PUSH

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PUSH	Push Top of Return Stack
Syntax:	[*label*] PUSH
Operands:	None
Operation:	(PC+2) $\rightarrow$ TOS
Status Affected:	None
Encoding:	0000 0000 0000 0101
Description:	The PC+2 is pushed onto the top of the return stack. The previous TOS value is pushed down on the stack. This instruction allows to implement a software stack by modifying TOS, and then push it onto the return stack.
Words:	1
Cycles:	1

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	PUSH PC+2 onto return stack	No operation	No operation

Example: PUSH

Before Instruction

TOS	=	00345Ah
PC	=	000124h

After Instruction

PC	=	000126h
TOS	=	000126h
Stack (1 level down)	=	00345Ah

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