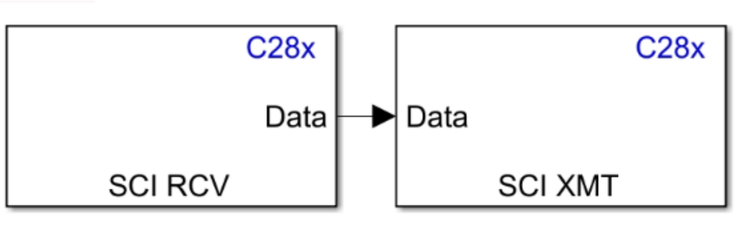
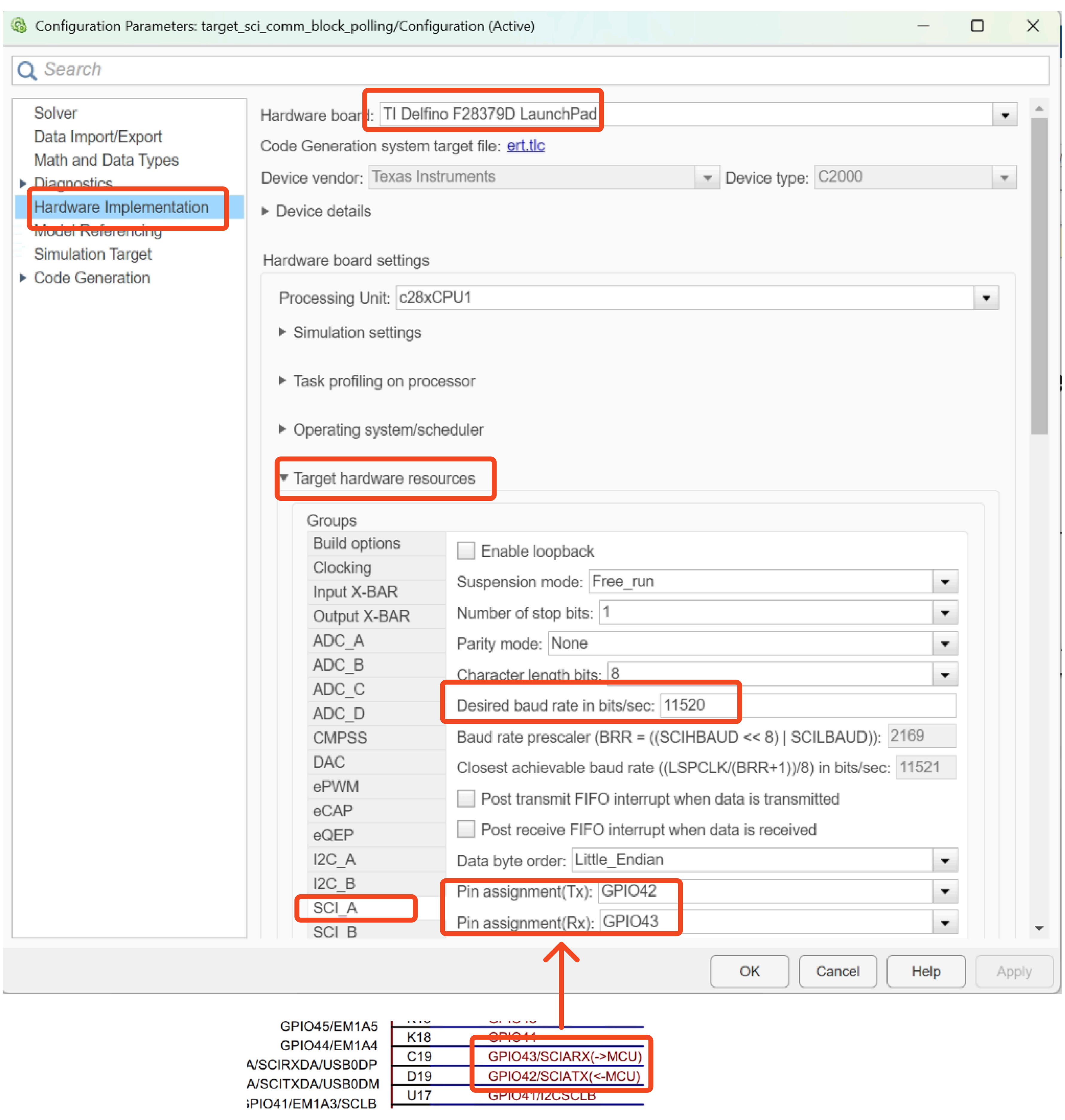
Eg. SCI comm with built-in blocks in polling mode

