

| Cycle | Reset | PC | Instr         | (FSM) state | SrcA | SrcB     | ALUResult | Zero |
|-------|-------|----|---------------|-------------|------|----------|-----------|------|
| 1     | 1     | 00 | 0             | 0           | 00   | 04       | 04        | 00   |
| 2     | 0     | 04 | addi 20020005 | 1           | 04   | 14       | 18(X)     | 00   |
| 3     | 0     | 04 | addi 20020005 | 9           | 00   | 05       | 05        | 00   |
| 4     | 0     | 04 | addi 20020005 | 10          | 04   | 00       | 05        | 00   |
| 5     | 0     | 04 | addi 20020005 | 0           | 08   | 04       | 04        | 00   |
| 6     | 0     | 08 | addi 2003000c | 1           | 08   | 04       | 38        | 00   |
| 7     | 0     | 08 | addi 2003000c | 9           | 00   | 0c       | 0c        | 00   |
| 8     | 0     | 08 | addi 2003000c | 10          | 00   | 0c       | 0c        | 00   |
| 9     | 0     | 08 | addi 2003000c | 0           | 08   | 04       | 0c        | 00   |
| 10    | 0     | 0c | addi 2067fff7 | 1           | 0c   | ffffffdc | ffffffe8  | 00   |
| 11    | 0     | 0c | addi 2067fff7 | 9           | 0c   | ffffff7  | 3         | 00   |
| 12    | 0     | 0c | addi 2067fff7 | 10          | 0c   | ffffff7  | 03        | 00   |
| 13    | 0     | 0c | addi 2067fff7 | 0           | 0c   | 04       | 10        | 00   |
| 14    | 0     | 10 | or 00e22025   | 1           | 10   | 8094     | 80a4      | 00   |
| 15    | 0     | 10 | or 00e22025   | 6           | 03   | 05       | 07        | 00   |
| 16    | 0     | 10 | or 00e22025   | 7           | 03   | 05       | 07        | 00   |
| 17    | 0     | 10 | or 00e22025   | 0           | 10   | 04       | 14        | 00   |
| 18    | 0     | 14 | and 00642824  | 1           | 14   | a090     | a0a5      | 00   |
| 19    | 0     | 14 | and 00642824  | 6           | 0c   | 07       | 04        | 00   |
| 20    | 0     | 14 | and 00642824  | 7           | 0c   | 07       | 04        | 00   |
| 21    | 0     | 14 | and 00642824  | 0           | 14   | 04       | 18        | 00   |
| 22    | 0     | 18 | add 00a42820  | 1           | 18   | a080     | a098      | 00   |
| 23    | 0     | 18 | add 00a42820  | 6           | 04   | 07       | 000b      | 00   |
| 24    | 0     | 18 | add 00a42820  | 7           | 04   | 07       | 000b      | 00   |
| 25    | 0     | 18 | add 00a42820  | 0           | 18   | 04       | 1c        | 00   |
| 26    | 0     | 1c | beq 10a7000a  | 1           | 1c   | 28       | 44        | 00   |
| 27    | 0     | 1c | beq 10a7000a  | 8           | 0b   | 03       | 08        | 00   |
| 28    | 0     | 1c | beq 10a7000a  | 0           | 1c   | 04       | 20        | 00   |
| 29    | 0     | 20 | slt 0064202a  | 1           | 20   | 80a8     | 80c8      | 00   |
| 30    | 0     | 20 | slt 0064202a  | 6           | 0c   | 07       | 00        | 01   |
| 31    | 0     | 20 | slt 0064202a  | 7           | 0c   | 07       | 00        | 01   |
| 32    | 0     | 20 | slt 0064202a  | 0           | 20   | 04       | 24        | 00   |
| 33    | 0     | 24 | beq 10800001  | 1           | 24   | 04       | 28        | 00   |
| 34    | 0     | 24 | beq 10800001  | 8           | 00   | 00       | 00        | 01   |
| 35    | 0     | 28 | beq 10800001  | 0           | 28   | 04       | 2c        | 00   |
| 36    | 0     | 2c | slt 00e2202a  | 1           | 2c   | 80a8     | 80d4      | 00   |
| 37    | 0     | 2c | slt 00e2202a  | 6           | 03   | 05       | 01        | 00   |
| 38    | 0     | 2c | slt 00e2202a  | 7           | 03   | 05       | 01        | 00   |
| 39    | 0     | 2c | slt 00e2202a  | 0           | 2c   | 04       | 30        | 00   |
| 40    | 0     | 30 | add 00853820  | 1           | 30   | e080     | e0b0      | 00   |
| 41    | 0     | 30 | add 00853820  | 6           | 01   | 0b       | 0c        | 00   |
| 42    | 0     | 30 | add 00853820  | 7           | 01   | 0b       | 0c        | 00   |
| 43    | 0     | 30 | add 00853820  | 0           | 30   | 04       | 34        | 00   |
| 44    | 0     | 34 | sub 00e23822  | 1           | 34   | e088     | e0bc      | 00   |
| 45    | 0     | 34 | sub 00e23822  | 6           | 0c   | 05       | 07        | 00   |

|    |   |    |              |    |    |     |     |    |
|----|---|----|--------------|----|----|-----|-----|----|
| 46 | 0 | 34 | sub 00e23822 | 7  | 0c | 05  | 07  | 00 |
| 47 | 0 | 34 | sub 00e23822 | 0  | 34 | 04  | 38  | 00 |
| 48 | 0 | 38 | sw ac670044  | 1  | 38 | 110 | 148 | 00 |
| 49 | 0 | 38 | sw ac670044  | 2  | 0c | 44  | 50  | 00 |
| 50 | 0 | 38 | sw ac670044  | 5  | 0c | 44  | 50  | 00 |
| 51 | 0 | 38 | sw ac670044  | 0  | 38 | 04  | 3c  | 00 |
| 52 | 0 | 3c | lw 8c020050  | 1  | 3c | 140 | 17c | 00 |
| 53 | 0 | 3c | lw 8c020050  | 2  | 00 | 50  | 50  | 00 |
| 54 | 0 | 3c | lw 8c020050  | 3  | 00 | 50  | 50  | 00 |
| 55 | 0 | 3c | lw 8c020050  | 4  | 00 | 50  | 50  | 00 |
| 56 | 0 | 3c | lw 8c020050  | 0  | 3c | 04  | 40  | 00 |
| 57 | 0 | 40 | J 08000011   | 1  | 40 | 44  | 84  | 00 |
| 58 | 0 | 40 | J 08000011   | 11 | 00 | 11  | 11  | 00 |
| 59 | 0 | 44 | J 08000011   | 0  | 44 | 04  | 48  | 00 |
| 60 | 0 | 48 | sw ac020054  | 1  | 48 | 150 | 198 | 00 |
| 61 | 0 | 48 | sw ac020054  | 2  | 00 | 54  | 54  | 00 |
| 62 | 0 | 48 | sw ac020054  | 5  | 00 | 54  | 54  | 00 |

Control Word

5010

0030

0564

0C24

5010

0030

0564

0C24

5010

0030

0564

0C24

5010

0030

0582

0D42

5010

0030

0582

0D42

5010

0030

0582

0D42

5010

0030

0745

5010

0030

0582

0D42

5010

0030

0745

5010

0030

0582

0D42

5010

0030

0582

0D42

5010

0030

0582

0D42  
5010  
0030  
0420  
25A0  
5010  
0030  
0420  
0520  
0DA0  
5010  
0030  
4428  
5010  
0030  
0420  
25A0