



**Micromega Corporation**

## Code Example uM-FPU64

### Pseudo Random Numbers

#### Introduction

This code example provides an FPU functions for generating psuedo-random numbers using the example from Kernighan & Ritchie, "The C Programming Language".

#### FPU Functions

FPU functions: *random.fp4*

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```
lval = rand()
```

Returns a psuedo-random number from 0 to 32767.

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```
fval = frand() float
```

Returns a random 32-bit floating point value from 0.0 to 1.0.

---

```
fval = frand2(float, float) float
```

Returns a random 32-bit floating point value from arg1 to arg2.

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#### Further Information

See the Micromega website (<http://www.micromegacorp.com>) for additional information regarding the uM-FPU64 floating point coprocessor, including:

Code Example: *Interfacing Keypad Switches*  
*uM-FPU64 Datasheet*  
*uM-FPU64 Instruction Set*  
*uM-FPU64 IDE User Manual*  
*uM-FPU64 IDE Compiler Manual*