

| HI/LO | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 0 | RET | MOV Rn, Rn | MOV @Rn, Rn | MOV Rn, @Rn | MOV +@Rn, Rn | MOV Rn, +@Rn | PUSH Rn | POP Rn |
| 10 | INC Rn, #COUNT | DEC Rn, #COUNT | ADD Rn, Rn | ADC Rn, Rn | SUB Rn, Rn | SBC Rn, Rn | SMUL Rn, Rn | UMUL Rn, Rn |
| 20 | MOVL R0, #VAL | MOVL R1, #VAL | MOVL R2, #VAL | MOVL R3, #VAL | MOVL R4, #VAL | MOVL R5, #VAL | MOVL R6, #VAL | MOVL R7, #VAL |
| 30 | MOVH R0, #VAL | MOVH R1, #VAL | MOVH R2, #VAL | MOVH R3, #VAL | MOVH R4, #VAL | MOVH R5, #VAL | MOVH R6, #VAL | MOVH R7, #VAL |
| 40 | MOV R0, #VAL | MOV R1, #VAL | MOV R2, #VAL | MOV R3, #VAL | MOV R4, #VAL | MOV R5, #VAL | MOV R6, #VAL | MOV R7, #VAL |
| 50 | BPL R0, LABEL | BPL R1, LABEL | BPL R2, LABEL | BPL R3, LABEL | BPL R4, LABEL | BPL R5, LABEL | BPL R6, LABEL | BPL R7, LABEL |
| 60 | BMI R0, LABEL | BMI R1, LABEL | BMI R2, LABEL | BMI R3, LABEL | BMI R4, LABEL | BMI R5, LABEL | BMI R6, LABEL | BMI R7, LABEL |
| 70 | BEQ R0, LABEL | BEQ R1, LABEL | BEQ R2, LABEL | BEQ R3, LABEL | BEQ R4, LABEL | BEQ R5, LABEL | BEQ R6, LABEL | BEQ R7, LABEL |
| 80 | BNE R0, LABEL | BNE R1, LABEL | BNE R2, LABEL | BNE R3, LABEL | BNE R4, LABEL | BNE R5, LABEL | BNE R6, LABEL | BNE R7, LABEL |
| 90 | BM1 R0, LABEL | BM1 R1, LABEL | BM1 R2, LABEL | BM1 R3, LABEL | BM1 R4, LABEL | BM1 R5, LABEL | BM1 R6, LABEL | BM1 R7, LABEL |
| A0 | BNM1 R0, LABEL | BNM1 R1, LABEL | BNM1 R2, LABEL | BNM1 R3, LABEL | BNM1 R4, LABEL | BNM1 R5, LABEL | BNM1 R6, LABEL | BNM1 R7, LABEL |
| B0 | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL |
| C0 | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL |
| D0 | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL |
| E0 | MOV LABEL, R0 | MOV LABEL, R1 | MOV LABEL, R2 | MOV LABEL, R3 | MOV LABEL, R4 | MOV LABEL, R5 | MOV LABEL, R6 | MOV LABEL, R7 |
| F0 | MOV R0, LABEL | MOV R1, LABEL | MOV R2, LABEL | MOV R3, LABEL | MOV R4, LABEL | MOV R5, LABEL | MOV R6, LABEL | MOV R7, LABEL |

| HI/LO | 8 | 9 | A | B | C | D | E | F |
|-------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 0 | CLR Rn | SWAP Rn, Rn | AND Rn, Rn | OR Rn, Rn | XOR Rn, Rn | JSR LABEL | RTS | JMP LABEL |
| 10 | ASL Rn, #COUNT | ASR Rn, #COUNT | LSL Rn, #COUNT | LSR Rn, #COUNT | ROL Rn, #COUNT | RLC Rn, #COUNT | ROR Rn, #COUNT | RRC Rn, #COUNT |
| 20 | MOVL R8, #VAL | MOVL R9, #VAL | MOVL R10, #VAL | MOVL R11, #VAL | MOVL R12, #VAL | MOVL R13, #VAL | MOVL R14, #VAL | MOVL R15, #VAL |
| 30 | MOVH R8, #VAL | MOVH R9, #VAL | MOVH R10, #VAL | MOVH R11, #VAL | MOVH R12, #VAL | MOVH R13, #VAL | MOVH R14, #VAL | MOVH R15, #VAL |
| 40 | MOV R8, #VAL | MOV R9, #VAL | MOV R10, #VAL | MOV R11, #VAL | MOV R12, #VAL | MOV R13, #VAL | MOV R14, #VAL | MOV R15, #VAL |
| 50 | BPL R8, LABEL | BPL R9, LABEL | BPL R10, LABEL | BPL R11, LABEL | BPL R12, LABEL | BPL R13, LABEL | BPL R14, LABEL | BPL R15, LABEL |
| 60 | BMI R8, LABEL | BMI R9, LABEL | BMI R10, LABEL | BMI R11, LABEL | BMI R12, LABEL | BMI R13, LABEL | BMI R14, LABEL | BMI R15, LABEL |
| 70 | BEQ R8, LABEL | BEQ R9, LABEL | BEQ R10, LABEL | BEQ R11, LABEL | BEQ R12, LABEL | BEQ R13, LABEL | BEQ R14, LABEL | BEQ R15, LABEL |
| 80 | BNE R8, LABEL | BNE R9, LABEL | BNE R10, LABEL | BNE R11, LABEL | BNE R12, LABEL | BNE R13, LABEL | BNE R14, LABEL | BNE R15, LABEL |
| 90 | BM1 R8, LABEL | BM1 R9, LABEL | BM1 R10, LABEL | BM1 R11, LABEL | BM1 R12, LABEL | BM1 R13, LABEL | BM1 R14, LABEL | BM1 R15, LABEL |
| A0 | BNM1 R8, LABEL | BNM1 R9, LABEL | BNM1 R10, LABEL | BNM1 R11, LABEL | BNM1 R12, LABEL | BNM1 R13, LABEL | BNM1 R14, LABEL | BNM1 R15, LABEL |
| B0 | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL | BRA LABEL |
| C0 | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL | BCS LABEL |
| D0 | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL | BCC LABEL |
| E0 | MOV LABEL, R8 | MOV LABEL, R9 | MOV LABEL, R10 | MOV LABEL, R11 | MOV LABEL, R12 | MOV LABEL, R13 | MOV LABEL, R14 | MOV LABEL, R15 |
| F0 | MOV R8, LABEL | MOV R9, LABEL | MOV R10, LABEL | MOV R11, LABEL | MOV R12, LABEL | MOV R13, LABEL | MOV R14, LABEL | MOV R15, LABEL |