

Boolean Signals						
LD.MAR	GateMARMUX					
LD.MDR	GateMDR					
LD.REG	GatePC					
LD.CC	GateALU					
LD.PC	LD.IR					
MEM.EN						

Signal Name	Possible Values
ALUK	ADD, AND, NOT, PASSA
ADDR1MUX	PC, BaseR
ADDR2MUX	ZERO, offset6, PCoffset9, PCoffset11
PCMUX	PC+1, ADDER, BUS
MARMUX	ZEXT, ADDER
SR2MUX	SR2, SEXT
R.W	R (0), W (1)

Mnemonic	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
*ADD	0	0	0	1	DR				SR1		0	0	0		SR2		
*ADD	0	0	0	1	DR				SR1 1				imm5				
*AND	0	1	0	1	DR				SR1			0	0	SR2			
*AND	0	1	0	1	DR				SR1		1 imm5						
BR	0	0	0	0	n	Z	р	PCoffset9									
JMP	1	1	0	0	0	0	0	BaseR			0	0	0	0	0	0	
JSR	0	1	0	0	1		PCoffset11										
JSRR	0	1	0	0	0	0	0	BaseR			0	0	0	0	0	0	
*LD	0	0	1	0	DR					PCoffset9							
*LDI	1	0	1	0	DR				PCoffset9								
*LDR	0	1	1	0	DR			E	BaseR offset6								
LEA	1	1	1	0	DR						PCoffset9						
*NOT	1	0	0	1		DR			SR		1	1	1	1	1	1	
reserved	1	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	
RTI	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ST	0	0	1	1	SR				PCoffset9								
STI	1	0	1	1	SR			PCoffset9									
STR	0	1	1	1	SR			BaseR offset6					-				
TRAP	1	1	1	1	0	0 0 0 trapvect8											

^{*} modifies condition codes NZP