SP507: FAQ



Sipex Part: SP507 Date: Feb6-07

Question:

We are seeing an impedance mismatch for signals when received by the SP507. The signals are transmitted by a Fireberd 6000A bit error rate tester. Measuring the resistance between the two input leads with a multimeter shows a value of approximately 180Ω instead of the 120Ω listed in the data sheet. Does this problem sound familiar? Are there special considerations for driving the termination enable input pin such as input current?

Answer:

Our SP507 data sheet specifies V.35 Receiver source impedance to be from 90Ω to 110Ω . To measure this specification we use test circuit as shown in figure 30 of the data sheet. Using a Digital Multimeter (DMM) may not give you accurate results for input Z. The TERM OFF input is TTL type and does not require any special considerations.

Question:

The SP507 has a low pulse time problem.

Answer:

Crossing over the clock is a valid solution. This cancels the delays. It has been used by other customers. As long as the polarity of the final signal is correct then compatibility is assured. Note that for some applications, the SP509 would perform better in this when speed is a consideration. It has faster transition times.