

MSB	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0		NOP (INH)					TAP (INH)	TPA (INH)	INX (INH)	DEX (INH)	CLV (INH)	SEV (INH)	CLC (INH)	SEC (INH)	CLI (INH)	SEI (INH)
1	SBA	CBA					TAB (INH)	TBA (INH)		DAA (INH)		ABA (INH)				
2	BRA (REL)		BHI (REL)	BLS (REL)	BCC (REL)	BCS (REL)	BNE (REL)	BEQ (REL)	BVC (REL)	BVS (REL)	BPL (REL)	BMI (REL)	BGE (REL)	BLT (REL)	BGT (REL)	BLE (REL)
3	TSX (INH)	INS (INH)	PUL (A)	PUL (B)	DES (INH)	TXS (INH)	PSH (A)	PSH (B)		RTS (INH)		RTI (INH)			WAI (INH)	SWI (INH)
4	NEG (A)			COM (A)	LSR (A)		ROR (A)	ASR (A)	ASL (A)	ROL (A)	DEC (A)		INC (A)	TST (A)		CLR (A)
5	NEG (B)			COM (B)	LSR (B)		ROR (B)	ASR (B)	ASL IN	ROL (B)	DEC (B)		INC (B)	TST (B)		CLR (B)
6	NEG (IND)			COM (IND)	LSR (IND)		ROR (IND)	ASR (IND)	ASL (IND)	ROL (IND)	DEC (IND)		INC (IND)	TST (IND)	JMP (IND)	CLR (IND)
7	NEG (EXT)			COM (EXT)	LSR (EXT)		ROR (EXT)	ASR (EXT)	ASL (EXT)	ROL (EXT)	DEC (EXT)		INC (EXT)	TST (EXT)	JMP (EXT)	CLR (EXT)
8	SUB(A) (IMM)	CMP(A) (IMM)	SBC(A) (IMM)		AND(A) (IMM)	BIT(A) (IMM)	LDA(A) (IMM)		EOR(A) (IMM)	ADC(A) (IMM)	ORA(A) (IMM)	ADD(A) (IMM)	CPX(A) (IMM)	BSR (REL)	LDS (IMM)	
9	SUB(A) (DIR)	CMP(A) (DIR)	SBC(A) (DIR)		AND(A) (DIR)	BIT(A) (DIR)	LDA(A) (DIR)	STA(A) (DIR)	EOR(A) (DIR)	ADC(A) (DIR)	ORA(A) (DIR)	ADD(A) (DIR)	CPX(A) (DIR)		LDS (DIR)	STS (DIR)
A	SUB(A) (IND)	CMP(A) (IND)	SBC(A) (IND)		AND(A) (IND)	BIT(A) (IND)	LDA(A) (IND)	STA(A) (IND)	EOR(A) (IND)	ADC(A) (IND)	ORA(A) (IND)	ADD(A) (IND)	CPX(A) (IND)	JSR (IND)	LDS (IND)	STS (IND)
B	SUB(A) (EXT)	CMP(A) (EXT)	SBC(A) (EXT)		AND(A) (EXT)	BIT(A) (EXT)	LDA(A) (EXT)	STA(A) (EXT)	EOR(A) (EXT)	ADC(A) (EXT)	ORA(A) (EXT)	ADD(A) (EXT)	CPX(A) (EXT)	JSR (EXT)	LDS (EXT)	STS (EXT)
C	SUB(B) (IMM)	CMP(B) (IMM)	SBC(B) (IMM)		AND(B) (IMM)	BIT(B) (IMM)	LDA(B) (IMM)		EOR(B) (IMM)	ADC(B) (IMM)	ORA(B) (IMM)	ADD(B) (IMM)			LDX (IMM)	
D	SUB(B) (DIR)	CMP(B) (DIR)	SBC(B) (DIR)		AND(B) (DIR)	BIT(B) (DIR)	LDA(B) (DIR)	STA(B) (DIR)	EOR(B) (DIR)	ADC(B) (DIR)	ORA(B) (DIR)	ADD(B) (DIR)			LDX(B) (DIR)	STX(B) (DIR)
E	SUB(B) (IND)	CMP(B) (IND)	SBC(B) (IND)		AND(B) (IND)	BIT(B) (IND)	LDA(B) (IND)	STA(B) (IND)	EOR(B) (IND)	ADC(B) (IND)	ORA(B) (IND)	ADD(B) (IND)			LDX (IND)	STX (IND)
F	SUB(B) (EXT)	CMP(B) (EXT)	SBC(B) (EXT)		AND(B) (EXT)	BIT(B) (EXT)	LDA(B) (EXT)	STA(B) (EXT)	EOR(B) (EXT)	ADC(B) (EXT)	ORA(B) (EXT)	ADD(B) (EXT)			LDX (EXT)	STX (EXT)

DIR = Direct Addressing Mode
EXT = Extended Addressing Mode
IMM = Immediate Addressing Mode

IND = Index Addressing Mode
INH = Inherent Addressing Mode
REL = Relative Addressing Mode

A = Accumulator A
B = Accumulator B

M6800 Instruction Map