DE LORENZO

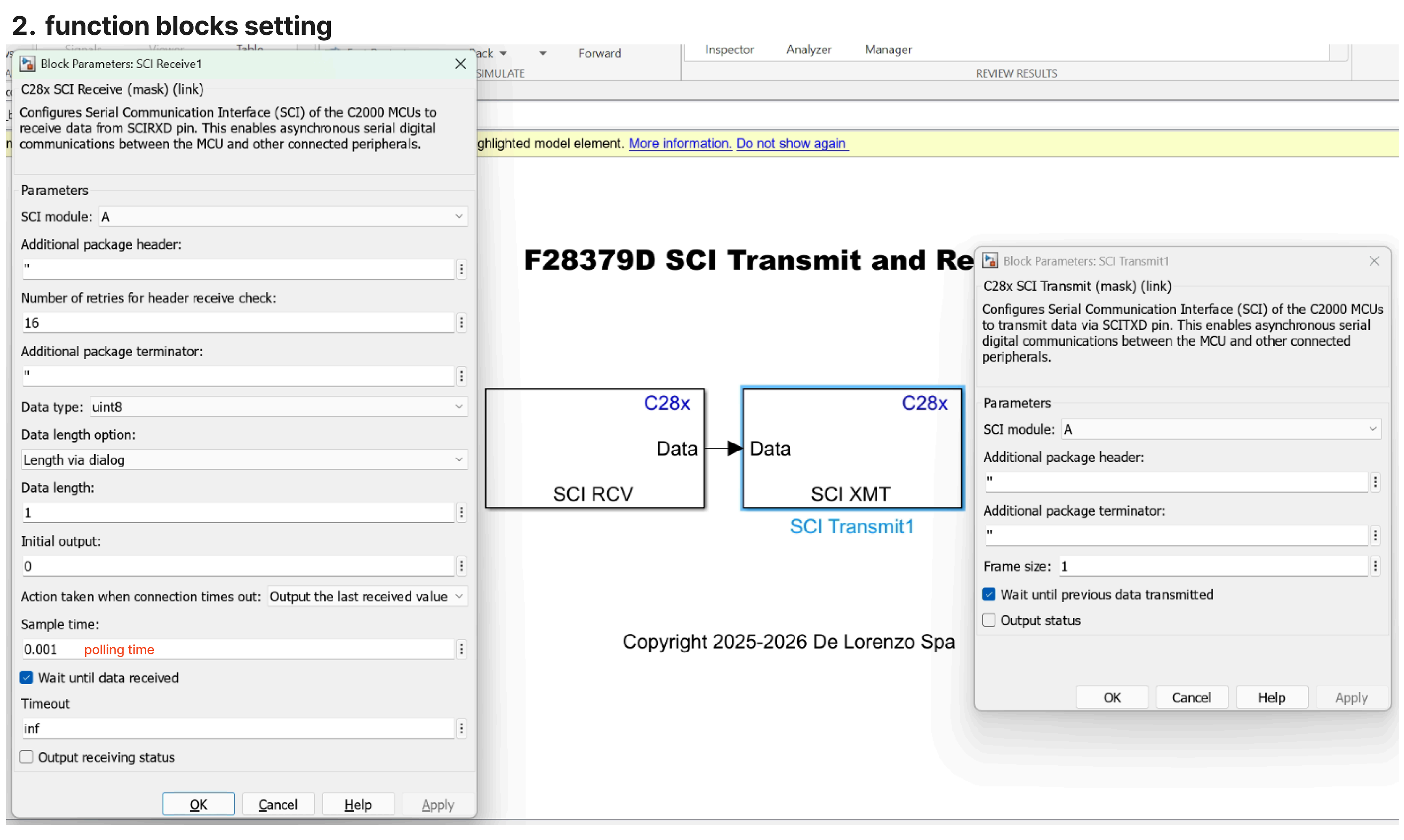
target model



1. configuration



2. function blocks setting



Note:

Blocking mode - Wait until data received + Timeout = inf. for cases where you're sure there will be data and willing to wait.

Blocking mode with Timeout - Wait until data received + Timeout.

Select the Wait until data received parameter and set Timeout to any finite