

ΕΡΓΑΣΤΗΡΙΟ ΣΥΓΧΡΟΝΗΣ ΑΡΧΙΤΕΚΤΟΝΙΚΗΣ

Τριαντάφυλλος Πράππας ΑΜ:1067504

ΕΡΓΑΣΤΗΡΙΑΚΗ ΑΣΚΗΣΗ 4

PC: 0011 BR: 0101 SP: 0111 LR: 0001 X: 1001 temp: 1011

BOOTST RAP	BRA	BI N	CO N	I	I	I	APO RT	BPO RT	DDA TA	SH ~	SE LB	MW E~	MARC LK	MSTAT US	LD S~	PC E~	CARR YE~	MD E~	DDAT AE~	ADDR ESS
	(4:0)	(2:0)	(2:0)	(2:0)	(5:3)	(8:6)	(3:0)	(3:0)	(1:0)											
SW+0->PC,MAR	XXX XX	00 0	XX X	11 1	00 0	01 1	XXX X	0011	XX	0	1	1	1	0	1	0	1	1	1	m00
NEXT(PC)	XXX XX	00 0	XX X	00 0	00 0	00 1	XXX X	XXX X	XX	0	0	1	0	0	0	0	0	0	0	m01

LOAD BR #K	BRA	BI N	CO N	I	I	I	APO RT	BPO RT	DDA TA	SH ~	SE LB	MW E~	MARC LK	MSTAT US	LD S~	PC E~	CARR YE~	MD E~	DDATA E~	ADDRE SS
	(4:0)	(2:0)	(2:0)	(2:0)	(5:3)	(8:6)	(3:0)	(3:0)	(1:0)											
PC+1->PC,MAR	XXX XX	00 0	XX X	10 1	00 0	01 1	0011	0011	01	0	1	1	1	0	1	1	1	1	0	m02
MDR + 0->BR	XXX XX	00 0	XX X	11 1	00 0	01 1	XXX X	0101	XX	0	1	1	0	0	1	1	1	0	1	m03
PC+1->PC,MAR	XXX XX	00 0	XX X	10 1	00 0	01 1	0011	0011	01	0	1	1	1	0	1	1	1	1	0	m04
Next(PC)	XXX XX	00 0	XX X	00 0	00 0	00 1	XXX X	XXX X	XX	0	0	1	0	0	0	0	0	0	0	m05

LOAD SP #K	BRA	BI N	CO N	I	I	I	APO RT	BPO RT	DDA TA	SH ~	SE LB	MW E~	MARC LK	MSTAT US	LD S~	PC E~	CARR YE~	MD E~	DDATA E~	ADDRE SS
	(4:0)	(2:0)	(2:0)	(2:0)	(5:3)	(8:6)	(3:0)	(3:0)	(1:0)											
PC+1->PC,MAR	XXX XX	00 0	XX X	10 1	00 0	01 1	0011	0011	01	0	1	1	1	0	1	1	1	1	0	m06
MDR + 0->SP	XXX XX	00 0	XX X	11 1	00 0	01 1	XXX X	0111	XX	0	1	1	0	0	1	1	1	0	1	m07
PC+1->PC,MAR	XXX XX	00 0	XX X	10 1	00 0	01 1	0011	0011	01	0	1	1	1	0	1	1	1	1	0	m08
Next(PC)	XXX XX	00 0	XX X	00 0	00 0	00 1	XXX X	XXX X	XX	0	0	1	0	0	0	0	0	0	0	m09

SUB	BRA	BI N	CO N	I	I	I	APO RT	BPO RT	DDA TA	SH ~	SE LB	MW E~	MARC LK	MSTAT US	LD S~	PC E~	CARR YE~	MD E~	DDATA E~	ADDRE SS
	(4:0)	(2: 0)	(2: 0)	(2: 0)	(5: 3)	(8: 6)	(3:0)	(3:0)	(1:0)											
BR-SP ->NOP	XXX XX	00 0	XX X	00 1	01 0	00 1	0101	0111	XX	0	1	1	0	1	1	1	1	1	1	m32
	0100 1	10 1	01 1	00 0	00 0	00 1	0000	0000	00	0	1	1	0	0	1	1	1	1	1	m33
SP+0- ->MAR	XXX XX	00 0	XX X	10 0	00 0	00 1	0111	0000	XX	0	0	1	1	0	1	0	1	0	0	m34
MDR+ 0- ->temp	XXX XX	00 0	XX X	11 1	00 0	01 1	XXX X	1011	XX	0	1	1	0	0	1	1	1	0	1	m35
SP+1 ->SP	XXX XX	00 0	XX X	10 1	00 0	01 1	0111	0111	01	0	1	1	1	0	1	1	1	1	0	m36
BR-SP ->NOP	XXX XX	00 0	XX X	00 1	01 0	00 1	0101	0111	XX	0	1	1	0	1	1	1	1	1	1	m37
	0010 0	10 1	01 1	00 0	00 0	00 1	0000	0000	00	0	1	1	0	0	1	1	1	1	1	m38
SP+0 - ->MAR	XXX XX	00 0	XX X	10 0	00 0	00 1	0111	0000	XX	0	0	1	1	0	1	0	1	0	0	m39
MDR - temp - -> temp	XXX XX	00 0	XX X	10 1	01 0	01 1	1011	1011	XX	0	1	1	0	0	1	1	1	0	1	m3a
Temp+ 0- ->MAR	XXX XX	00 0	XX X	10 0	00 0	00 1	1011	0000	XX	0	0	0	0	0	1	0	1	0	0	m3b
PC+1- ->PC,M AR	XXX XX	00 0	XX X	10 1	00 0	01 1	0011	0011	01	0	1	1	1	0	1	1	1	1	0	m3c
Next(P C)	XXX XX	00 0	XX X	00 0	00 0	00 1	XXX X	XXX X	XX	0	0	1	0	0	0	0	0	0	0	m3d