

The half subtractors subtracts 1's place (LSB). The B_0 output of half subtractor is tied to the 2's Full subtractor. The output B_0 of each subtractor is connected to the next more significant digit's borrow input. These borrow lines keep track of the borrows.

✓
Summary:

3. Parallel Subtractor

Ref. To Khein
p-133

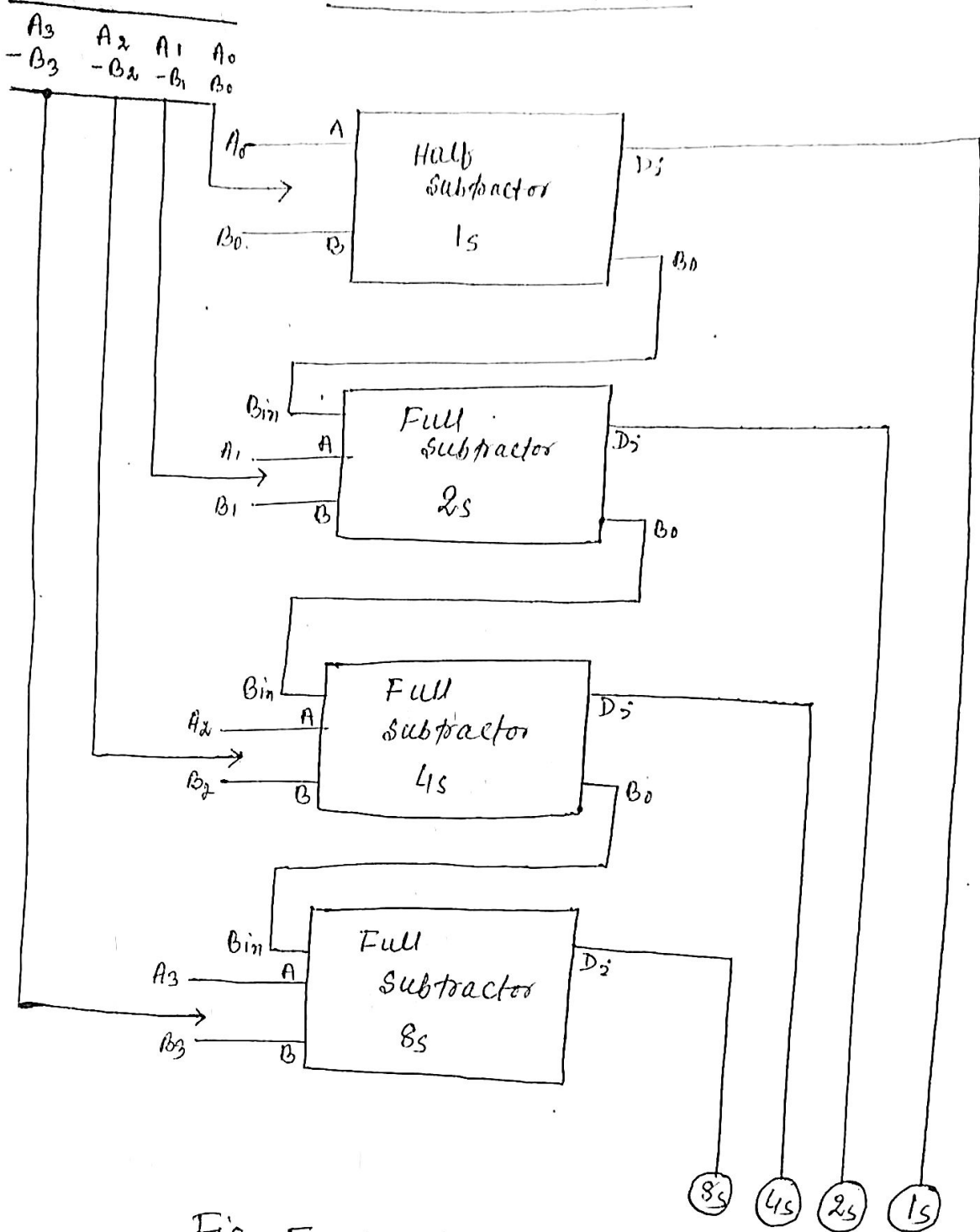


Fig-5 - 4 bit Parallel Subtractor.

Half & Full subtractors are wired together to perform as a parallel subtractor [shown in fig 5]. one half and 3 - full subtractor are used to make a 4-bit parallel subtractor that can subtract binary numbers $B_3 B_2 B_1 B_0$ from binary number $A_3 A_2 A_1 A_0$.