

8051 Instruction Set

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instruction	Bytes	Cycles	Opcode
ACALL	2	2	aaa10001 address
LCALL	3	2	00010010 address address
RET	1	2	00100010
RET	1	2	00110010
AJMP	2	2	aaa00001 address
LJMP	3	2	00000010 address address
SJMP	2	2	10000000 rel.address
JMP	1	2	01110011
JZ	2	2	01100000 rel.address
JNZ	2	2	01110000 rel.address
CJNE	3	2	10110101 address rel.address
CJNE	3	2	10110100 data rel.address
CJNE	3	2	10111rrr data rel.address
CJNE	3	2	1011011i data rel.address
DNJZ	2	2	11011rrr rel.address
DJNZ	3	2	11010101 address rel.address
NOP	1	1	00000000

Table 1: Branching instructions for the 8051 microcontroller