

DEUARCH MICROOPERATIONS TABLE		
Fetch	T0 T1	$IR \leftarrow IM[PC]$ $PC \leftarrow PC + 1$
Decode	T2	$D0..D15 \leftarrow IR[9..6]$, $Q \leftarrow IR[10]$, $S2 \leftarrow IR[1..0]$, $S1 \leftarrow IR[3..2]$, $Rd \leftarrow IR[5..4]$
Arithmetic and Logic Operations		
AND	D0T3	$Rd \leftarrow S1 \wedge S2$, $SC \leftarrow 0$
OR	D1T3	$Rd \leftarrow S1 \vee S2$, $SC \leftarrow 0$
INC	D2T3	$Rd \leftarrow S1 + 1$, $SC \leftarrow 0$
DBT	D3T3	$Rd \leftarrow S1 >>$, $SC \leftarrow 0$
DBL	D4T3	$Rd \leftarrow S1 + S1$, $SC \leftarrow 0$
ADD	D5T3	$Rd \leftarrow S1 + S2$, $SC \leftarrow 0$
Data Transfer		
LD	D6QT3 D6Q'T3 D6Q'T4	$Rd \leftarrow S1S2$, $SC \leftarrow 0$ $AR \leftarrow S1S2$ $Rd \leftarrow DM[AR]$, $SC \leftarrow 0$
TSF	D7T3	$Rd \leftarrow S1$, $SC \leftarrow 0$
ST	D8T3 D8T4	$AR \leftarrow S1S2$, $DM[AR] \leftarrow Rd$, $SC \leftarrow 0$
Program Control		
RET	D9T3 D9T4	$PC \leftarrow SM[SP]$ $SP \leftarrow SP + 1$, $SC \leftarrow 0$
CAL	D10T3 D10T4 D10T5	$SP \leftarrow SP - 1$ $SM[SP] \leftarrow PC$ $PC \leftarrow IR[4..0]$, $SC \leftarrow 0$
JMP	D11T3	$PC \leftarrow IR[4..0]$, $SC \leftarrow 0$
CJMP	D12T3	IF $V=1$ THEN $PC \leftarrow IR[4..0]$, $SC \leftarrow 0$
JMR	D13T3	$PC \leftarrow PC + IR[3..0]$, $SC \leftarrow 0$
HLT	D14T3	$SC \leftarrow 0$

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