VIRTUAL16 Instruction Set Table

HI/LO	0	1	2	3	4	5	6	7
0	RET	MOV Rs, Rd	MOV @Rs, Rd	MOV Rs, @Rd	MOV +@Rs, Rd	MOV Rs, +@Rd	MOV Rs.H, Rd.H	MOV Rs.H, Rd.L
10	INC Rd, #COUNT	DEC Rd, #COUNT	ADD Rd, Rs	ADC Rd, Rs	SUB Rd, Rs	SBC Rd, Rs	SMUL Rd, Rs	UMUL Rd, Rs
20	BCC OFFSET	BCS OFFSET	BRA OFFSET	AND Rd, Rs	OR Rd, Rs	XOR Rd, Rs	CLC	SEC
30	NOP	NOP	NOP	NOP	NOP	NOP	NOP	NOP
40	NOP	NOP	NOP	NOP	NOP	NOP	NOP	NOP
50	MOVL R0, #VAL	MOVL R1, #VAL	MOVL R2, #VAL	MOVL R3, #VAL	MOVL R4, #VAL	MOVL R5, #VAL	MOVL R6, #VAL	MOVL R7, #VAL
60	MOVH R0, #VAL	MOVH R1, #VAL	MOVH R2, #VAL	MOVH R3, #VAL	MOVH R4, #VAL	MOVH R5, #VAL	MOVH R6, #VAL	MOVH R7, #VAL
70	MOV R0, #VAL	MOV R1, #VAL	MOV R2, #VAL	MOV R3, #VAL	MOV R4, #VAL	MOV R5, #VAL	MOV R6, #VAL	MOV R7, #VAL
80	MOV ADDR, R0	MOV ADDR, R1	MOV ADDR, R2	MOV ADDR, R3	MOV ADDR, R4	MOV ADDR, R5	MOV ADDR, R6	MOV ADDR, R7
90	MOV R0, ADDR	MOV R1, ADDR	MOV R2, ADDR	MOV R3, ADDR	MOV R4, ADDR	MOV R5, ADDR	MOV R6, ADDR	MOV R7, ADDR
A0	BNM1 R0, OFFSET	BNM1 R1, OFFSET	BNM1 R2, OFFSET	BNM1 R3, OFFSET	BNM1 R4, OFFSET	BNM1 R5, OFFSET	BNM1 R6, OFFSET	BNM1 R7, OFFSET
B0	BM1 R0, OFFSET	BM1 R1, OFFSET	BM1 R2, OFFSET	BM1 R3, OFFSET	BM1 R4, OFFSET	BM1 R5, OFFSET	BM1 R6, OFFSET	BM1 R7, OFFSET
C0	BMI R0, OFFSET	BMI R1, OFFSET	BMI R2, OFFSET	BMI R3, OFFSET	BMI R4, OFFSET	BMI R5, OFFSET	BMI R6, OFFSET	BMI R7, OFFSET
D0	BPL R0, OFFSET	BPL R1, OFFSET	BPL R2, OFFSET	BPL R3, OFFSET	BPL R4, OFFSET	BPL R5, OFFSET	BPL R6, OFFSET	BPL R7, OFFSET
E0	BNE R0, OFFSET	BNE R1, OFFSET	BNE R2, OFFSET	BNE R3, OFFSET	BNE R4, OFFSET	BNE R5, OFFSET	BNE R6, OFFSET	BNE R7, OFFSET
F0	BEQ R0, OFFSET	BEQ R1, OFFSET	BEQ R2, OFFSET	BEQ R3, OFFSET	BEQ R4, OFFSET	BEQ R5, OFFSET	BEQ R6, OFFSET	BEQ R7, OFFSET

HI/LO	8	9	A	B	C	D	E	F
0	MOV Rs.L, Rd.H	MOV Rs.L, Rd.L	SWAP Rs, Rd	JSR ADDR	NJSR ADDR	JSR ADDR	JMP ADDR	RTS
10	CMP Rd, Rs	ASR Rd, #COUNT	LSL Rd, #COUNT	LSR Rd, #COUNT	ROL Rd, #COUNT	RLC Rd, #COUNT	ROR Rd, #COUNT	RRC Rd, #COUNT
20	PUSH Rd	POP Rd	NOP	NOP	NOP	NOP	NOP	NOP
30	NOP	NOP	NOP	NOP	NOP	NOP	NOP	NOP
40	NOP	NOP	NOP	NOP	NOP	NOP	NOP	NOP
50	MOVL R8, #VAL	MOVL R9, #VAL	MOVL R10, #VAL	MOVL R11, #VAL	MOVL R12, #VAL	MOVL R13, #VAL	MOVL R14, #VAL	MOVL R15, #VAL
60	MOVH R8, #VAL	MOVH R9, #VAL	MOVH R10, #VAL	MOVH R11, #VAL	MOVH R12, #VAL	MOVH R13, #VAL	MOVH R14, #VAL	MOVH R15, #VAL
70	MOV R8, #VAL	MOV R9, #VAL	MOV R10, #VAL	MOV R11, #VAL	MOV R12, #VAL	MOV R13, #VAL	MOV R14, #VAL	MOV R15, #VAL
80	MOV ADDR, R8	MOV ADDR, R9	MOV ADDR, R10	MOV ADDR, R11	MOV ADDR, R12	MOV ADDR, R13	MOV ADDR, R14	MOV ADDR, R15
90	MOV R8, ADDR	MOV R9, ADDR	MOV R10, ADDR	MOV R11, ADDR	MOV R12, ADDR	MOV R13, ADDR	MOV R14, ADDR	MOV R15, ADDR
A0	BNM1 R8, OFFSET	BNM1 R9, OFFSET	BNM1 R10, OFFSET	BNM1 R11, OFFSET	BNM1 R12, OFFSET	BNM1 R13, OFFSET	BNM1 R14, OFFSET	BNM1 R15, OFFSET
B0	BM1 R8, OFFSET	BM1 R9, OFFSET	BM1 R10, OFFSET	BM1 R11, OFFSET	BM1 R12, OFFSET	BM1 R13, OFFSET	BM1 R14, OFFSET	BM1 R15, OFFSET
C0	BMI R8, OFFSET	BMI R9, OFFSET	BMI R10, OFFSET	BMI R11, OFFSET	BMI R12, OFFSET	BMI R13, OFFSET	BMI R14, OFFSET	BMI R15, OFFSET
D0	BPL R8, OFFSET	BPL R9, OFFSET	BPL R10, OFFSET	BPL R11, OFFSET	BPL R12, OFFSET	BPL R13, OFFSET	BPL R14, OFFSET	BPL R15, OFFSET
E0	BNE R8, OFFSET	BNE R9, OFFSET	BNE R10, OFFSET	BNE R11, OFFSET	BNE R12, OFFSET	BNE R13, OFFSET	BNE R14, OFFSET	BNE R15, OFFSET
F0	BEQ R8, OFFSET	BEQ R9, OFFSET	BEQ R10, OFFSET	BEQ R11, OFFSET	BEQ R12, OFFSET	BEQ R13, OFFSET	BEQ R14, OFFSET	BEQ R15, OFFSET