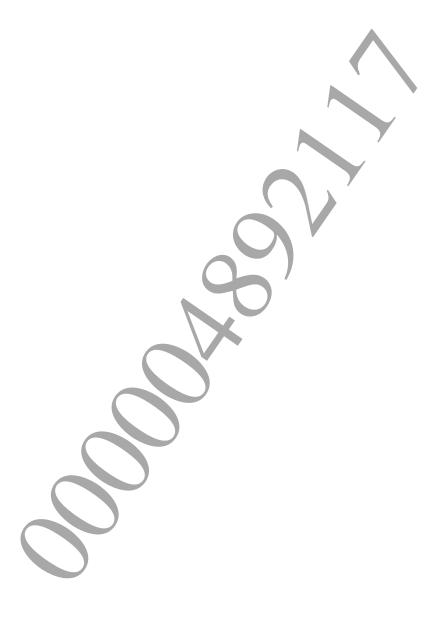


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1 Library Overview

Overview

The SIMD-oriented Fast Mersenne Twister library (libsfmt132049) is used for generating pseudo random numbers in conformance with SMFT132049.

Related Files

The following files are required to use libsfmt132049.

Description
Header file
Static link library file
Stub library file
weak import stub library file
PRX module file



2 Using the Library

Basic Usage Procedure

(1) Initialize random number sequence

Call sceSfmt132049InitGenRand() to initialize the random number sequence.

```
SceSfmt132049Context ctx;
sceSfmt132049InitGenRand(&ctx, seed);
```

A 32-bit seed value is passed in the seed argument. This value is used to initialize the random number sequence and initialize the state of the SceSfmt132049Context structure. Subsequently, pseudo random numbers can be obtained by calling the sceSfmt132049GenRand32 () function.

(2) Obtain random number

The sceSfmt132049GenRand32() function is used to generate a pseudo random number.

```
res = sceSfmt132049GenRand32(&ctx);
```

When the sceSfmt132049GenRand32() function is called, a pointer to the SceSfmt132049Context structure that was previously initialized by the sceSfmt132049InitGenRand() function, is passed as the argument. Since libsfmt132049 does not maintain any state internally, an arbitrary number of random number sequences can be generated by preparing multiple SceSfmt132049Context structures.

Saving and Getting a Random Number Sequence

If the contents of the SceSfmt132049Context structure are saved in advance, the random number sequence can be replayed later.