Applications Places System
Tue Jul 19, 15:20 christopher
JHAVÉ 2.0
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Connection Setup Visualizer Debug

Determine the operation

11
× 23

001011
× 010111

	M	A	Q	β	Count	Math/ALU
Initialization	0 0 1 0 1 1	0 0 0 0 0 0	0 1 0 1 1 1	0	6	

Pseudo Code | Info

Booth's Multiplication Algorithm

```
01 boothMultiply(multiplicand,
multiplier){
02   Register M=multiplicand
03   Register A=0
04   Register Q=multiplier
05   Bit β=0
06   Integer count=REGISTER_SIZE
07
08   while (count > 0) {
09
10     switch ([leastSignificantBit
(Q),β]) {
11       case [1,0]: A=A-M
12         break
13
14       case[0,1]: A=A+M
15         break
16     }
17
18     //Shift A, Q, and β 1 bit
19     signPreservingRightShift(1,
A, Q, β)
20
21     count--
22   }
23 }
```

6 7

Terminal JHAVE 2.0