| 명령 | | CU | | | | | | | | | | | ALU | | | | | | | | W | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | test | Enable | | | | | | Select | | | | stack | A | B | cmd | out | Z | DC | C | test | d=1(F) | |
| | | | ir | w | rf | tris | stat | PC | w | A | bus | rf | | | | | | | | | | | |
| ADDWF | Q2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| | Q4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 |
| NOP | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| | Q4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| ANDWF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 254 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 254 | 6 | 255 | 0 | 0 | 0 | 0 | 2 | 254 |
| | Q4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 255 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 254 |
| CLRF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 6 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 6 | 3 | 0 | 1 | 0 | 0 | 1 | 6 | 6 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 6 | 6 |
| CLRW | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 170 | 170 | 0 | 84 | 0 | 1 | 1 | 1 | 170 | 1 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 170 | 170 | 3 | 0 | 1 | 0 | 0 | 1 | 170 | 1 |
| | Q4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 170 | 0 | 0 | 170 | 0 | 0 | 0 | 1 | 170 | 1 |
| DECF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 2 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 2 | 4 | 1 | 0 | 0 | 0 | 1 | 2 | 2 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 2 | 2 |
| DECFSZ | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 1 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 1 | 4 | 0 | 1 | 0 | 0 | 1 | 2 | 1 |
| | Q4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 2 | 1 |
| | Q5 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 1 |
| | Q6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 0 |
| | Q7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 0 |
| | Q8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 0 |

표 1 Control Unit / ALU 동작표 (1)

| 명령 | | CU | | | | | | | | | | | | ALU | | | | | | | | W | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | test | Enable | | | | | | Select | | | | stack | A | B | cmd | out | Z | DC | C | test | d=1(F) | |
| | | | ir | w | rf | tris | stat | PC | w | A | bus | rf | | | | | | | | | | | |
| COMF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 0 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 2 | 5 | 253 | 0 | 0 | 0 | 1 | 2 | 0 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 253 | 0 | 255 | 0 | 0 | 0 | 0 | 2 | 0 |
| INCF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 17 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 17 | 6 | 18 | 0 | 0 | 0 | 0 | 0 | 17 |
| | Q4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 1 | 0 | 17 |
| INCFSZ | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 2 | 253 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 253 | 6 | 254 | 0 | 0 | 0 | 0 | 2 | 253 |
| | Q4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 254 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 253 |
| IORWF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 4 | 0 | 8 | 0 | 0 | 0 | 1 | 4 | 2 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 4 | 2 | 7 | 6 | 0 | 0 | 0 | 1 | 4 | 2 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 6 | 0 | 10 | 0 | 0 | 0 | 1 | 4 | 2 |
| MOVF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 4 | 0 | 8 | 0 | 0 | 0 | 1 | 4 | 6 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 4 | 6 | 8 | 6 | 0 | 0 | 0 | 1 | 4 | 6 |
| | Q4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 4 | 6 | 0 | 10 | 0 | 0 | 0 | 1 | 4 | 6 |
| MOVWF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 6 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 6 | 9 | 6 | 0 | 0 | 0 | 1 | 6 | 6 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 6 |
| RLF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 254 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 254 | 10 | 252 | 0 | 0 | 1 | 0 | 6 | 254 |
| | Q4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 252 | 0 | 2 | 0 | 1 | 1 | 0 | 6 | 254 |
| RRF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 249 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 249 | 11 | 252 | 0 | 0 | 1 | 0 | 6 | 249 |
| | Q4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 252 | 0 | 2 | 0 | 1 | 1 | 0 | 6 | 249 |
| SUBWF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 127 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 127 | 12 | 121 | 0 | 0 | 1 | 0 | 6 | 127 |
| | Q4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 121 | 0 | 127 | 0 | 0 | 0 | 0 | 6 | 127 |

