CS2110 REFERENCE SHEET

ADD	0001	DR	SR1	0	00	SR2

ADD	0001	DR	SR1	1	imm5

AND	0101	DR	SR1	0	00	SR2

AND	0101	DR	SR1	1	imm5

BR	0000	n	z	p	PCoffset9

JMP	1100	000	BaseR	000000

JSR	0100	1	PCoffset11

JSRR	0100	0	00	BaseR	000000

LD	0010	DR	PCoffset9

LDI	1010	DR	PCoffset9

LDR	0110	DR	BaseR	offset6

LEA	1110	DR	PCoffset9

NOT	1001	DR	SR	111111

ST	0011	SR	PCoffset9

STI	1011	SR	PCoffset9

STR	0111	SR	BaseR	offset6

TRAP	1111	0000	trapvect8

Trap Vector	Assembler Name
x20	GETC
x21	OUT
x22	PUTS
x23	IN
x25	HALT

Device Register	Address
Keybd Status Reg	xFE00
Keybd Data Reg	xFE02
Display Status Reg	xFE04
Display Data Reg	xFE06

R6 →

Last local
:
First local
Old frame pointer
Return address
Return value
First argument
:
Last argument

R5 → (First local)
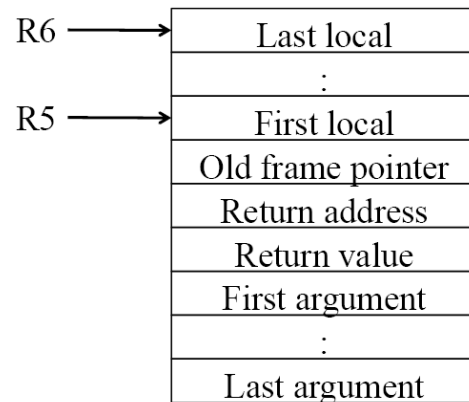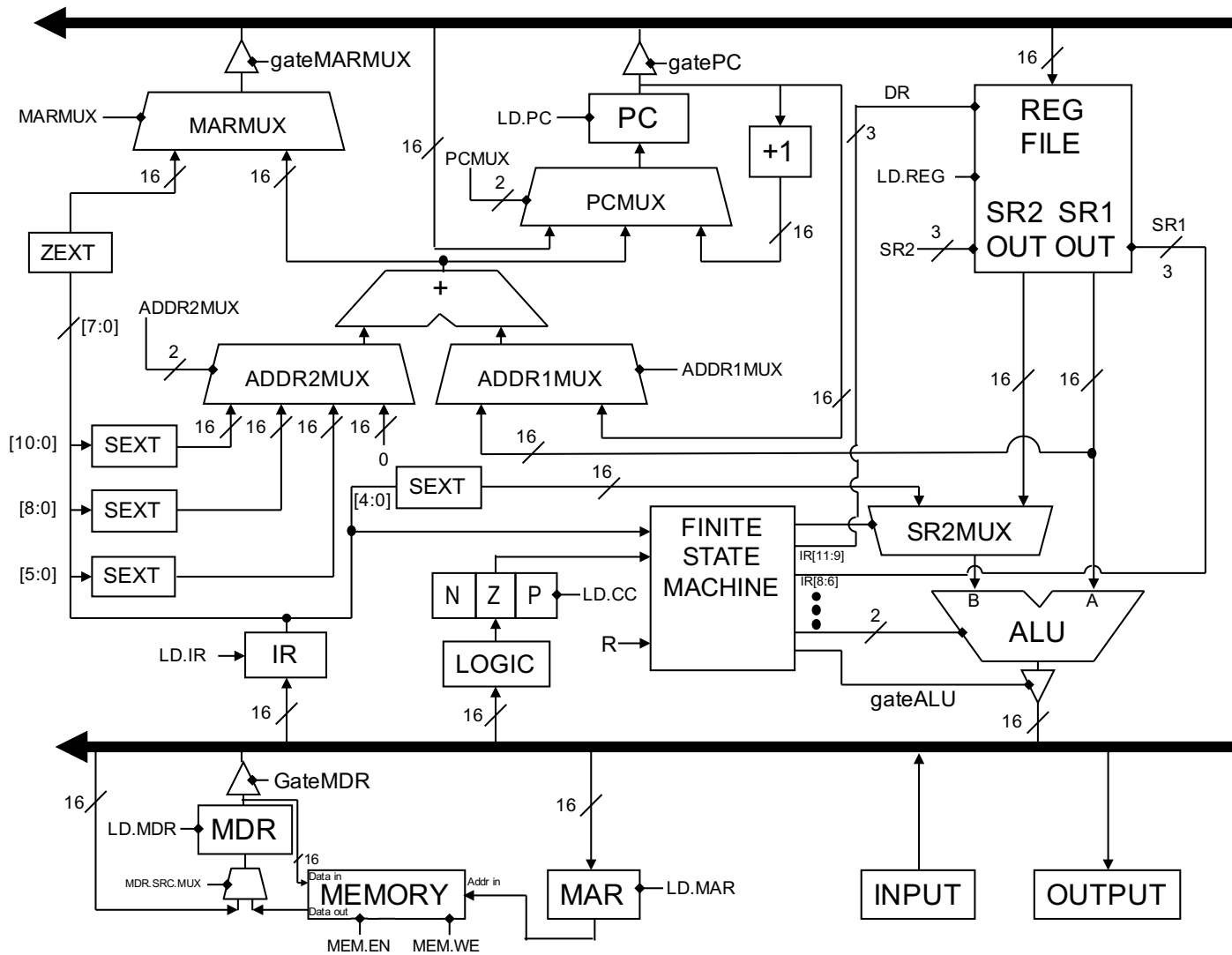
Boolean Signals

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

MUX Name	Possible Values
ALUK	ADD, AND, NOT, PASSA
ADDR1MUX	PC, BaseR
ADDR2MUX	ZERO, offset6, PCoffset9, PCoffset11
PCMUX	PC+1, BUS, ADDER
MARMUX	ZEXT, ADDER
MDR.SRC.MUX	BUS, MEM
SR2MUX	SR2, SEXT