| | PC(1 bit) | MUX1 (1bit) L70 | MUX2 (1 bit) L71 | MUX3 (1 bit) L72 | RF (2 bits) L74 | MUX4(1 bit) L75 | ALU (4 bits) L76 | IO (2 bits) L77 | DM (2 bits) L78 | MUX5 (2 bits) L79 |
|------------|-------------|-----------------|------------------|------------------|-----------------|---------------------|--------------------|---------------------------|-----------------|-------------------|
| | x | 0 | x | x | x | x | x | x | x | x |
| | x | x | 0 | 0 | x | x | x | x | x | x |
| | x | x | x | x | 10 | x | x | x | x | x |
| | x | x | x | x | x | 0 for Rd2 / 1 for L | x | x | x | x |
| | x | x | x | X | x | x | CODE for the logic | x | x | x |
| | x | x | x | x | x | x | x | x | x | x |
| | x | x | x | х | x | x | x | x | x | 1 |
| | x | x | 1 | 1 | x | x | x | x | x | x |
| | x | x | x | x | 11 | x | x | x | x | x |
| I/O | x | 1 | x | х | x | x | х | х | x | x |
| | x | x | 0 | 0 | x | x | х | х | x | x |
| | x | x | x | х | 10 | x | х | х | x | x |
| | x | x | x | х | x | x | х | 1 for input, 2 for output | x | x |
| | x | x | x | х | x | x | х | x | x | x |
| | x | x | x | х | x | x | х | x | x | x |
| | x | x | x | х | x | x | х | x | x | 0 |
| | x | x | 1 | 1 | x | x | х | x | x | x |
| | x | x | x | х | 11 | x | х | x | x | x |
| | x | 1 | x | х | x | x | х | x | x | x |
| | x | x | 0 | 0 | x | x | x | x | x | x |
| | x | x | x | х | 10 | x | х | x | x | x |
| | x | x | x | х | x | 1 | х | x | x | x |
| | x | x | x | х | x | x | add | x | x | x |
| | x | x | x | х | x | x | x | x | read | x |
| | x | x | x | х | x | x | х | x | x | 2 |
| | x | x | 1 | 1 | x | x | х | x | x | х |
| | x | x | x | х | 11 | x | х | x | x | х |
| mov rd, rs | same as ALU | | | | | | | | | |
| mov rd L | same as ALU | | | | | | | | | |
| | x | 1 | x | х | x | х | х | x | x | x |
| | x | x | 0 | 0 | x | x | х | x | x | х |
| | x | x | x | х | х | x | х | x | x | x |
| | x | x | x | х | x | x | pass rd1 | x | x | х |
| | x | x | x | Х | х | x | x | x | write | x |