PROGRAMMING THE Z80

ADC HL, ss Add with carry HL and register pair ss.

Function:

 $HL \leftarrow HL + ss + C$

Format:

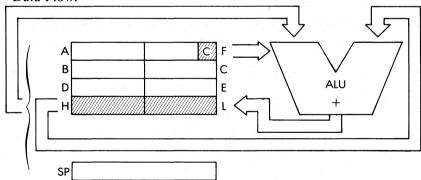
| ı | 1 | 1,1 | 0 | 1 | 1 | 0 | 1 | byte 1: ED | | |
|---|---|-----|---|---|---|---|---|------------|--|--|
| | | | | | | | | | | |
| 0 | 1 | s | s | 1 | 0 | 1 | 0 | byte 2 | | |

Description:

The contents of the HL register pair are added to the contents of the specified register pair, and then the contents of the carry flag are added. The final result is stored back in HL. ss may be any one of:

$$BC - 00$$
 $HL - 10$ $DE - 01$ $SP - 11$





Timing:

4 M cycles; 15 T states: 75 usec @ 2 MHz

Addressing Mode: Implicit.

Byte Codes:

ss: BC DE HL SP ED- 4A 5A 6A 7A

THE Z80 INSTRUCTION SET

Flags:

| S | Z | Н | P/V | Ν | С |
|---|---|---|-----|---|---|
| • | | ? | • | 0 | |

H is set if there is a carry from bit 11.

Example:

ADC HL, DE

Before:

After:

