	alu_ctrl	mult_sel	mult_en	jump_reg				
ADD	010	01	0	0				
SUB	110	01	0	0				
JAL	000	00	0	0				
AND	000	01	0	0				
OR	001	01	0	0				
SUB	010	01	0	0				
SLT	110	01	0	0				
MULTU	111	01	1	0				
MFHI	000	11	0	0				
MFLO	000	10	0	0				
JR	000	01	0	1				
	branch	jump	reg_dst	we_reg	alu_src	we_dm	dm2reg	alu_op
R-type	0	0	01	1	0	0	0	11
ADDI	0	0	00	1	1	0	0	00
BEQ	1	0	00	0	0	0	0	01
J	0	1	00	0	0	0	0	00
SW	0	0	00	0	1	1	0	00
LW	0	0	00	1	1	0	1	00
JAL	0	1	10	1	0	0	0	10