value greater than 0. In this mode, if data is not available in FIFO to read, the block checks the FIFO status until the timeout value is reached. If data is not available in FIFO to read within that time, then the SCI Receive block outputs its status as timeout.

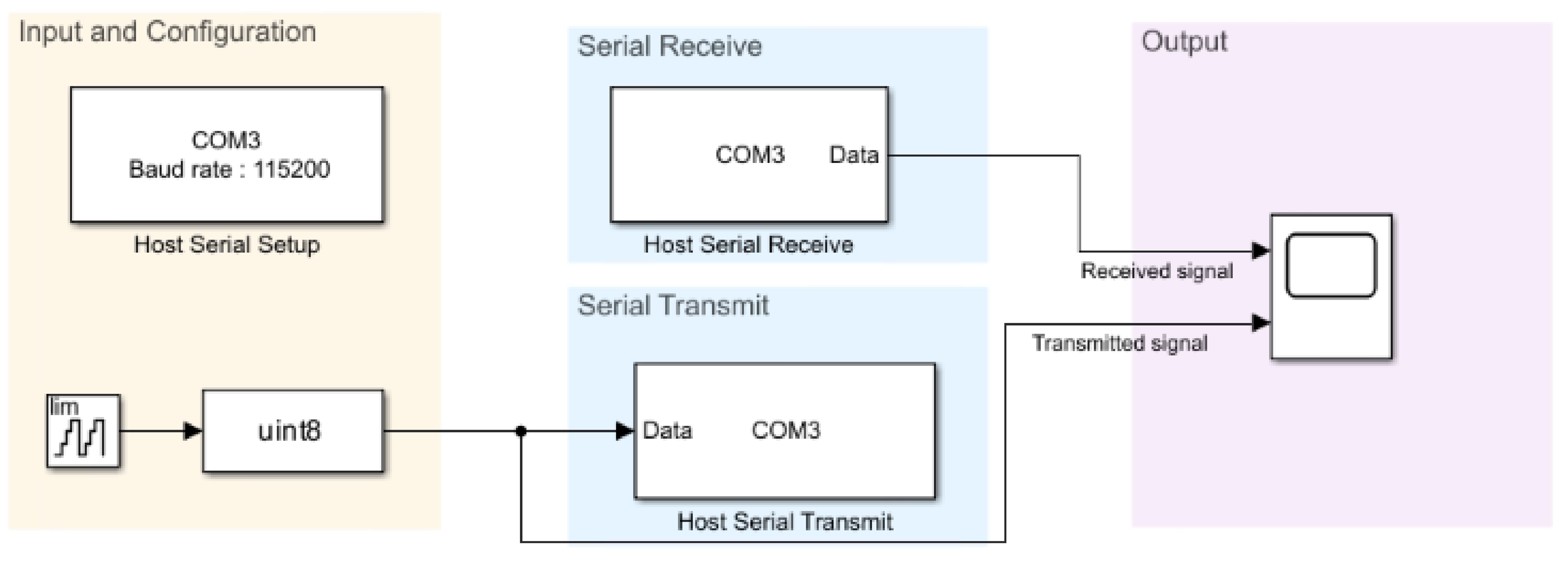
Non-Blocking mode - DO NOT wait until data received. for continuous, non-interrupted systems.

