	I)	
Forward MUX	MF_GRFRD1_D	MF_GRFRD2_D	MF_ALUA_E
sequence_input	RD1	RD2	$V1_E_1eft$
$forward_input$	ALUResult_M	ALUResult_M	ALUResult_M
	$\mathrm{pc4}_\mathtt{M}$	$\mathtt{pc4}_\mathtt{M}$	$\mathrm{pc4}_\mathrm{M}$
	hi_M	hi_M	hi_M
	$1o_{M}$	1o_M	$1o_M$
	ALUResult_W	ALUResult_W	$ALUResult_W$
	DM_RD_W	DM_RD_W	DM_RD_W
	$\mathtt{pc4}_\mathtt{W}$	$\mathtt{pc4}_\mathtt{W}$	$\mathtt{pc4}_\mathtt{W}$
	hi_W	hi_W	hi_W
	1o_W	1o_W	1o_W
_			
select		MF_GRFRD2_D_se1	
output	V1	V2	V1_E_right

Е		M
MF_ALUB_E	MF_MemData_E	MF_DMWD_M
$V2_E_1eft$	$V2_E_1$ eft	$V2_M$
ALUResult_M	$ALUResult_M$	ALUResult_W
$\mathtt{pc4}_\mathtt{M}$	$\mathtt{pc4}_\mathtt{M}$	DM_RD_W
hi_M	hi_M	$\mathtt{pc4}_\mathtt{W}$
$1o_M$	$1o_M$	hi_W
ALUResult_W	$ALUResult_W$	1o_W
DM_RD_W	DM_RD_W	
$\mathtt{pc4}_\mathtt{W}$	$\mathtt{pc4}_\mathtt{W}$	
hi_W	hi_W	
1o_W	$1o_W$	

MF_ALUB_E_se1 V2_E_right_ALUB MF_MemData_E_sel V2_E_right2_RegM MF_DMWD_M_sel MemData