IN r, (C)

Load register r from port(C)

Function: $r \leftarrow (C)$

Format:

| 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | byte 1: ED |

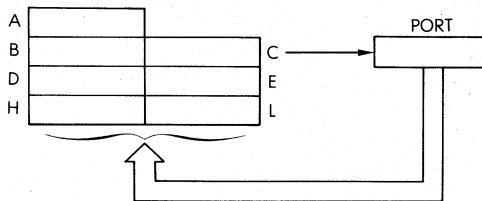| 0 | 1 | ← r → | 0 | 0 | 0 | byte 2 |
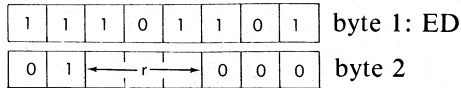
Description: The peripheral device addressed by the contents of the C register is read and the result is loaded into the specified register.
C provides bits A0 to A7 of the address bus.
B provides bits A8 to A15.

Data Flow:

r may be any one of:

A – 111	E – 011
B – 000	H – 100
C – 001	L – 101
D – 010	

Timing: 3 M cycles; 12 T states; 6 usec @ 2 MHz

Addressing Mode: External.

Byte Codes:

r:	A	B	C	D	E	H	L
ED	78	40	48	50	58	60	68

Flags:

S	Z		H		ⓟ/v	N	C	
●	●		●			●	○	

It is important to note that IN A,(N) does not have any effect on the flags, while IN r,(C) does.

Example: IN   D, (C)

Before: After:

```
ED
50
```
OBJECT CODE

D | 09 |

| A5 | C
| 6A | PORT
  A5

D | 6A | PORT

| A5 | C
| 6A | PORT
  A5