warning:

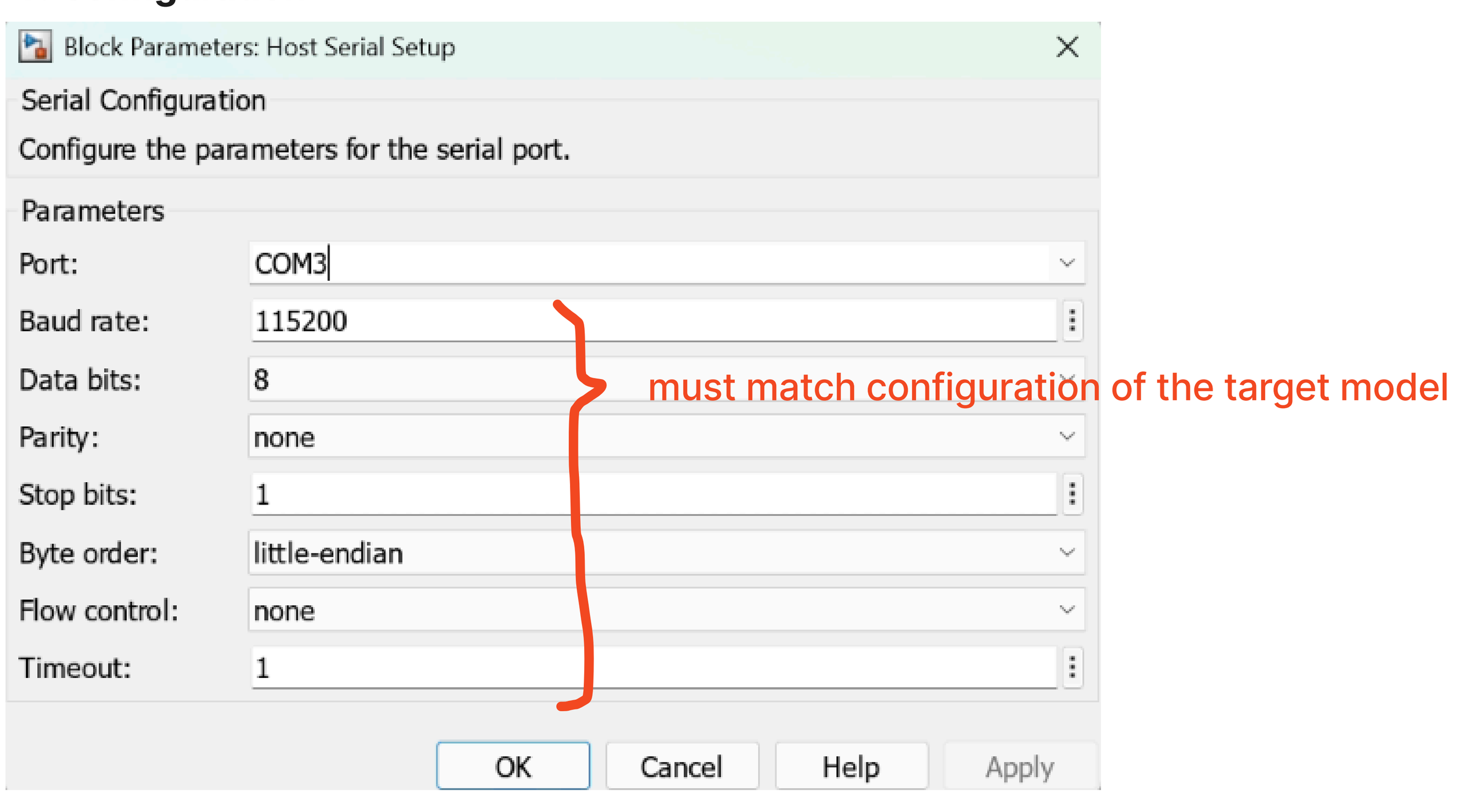
to receive data of length more than the FIFO length, use blocking modes to ensure data integrity.

