

# Multiplexadores do Data Flow

## ALU MUX

|             |     |
|-------------|-----|
| ADD         | 000 |
| AND         | 001 |
| OR          | 010 |
| PASS B(LSL) | 011 |
| SUB         | 100 |
| XOR         | 101 |
| NOR         | 110 |
| PASS B(LSR) | 111 |

## ALU B

|                |    |
|----------------|----|
| READ DATA 2    | 00 |
| ALU 4 (PC + 4) | 01 |
| READ DATA 2    | 10 |
| Sign extended  | 11 |

## PC BRANCH

|        |   |
|--------|---|
| ALU PC | 0 |
| ALU    | 1 |

## PC

|           |   |
|-----------|---|
| ALU 4     | 0 |
| PC BRANCH | 1 |

## READ REGISTER 1

|                  |   |
|------------------|---|
| Instruction(9:5) | 0 |
| Monitor          | 1 |

## READ REGISTER 2

|                    |   |
|--------------------|---|
| Instruction(20:16) | 0 |
|--------------------|---|

|                  |   |
|------------------|---|
| Instruction(4:0) | 1 |
|------------------|---|

## WRITE REGISTER

|                    |    |
|--------------------|----|
| Instruction(4:0)   | 00 |
| 11110              | 01 |
| Instruction(4:0)   | 10 |
| Instruction(20:16) | 11 |

## WRITE DATA REGISTER

|                  |    |
|------------------|----|
| ALU              | 00 |
| Read Data Memory | 01 |
| MUL/DIV          | 10 |
| STXR Try         | 11 |

## WRITE DATA MEMORY

|       |    |
|-------|----|
| STURB | 00 |
| STURH | 01 |
| STURW | 10 |
| STUR  | 11 |

## READ DATA MEMORY

|       |    |
|-------|----|
| LDURB | 00 |
| LDURH | 01 |
| LDURW | 10 |
| LDUR  | 11 |