표 2 Control Unit / ALU 동작표 (2)

| 명령 | | CU | | | | | | | | | | | | ALU | | | | | | | | W | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | test | Enable | | | | | | Select | | | | stack | A | B | cmd | out | Z | DC | C | test | d=1(F) | |
| | | | ir | w | rf | tris | stat | PC | w | A | bus | rf | | | | | | | | | | | |
| SWAPF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 121 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 121 | 13 | 151 | 0 | 0 | 0 | 0 | 6 | 121 |
| | Q4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 151 | 0 | 157 | 0 | 0 | 0 | 1 | 6 | 121 |
| XORWF | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 151 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 151 | 14 | 145 | 0 | 0 | 0 | 1 | 6 | 151 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 145 | 0 | 151 | 0 | 0 | 0 | 1 | 6 | 151 |
| BCF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 145 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 7 | 145 | 15 | 17 | 0 | 0 | 0 | 0 | 6 | 145 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 17 | 0 | 23 | 0 | 0 | 0 | 1 | 6 | 145 |
| BSF | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 7 | 17 | 16 | 145 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 145 | 0 | 151 | 0 | 0 | 0 | 1 | 6 | 17 |
| BTFSC | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 7 | 17 | 17 | 17 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 6 | 17 | 0 | 23 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| | Q8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 17 |
| BTFSS | Q2 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 |
| | Q3 | 69 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 7 | 145 | 17 | 145 | 0 | 0 | 0 | 0 | 6 |
| | Q4 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 6 | 145 | 0 | 151 | 0 | 0 | 0 | 1 | 6 |
| | Q5 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 |
| | Q6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 |
| | Q7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 |
| | Q8 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 |

표 3 Control Unit / ALU 동작표 (3)

| 명령 | | cCU | | | | | | | | | | | ALU | | | | | | | | W | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | test | Enable | | | | | | Select | | | | stack | A | B | cmd | out | Z | DC | C | test | d=1(F) | |
| | | | ir | w | rf | tris | stat | PC | w | A | bus | rf | | | | | | | | | | | |
| ANDWL | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 1 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 2 | 255 | 6 | 2 | 6 | 0 | 0 | 0 | 1 | 6 | 1 |
| | Q4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 6 | 6 | 0 | 12 | 0 | 0 | 0 | 1 | 6 | 1 |
| CALL | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 44 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 45 |
| | Q4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 45 |
| | Q5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 45 |
| | Q6 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 45 |
| | Q7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 45 |
| | Q8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 48 |
| RETLW | Q2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 170 | 170 | 0 | 84 | 0 | 1 | 1 | 1 | 170 | 55 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 170 | 0 | 13 | 0 | 0 | 1 | 0 | 99 | 56 |
| | Q4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 56 |
| | Q5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 56 |
| | Q6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 56 |
| | Q7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 56 |
| | Q8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 45 |
| GOTO | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 46 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 47 |
| | Q4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 47 |
| | Q5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 47 |
| | Q6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 47 |
| | Q7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 47 |
| | Q8 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 99 | 99 | 0 | 198 | 0 | 0 | 0 | 1 | 99 | 56 |

표 4 Control Unit / ALU 동작표 (4)

| 명령 | | CU | | | | | | | | | | | ALU | | | | | | | | W | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | test | Enable | | | | | | Select | | | | stack | A | B | cmd | out | Z | DC | C | test | d=1(F) | |
| | | | ir | w | rf | tris | stat | PC | w | A | bus | rf | | | | | | | | | | | |
| IORWL | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 2 | 255 | 0 | 7 | 255 | 0 | 0 | 0 | 1 | 0 | 1 |
| | Q4 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 255 | 0 | 255 | 0 | 0 | 0 | 0 | 0 | 1 |
| XORLW | Q2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 255 | 255 | 0 | 254 | 0 | 1 | 1 | 0 | 255 | 1 |
| | Q3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 2 | 255 | 255 | 14 | 0 | 1 | 0 | 0 | 0 | 255 | 1 |
| | Q4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 255 | 0 | 0 | 255 | 0 | 0 | 0 | 1 | 255 | 1 |
| MOVLW | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| | Q3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 170 | 0 | 9 | 170 | 0 | 0 | 0 | 1 | 0 | 1 |
| | Q4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 170 | 0 | 170 | 0 | 0 | 0 | 1 | 0 | 1 |
| TRIS | Q2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 170 | 170 | 0 | 84 | 0 | 1 | 1 | 1 | 170 | 1 |
| | Q3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 170 | 170 | 0 | 84 | 0 | 1 | 1 | 1 | 170 | 1 |
| | Q4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 170 | 170 | 0 | 84 | 0 | 1 | 1 | 1 | 170 | 1 |

표 5 Control Unit / ALU 동작표 (5)