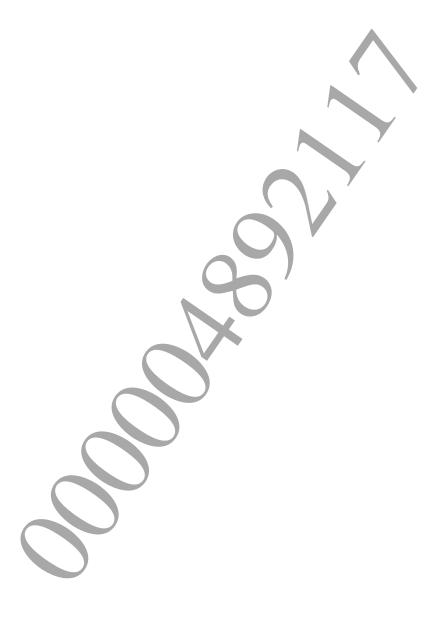


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1 Library Overview

Overview

The SIMD-oriented Fast Mersenne Twister library (libsfmt86243) is used for generating pseudo random numbers in conformance with SMFT86243.

Related Files

The following files are required to use libsfmt86243.

| Description Header file Static link library file |
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| |
| Static link library file |
| |
| Stub library file |
| weak import stub library file |
| PRX module file |
| |
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f 2 Using the Library

Basic Usage Procedure

(1) Initialize random number sequence

Call sceSfmt86243InitGenRand() to initialize the random number sequence.

```
SceSfmt86243Context ctx;
sceSfmt86243InitGenRand(&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 SceSfmt86243Context structure. Subsequently, pseudo random numbers can be obtained by calling the sceSfmt86243GenRand32() function.

(2) Obtain random number

The sceSfmt86243GenRand32() function is used to generate a pseudo random number.

```
res = sceSfmt86243GenRand32(&ctx);
```

When the sceSfmt86243GenRand32() function is called, a pointer to the SceSfmt86243Context structure that was previously initialized by the sceSfmt86243InitGenRand() function, is passed as the argument. Since libsfmt86243 does not maintain any state internally, an arbitrary number of random number sequences can be generated by preparing multiple SceSfmt86243Context structures.

Saving and Getting a Random Number Sequence

If the contents of the SceSfmt86243Context structure are saved in advance, the random number sequence can be replayed later.

