

## Green sheet ISA Pipeline CPU

### Stall

31:0

00000000000000000000000000000000

### Data register-register

	Id			Registers			Null
	Type	Op	I	RD	RA	RB	
	31:30	29:27	26	25:22	21:18	17:14	13:0
<b>ADD</b>	01	000	0	xxxx	xxxx	xxxx	0000000000000000
<b>SUB</b>	01	001	0	xxxx	xxxx	xxxx	0000000000000000
<b>AND</b>	01	010	0	xxxx	xxxx	xxxx	0000000000000000
<b>OR</b>	01	011	0	xxxx	xxxx	xxxx	0000000000000000
<b>MOV</b>	01	100	0	xxxx	0000	xxxx	0000000000000000
<b>MOD</b>	01	101	0	xxxx	xxxx	xxxx	0000000000000000
<b>EXP</b>	01	110	0	xxxx	xxxx	xxxx	0000000000000000
<b>CMP</b>	01	111	0	0000	xxxx	xxxx	0000000000000000

### Data register-immediate

	Id			Registers		
	Tipo	Op	I	RD	RA	Immediate
	31:30	29:27	26	25:22	21:18	17:0
<b>ADDI</b>	01	000	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>SUBI</b>	01	001	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>ANDI</b>	01	010	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>ORI</b>	01	011	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>MOV</b>	01	100	1	xxxx	0000	XXXXXXXXXXXXXXXXXXXX
<b>MOD</b>	01	101	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>EXP</b>	01	110	1	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>CMPI</b>	01	111	1	0000	xxxx	XXXXXXXXXXXXXXXXXXXX

### Memoria

	Id			Addressing		
	Type	Op	Null	RD	RA	Immediate
	31:30	29	28:26	25:22	21:18	17:0
<b>LDR</b>	10	0	000	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX
<b>STR</b>	10	1	000	xxxx	xxxx	XXXXXXXXXXXXXXXXXXXX

### Control

	Id			Null	Instruction number
	Type	Op	Null		
	31:30	29:28	27:26	25:18	17:0
<b>JMP</b>	11	00	00	00000000	XXXXXXXXXXXXXXXXXXXX
<b>JEQ</b>	11	01	00	00000000	XXXXXXXXXXXXXXXXXXXX
<b>JNE</b>	11	10	00	00000000	XXXXXXXXXXXXXXXXXXXX