|  |  |
| --- | --- |
| 信号 | 逻辑表达式 |
| PC\_CLK | CLK |
| IM\_R | 1 |
| Rsc4~0 | IM25~21 |
| Rtc4~0 | IM20~16 |
| Rdc4~0 | IM15~11(ADD+ADDU+SUB+SUBU+AND+OR+XOR+NOR+SLT+SLTU+SLL+  SRL+SRA+SLLV+SRLV+SRAV+JALR+MFHI+MFLO+CLZ)+IM20~16(ADDI+  ADDIU+ANDI+ORI+XORI+LW+SLTI+SLTIU+LUI+LBU+LHU+LB+LH+MFC0)  +31(JAL) |
| Cp0Rdc | IM15~11(MFC0+MTC0) |
| EXCE | BREAK+SYSCALL+ERET+TEQ(Z==0) |
| RF\_W | ADD+ADDU+SUB+SUBU+AND+OR+XOR+NOR+SLT+SLTU+SLL+SRL+SRA+  SLLV+SRLV+SRAV+ADDI+ADDIU+ANDI+ORI+XORI+LW+SLTI+SLTIU+LUI+  JAL+JALR+LBU+LHU+LB+LH+MFHI+MFLO+MFC0+CLZ |
| RF\_CLK | CLK |
| CS | LW+SW+LBU+LHU+LB+LH+SB+SH |
| DM\_R | LW+LBU+LHU+LB+LH |
| DM\_W | SW+SB+SH |
| HI\_W | DIV+DIVU+MUL+MULTU+MTHI |
| LO\_W | DIV+DIVU+MUL+MULTU+MTLO |
| ALUC3 | SLT+SLTU+SLL+SRL+SRA+SLLV+SRLV+SRAV+SLTI+SLTIU+LUI+BGEZ |
| ALUC2 | AND+OR+XOR+NOR+SLL+SRL+SRA+SLLV+SRLV+SRAV+ANDI+ORI+XORI |
| ALUC1 | ADD+SUB+XOR+NOR+SLT+SLTU+SLL+SLLV+ADDI+XORI+SLTI+SLTIU+JAL  +BGEZ+JALR |
| ALUC0 | SUB+SUBU+OR+NOR+SLT+SRL+SRLV+ORI+BEQ+BNE+SLTI+BGEZ+TEQ |
| M1\_2 | BREAK+SYSCALL+ERET+TEQ(Z==0) |
| M1\_1 | BEQ(Z==1)+BNE(Z==0)+J+JAL+BGEZ(N==1) |
| M1\_0 | JR+J+JAL+JALR+ERET |
| M2 | LW+LBU+LHU+LB+LH+MFHI+MFLO+MFC0+MUL+CLZ |
| M3\_1 | JAL+BGEZ+JALR |
| M3\_0 | ADD+ADDU+SUB+SUBU+AND+OR+XOR+NOR+SLT+SLTU+SLLV+SRLV+  SRAV+ADDI+ ADDIU+ANDI+ORI+XORI+LW+SW+BEQ+BNE+SLTI+SLTIU+  DIV+DIVU+MULT+MULTU+BGEZ+LBU+LHU+LB+LH+SB+SH+MTHI+MTLO+  CLZ+TEQ |
| M4\_2 | BGEZ |
| M4\_1 | ADDI+ADDIU+LW+SW+SLTI+JAL+JALR+LBU+LHU+LB+LH+SB+SH |
| M4\_0 | ANDI+ORI+XORI+SLTIU+LUI+JAL+JALR |
| M5\_1 | JAL |
| M5\_0 | ADDI+ADDIU+ANDI+ORI+XORI+LW+SLTI+SLTIU+LUI+LBU+LHU+LB+LH+  MFC0 |
| M6\_1 | MULTU+MTHI+MTLO |
| M6\_0 | DIVU+MTHI+MTLO |
| M7\_1 | MULTU+MTHI+MTLO |
| M7\_0 | DIVU+MTHI+MTLO |
| M8\_2 | LW+MFHI+MFLO+MFC0+MUL+CLZ |
| M8\_1 | LHU+LH+MFC0+MUL+CLZ |
| M8\_0 | LB+LH+MFHI+MFLO+CLZ |
| M9\_1 | MUL |
| M9\_0 | MFLO |