

8051 指令集－單Byte 指令整理 1

	0	1	2	3	4	5	6	7
0	NOP							
1								
2			RET [2C]	RET [2C]				
3	RR A	RRC A	RL A	RLC A				JMP @A + DPTR [2C]
4	INC A	DEC A						
5								
6	INC @R0	DEC @R0	ADD A, @R0	ADDC A, @R0	ORL A, @R0	ANL A, @R0	XRL A, @R0	
7	INC @R1	DEC @R1	ADD A, @R1	ADDC A, @R1	ORL A, @R1	ANL A, @R1	XRL A, @R1	
8	INC R0	DEC R0	ADD A, R0	ADDC A, R0	ORL A, R0	ANL A, R0	XRL A, R0	
9	INC R1	DEC R1	ADD A, R1	ADDC A, R1	ORL A, R1	ANL A, R1	XRL A, R1	
A	INC R2	DEC R2	ADD A, R2	ADDC A, R2	ORL A, R2	ANL A, R2	XRL A, R2	
B	INC R3	DEC R3	ADD A, R3	ADDC A, R3	ORL A, R3	ANL A, R3	XRL A, R3	
C	INC R4	DEC R4	ADD A, R4	ADDC A, R4	ORL A, R4	ANL A, R4	XRL A, R4	
D	INC R5	DEC R5	ADD A, R5	ADDC A, R5	ORL A, R5	ANL A, R5	XRL A, R5	
E	INC R6	DEC R6	ADD A, R6	ADDC A, R6	ORL A, R6	ANL A, R6	XRL A, R6	
F	INC R7	DEC R7	ADD A, R7	ADDC A, R7	ORL A, R7	ANL A, R7	XRL A, R7	

Note: [2B]=2 Byte, [3B]=3Byte, [2C]=2Cycle, [4C]=4 Cycle, Blank=1 byte/1 cycle

8051 指令集－單Byte 指令整理 2

	8	9	A	B	C	D	E	F
0							MOVX A, @DPTR [2C]	MOVX @DPTR, A [2C]
1								
2							MOVX A, @R0 [2C]	MOVX @R0, A [2C]
3	MOVC A, @A + PC [2C]	MOVC A, @A + DPTR [2C]	INC DPTR [2C]	CPL C	CLR C	SETB C	MOVX A, @RI [2C]	MOVX @RI, A [2C]
4			MUL AB [4C]		SWAP A	DA A	CLR A	CPL A
5								
6		SUBB A, @R0			XCH A, @R0	XCHD A, @R0	MOV A, @R0	MOV @R0, A
7		SUBB A, @R1			XCH A, @R1	XCHD A, @R1	MOV A, @R1	MOV @R1, A
8		SUBB A, R0			XCH A, R0		MOV A, R0	MOV R0, A
9		SUBB A, R1			XCH A, R1		MOV A, R1	MOV R1, A
A		SUBB A, R2			XCH A, R2		MOV A, R2	MOV R2, A
B		SUBB A, R3			XCH A, R3		MOV A, R3	MOV R3, A
C		SUBB A, R4			XCH A, R4		MOV A, R4	MOV R4, A
D		SUBB A, R5			XCH A, R5		MOV A, R5	MOV R5, A
E		SUBB A, R6			XCH A, R6		MOV A, R6	MOV R6, A
F		SUBB A, R7			XCH A, R7		MOV A, R7	MOV R7, A

Note: [2B]=2 Byte, [3B]=3Byte, [2C]=2Cycle, [4C]=4 Cycle, Blank=1 byte/1 cycle