

# PROGRAMMING THE Z80

**EX (SP), IX** Exchange IX with top of stack.

*Function:* (SP) ↔ IX<sub>low</sub>; (SP + 1) ↔ IX<sub>high</sub>

*Format:*

1	1	0	1	1	1	0	1
---	---	---	---	---	---	---	---

byte 1: DD

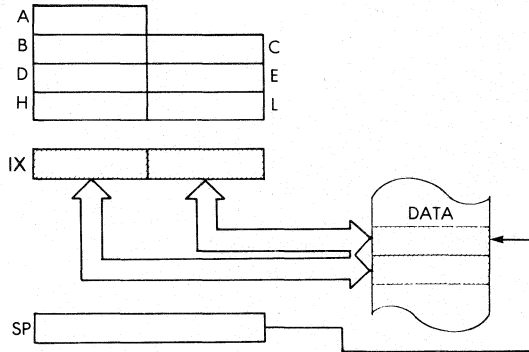
1	1	1	0	0	0	1	1
---	---	---	---	---	---	---	---

byte 2: E3

*Description:*

The contents of the low order of the IX register are exchanged with the contents of the memory location addressed by the stack pointer. The contents of the high order of the IX register are exchanged with the contents of the memory location immediately following the one addressed by the stack pointer.

*Data Flow:*



*Timing:* 6 M cycles; 23 T states; 11.5 usec @ 2 MHz

*Addressing Mode:* Indirect.

*Flags:*

S	Z		H	P/V	N	C

(no effect).

# THE Z80 INSTRUCTION SET

*Example:*

**EX (SP), IX**

**Before:**

**After:**

IX 

9234
------

IX 

016B
------

SP 

0402
------

SP 

0402
------