3. Build, Deploy & Start target model

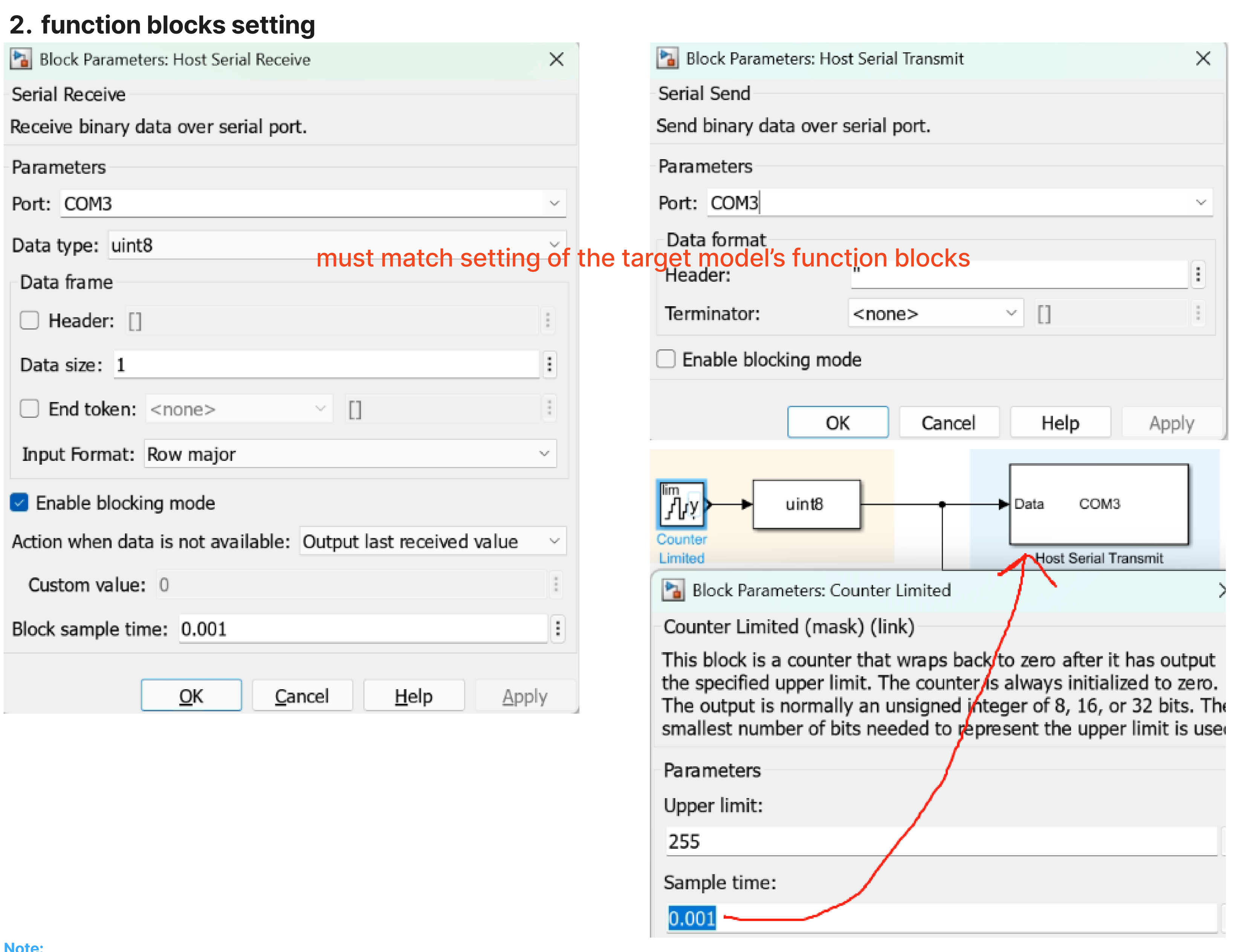
host model



1. configuration



2. function blocks setting



Note:

