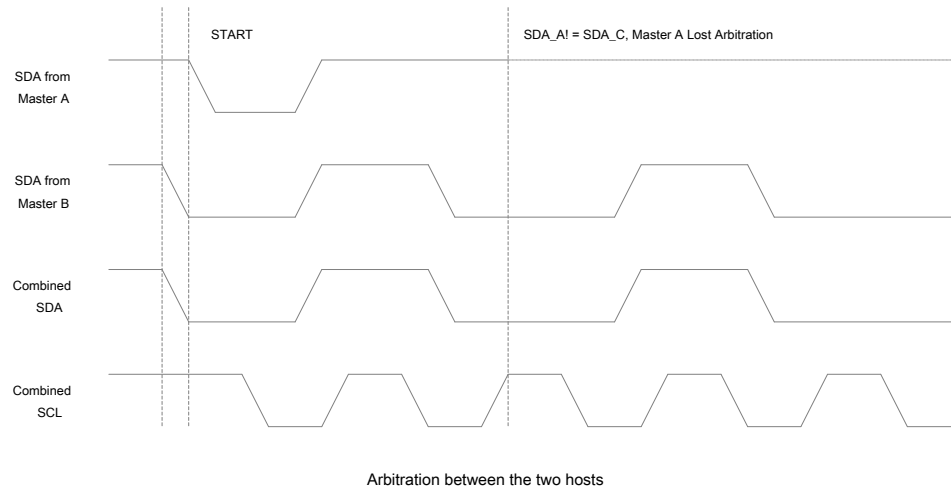After the output data of all the masters continuously monitoring SDA Line to implement the arbitration. If the SDA Numerical values of the host read back output does not match, the hosts lost the arbitration. It is noted that the host outputs a high level SDA , And another master outputs a low level SDA When will lose the arbitration. The hosts lost the arbitration shall be immediately converted to the slave mode, and detects whether being addressed. The host must be lost arbitration SDA Line is set high, but a clock signal may also be generated before the end of the current data or address packet. Arbitration will continue until only one host, which may consume more bits. When the master unit from the same address, the packet will continue arbitration.

Arbitration between the two hosts

Note that arbitration is not allowed in the following situations:

- One REPEATED START Between a state and a data bit;

- One STOP Between a state and a data bit;

- One REPEATED START State and STOP Between states;

Applications must consider the above, to ensure that these illegal arbitration case does not appear. This means that in a multi-host system, all data must be transmitted by the same SLA + R / W And data packets. In other words, all of the transmission must contain the same number of data packets, otherwise the result of the arbitration can not be defined.

TWI Module Summary

TWI FIG module configuration as shown in FIG.