

## Control signals



### Flags

N [Yellow] Z [Yellow] V [Yellow] C [Yellow]

LD<sub>A</sub> LD<sub>T</sub>  
LD<sub>X</sub> LD<sub>Y</sub>  
LD<sub>SP</sub> LD<sub>PC</sub>  
LD<sub>TA</sub> LD<sub>I</sub>

LD<sub>R</sub> LD<sub>CC</sub>  
f<sub>3</sub> f<sub>2</sub>  
f<sub>1</sub> f<sub>0</sub>  
NF OE<sub>A</sub>

OE<sub>R</sub> OE<sub>CC</sub>  
OE<sub>X</sub> OE<sub>Y</sub>  
OE<sub>SP</sub> OE<sub>PC</sub>  
DEC<sub>SP</sub> INC<sub>SP</sub>

INC<sub>PC</sub> g<sub>14</sub>  
g<sub>13</sub> g<sub>12</sub>  
MW g<sub>9</sub>  
MR g<sub>8</sub>

g<sub>7</sub> g<sub>6</sub>  
g<sub>5</sub> g<sub>4</sub>  
g<sub>3</sub> g<sub>2</sub>  
g<sub>1</sub> g<sub>0</sub>

### OP code

I<sub>03</sub> [Yellow]  
I<sub>04</sub> [Yellow]  
I<sub>DF</sub> [Yellow]  
I<sub>EF</sub> [Yellow]

Q<sub>4</sub> [Green]  
Q<sub>5</sub> [Green]  
Q<sub>6</sub> [Green]  
Q<sub>7</sub> [Green]  
Q<sub>8</sub> [Green]  
Q<sub>9</sub> [Green]  
Q<sub>10</sub> [Green]  
Q<sub>11</sub> [Green]  
Q<sub>12</sub> [Green]  
Q<sub>13</sub> [Green]  
Q<sub>14</sub> [Green]  
Q<sub>15</sub> [Green]

### State



## Control signals

LD<sub>A</sub>

LD<sub>T</sub>

LD<sub>X</sub>

LD<sub>Y</sub>

LD<sub>SP</sub>

LD<sub>PC</sub>

LD<sub>TA</sub>

LD<sub>I</sub>

LD<sub>R</sub>

LD<sub>CC</sub>

f<sub>3</sub>

f<sub>2</sub>

f<sub>1</sub>

f<sub>0</sub>

NF

OE<sub>A</sub>

OE<sub>R</sub>

OE<sub>CC</sub>

OE<sub>X</sub>

OE<sub>Y</sub>

OE<sub>SP</sub>

OE<sub>PC</sub>

DEC<sub>SP</sub>

INC<sub>SP</sub>

INC<sub>PC</sub>

g<sub>14</sub>

g<sub>13</sub>

MW

MR

g<sub>3</sub>

g<sub>2</sub>

g<sub>9</sub>

g<sub>8</sub>

g<sub>7</sub>

g<sub>6</sub>

g<sub>5</sub>

g<sub>4</sub>

g<sub>3</sub>

g<sub>2</sub>

g<sub>1</sub>

g<sub>0</sub>

## Flags

N

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## OP code

I<sub>03</sub>

I<sub>04</sub>

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Q<sub>4</sub>

Q<sub>5</sub>

Q<sub>6</sub>

Q<sub>7</sub>

Q<sub>8</sub>

Q<sub>9</sub>

Q<sub>10</sub>

Q<sub>11</sub>

Q<sub>12</sub>

Q<sub>13</sub>

Q<sub>14</sub>

Q<sub>15</sub>

## State

**N**

**Z**

**V**

**C**

$LD_A$	$LD_T$	$LD_R$	$OE_R$	$INC_{PC}$	$g_7$
$LD_X$	$LD_Y$	$f_3$	$OE_{CC}$	$g_{14}$	$g_6$
$LD_{SP}$	$LD_{PC}$	$f_1$	$OE_Y$	$g_{13}$	$g_5$
$LD_{TA}$	$LD_I$	$f_0$	$OE_{PC}$	$g_{12}$	$g_4$
		$NF$	$DEC_{SP}$	$MR$	$g_3$
			$INC_{SP}$	$g_9$	$g_2$
				$g_8$	$g_1$
					$g_0$

$I_{03}$

$I_{04}$

$I_{DF}$

$I_{EF}$

$Q_4$

$Q_5$

$Q_6$

$Q_7$

$Q_8$

$Q_9$

$Q_{10}$

$Q_{11}$

$Q_{12}$

$Q_{13}$

$Q_{14}$

$Q_{15}$

**Control signals**

**Flags**

**OP code**

**State**