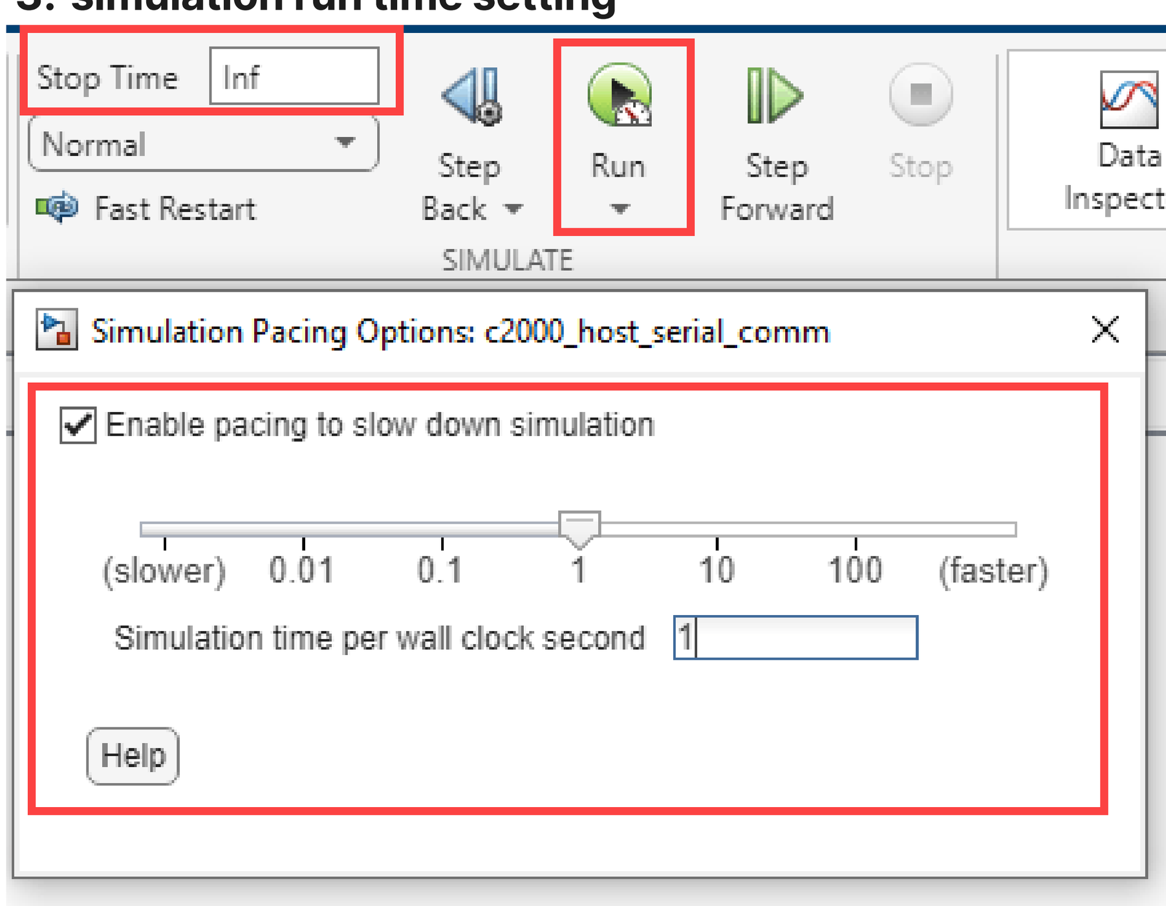
RX block sample time / data size = TX block sample time in another model.

In this case,

target TX block is driven by target RX block, whose polling time is known, i.e 0.001s. So 0.001(host RX)/1=0.001(target TX) stands.

