ALU Opcodes

Opcode		Instruction	
10	Two Operand		
	000	ADD	F = A+B
	001	ADC (add with carry)	F = A+B+C
	010	SUB (subtract)	F = A-B
	011	SBC (subtract with carry)	F = A-B-C
	100	AND	F = A AND B
	101	OR	F = A OR B
	110	XNOR	F = A XNOR B
	111	CMP (compare)	F = A – B (alias for SUB)
0	One Operand		
	0011	INV (invert)	F = NOT A
	0100	LSR (logic shift right)	'0' & A(15 : 1)
	0101	ROR (rotate right)	A(0) & A(15 : 1)
	0110	RRC (rotate right with carry)	C & A(15 : 1)
	0111	ASR (arithmetic shift right)	A(15) & A(15: 1)
	1000	LSL (logic shift left)	A(14 : 0) & '0'
	1001	ROL (rotate left)	A(14 : 0) & A(15)
	1010	RLC (rotate right with carry)	A(14 : 0) & C
	1011	PB (pass byte)	"00000000" & A(7 : 0)
	1100	INC (increment)	F = A + 1
	1101	DEC (decrement)	F = A – 1
	1110	CLR (clear)	F = "0000000000000000"