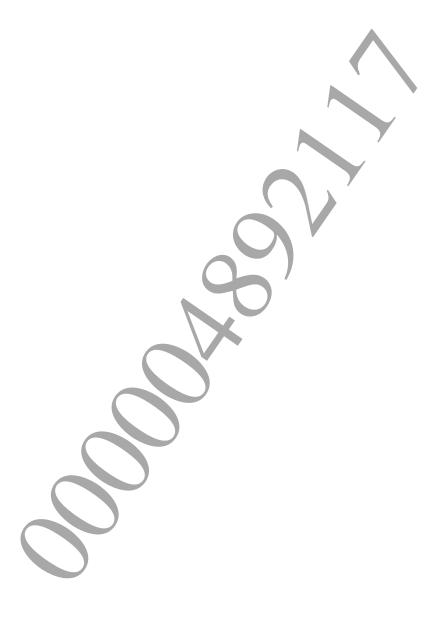


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1 Library Overview

Overview

The SIMD-oriented Fast Mersenne Twister library (libsfmt1279) is used for generating pseudo random numbers in conformance with SMFT1279.

Related Files

The following files are required to use libsfmt1279.

The following files are required	to use libstmt1279.	
Filename	Description	
libsfmt1279.h	Header file	
libSceSfmt1279.a	Static link library file	, ,
libSceSfmt1279_stub.a	Stub library file	· ·
libSceSfmt1279_stub_weak.a	weak import stub library file	
libsfmt1279.suprx	PRX module file	

2 Using the Library

Basic Usage Procedure

(1) Initialize random number sequence

Call sceSfmt1279InitGenRand() to initialize the random number sequence.

```
SceSfmt1279Context ctx;
sceSfmt1279InitGenRand(&ctx, seed);
```

A 32-bit seed value is passed in the <code>seed</code> argument. This value is used to initialize the random number sequence and initialize the state of the <code>SceSfmt1279Context</code> structure. Subsequently, pseudo random numbers can be obtained by calling the <code>sceSfmt1279GenRand32()</code> function.

(2) Obtain random number

The sceSfmt1279GenRand32() function is used to generate a pseudo random number.

```
res = sceSfmt1279GenRand32(&ctx);
```

When the sceSfmt1279GenRand32() function is called, a pointer to the SceSfmt1279Context structure that was previously initialized by the sceSfmt1279InitGenRand() function, is passed as the argument. Since libsfmt1279 does not maintain any state internally, an arbitrary number of random number sequences can be generated by preparing multiple SceSfmt1279Context structures.

Saving and Getting a Random Number Sequence

If the contents of the SceSfmt1279Context structure are saved in advance, the random number sequence can be replayed later.