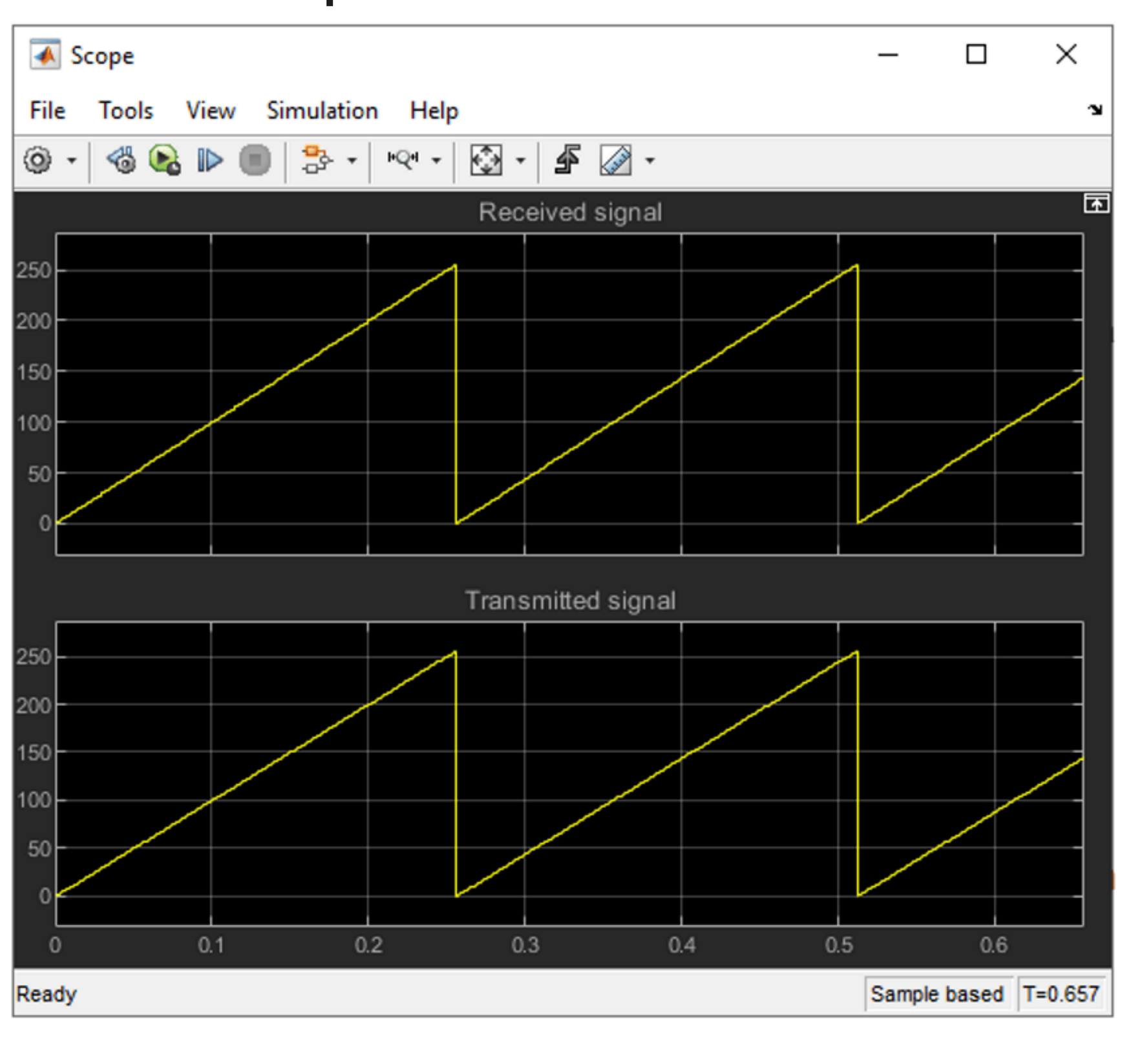
host TX block is driven by a counter, whose sampling time is 0.001, i.e. 0.001(target RX)/1=0.001(host TX) also stands.

3. simulation run time setting



enable the Simulation Pacing ensures real time communication with target

4. run and compare



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