

Hey,hey Phreaks.

“Know yourself and know your enemy and you can fight a thousand battles without danger of defeat”
Sun Tzu

In the eternal battle between Avrers and Picers, a very interesting bunch of Pseudo Random Number Generator inline code routines were taken prisoner, interrogated and finally came over to “our” side.
Check it out here ...

http://avr.15.forumer.com/a/quick-8bit-random-number-generators-picasm_post359.html

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RegDef:

```
.def   RegA      = r1           ; Random Number Registers
.def   RegB      = r2
.def   RegC      = r3
.def   RegD      = r4
.def   Temp      = r16         ; General Purpose Work Register
```

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8bitRng:

```
    clc
    rol   RegA
    brcc  pc+3
    ldi   Temp, $1d
    eor   RegA, Temp
```

;------

16bitRng:

```
    clc
    ror   RegA
    ror   RegB
    brcc  pc+4
    ldi   Temp, $a1
    eor   RegB, Temp
    eor   RegA, Temp
```

;------

24bitRng:

```
    clc
    ror   RegA
    ror   RegB
    ror   RegC
    brcc  pc+5
    ldi   Temp, $d7
    eor   RegA, Temp
    eor   RegB, Temp
    eor   RegC, Temp
```

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32bitRng:

```
    clc  
    ror    RegA  
    ror    RegB  
    ror    RegC  
    ror    RegD  
    brcc   pc+6  
    ldi    Temp, $a6  
    eor    RegA, Temp  
    eor    RegB, Temp  
    eor    RegC, Temp  
    eor    RegD, Temp
```