

Answer on Question #46085 – Physics - Electric Circuits

Explain the working of synchronous counter.

Solution:

With the Synchronous Counter, the external clock signal is connected to the clock input of EVERY individual flip-flop within the Counter so that all of the flip-flops are clocked together simultaneously (in parallel) at the same time giving a fixed time relationship. In other words, changes in the output occur in “synchronisation” with the clock signal.

The result of this synchronisation is that all the individual output bits changing state at exactly the same time in response to the common clock signal with no ripple effect and therefore, no propagation delay.

