STATE	TB_EN	MEMORY(5)	RB(6)	ALUY(9)	ALUX(1)	PC(3)	TA(3)	TB(2)	TC(2)	TD(1)	IR(1)	TY	NS	CONTROL WORD	
S1		0 00101	000000	000000000	1	100	000	00	00	0	1	NS	S2	000101000000000000001100000000001	34
S2		1 00000	010000	000000000	0	000	010	01	00	0	0	NS	S3	100000010000000000000000010010000	34
S3		0 00000	000000	011000001	0	000	011	00	00	0	0	NS	S4	00000000000110000010000011000000	34
S4		0 00000	001001	000000000	0	000	000	00	00	0	0	DEC (BC/IB)		0000000100100000000000000000000000	34
S5		0 00000	000000	010000001	0	000	011	00	00	0	0	NS	S4	0000000000010000010000011000000	34
S6		0 00000	000000	010010001	0	000	011	00	00	0	0	NS	S4	000000000000100100100011000000	34
													34		
S7		0 00000	001111	000000000	0	000	000	00	00	0	0	IB		000000011110000000000000000000000000000	34
S8		0 00000	000000	100000000	0	000	011	00	00	0	0	NS	S9	0000000000010000000000011000000	34
S9		0 00001	000000	000000000	0	000	000	00	10	0	0	NS	S10	000001000000000000000000000000000000000	34
S10		0 00000	001110	000000000	0	000	000	00	00	0	0	IB		0000000111000000000000000000000000	34
S11		0 01010	000000	000000000	0	000	000	00	00	0	0	IB		001010000000000000000000000000000000000	34
S12		1 00000	000000	000000000	0	000	000	11	00	0	0	NS	S13	100000000000000000000000000110000	34
S13		1 00001	000000	000000000	0	000	000	10	10	1	0	NS	S14	100001000000000000000000000101010	34
S14		0 00000	000110	011010000	0	000	011	00	00	0	0	BC		00000000110011010000000011000000	34
S15		1 00000	000000	000000000	0	000	000	10	00	1	0	NS	S16	100000000000000000000000000000010	34
					0					0	0				
S16		0 00000	100000	000000000		000	000	00	01			NS	S17	000001000000000000000000000000000000000	34
S17		0 10010	000000	000000000	0	000	100	00	00	0	0	BC		01001000000000000000000100000000	34
S18		0 00000	110000	011000110	0	000	010	00	00	0	0	BC		0000001100000110001100000010000000	34
S19		0 00000	000000	010000000	0	110	000	00	00	0	0	IB		00000000000010000000110000000000	34
S20		0 00000	110000	000000000	0	000	000	00	01	0	0	NS	S21	000000110000000000000000000000000000000	34
S21		0 00000	001110	110110000	0	110	000	00	00	0	0	IB		0000000011101101100000110000000000	34
S22		0 00000	001110	000000000	0	101	000	00	00	0	0	IB		000000001110000000000101000000000	34
S23		1 00000	010000	000000000	0	000	010	11	00	0	0	NS	S3	100000010000000000000000010110000	34
S24		0 00000	000000	000000000	0	001	000	00	00	0	0	IB	00	000000000000000000000000000000000000000	34
					0					0	0			000000000000000000000000000000000000000	
S25		0 00000	000000	000000000		000	000	00	00			IB			34
S26		0 00000	000000	000000000	0	010	000	00	00	0	0	IB		00000000000000000000010000000000	34
S27		1 00000	000000	100000000	0	000	000	00	00	0	0	NS	S11	100000000010000000000000000000000000000	34
S28		0 00000	000001	00000000	0	000	000	00	00	0	0	DEC (BC/IB)		000000000100000000000000000000000000000	34
							NS: Next State	BC: Branch Cor	ntrol	IB:Instruction B	ranch				
							DEC: Decoder	TY: Type							