summary:

the IP connects with the master and receive the data of the

system based on the internal ready and the valid data,

when both of them on 1 than the IP taked the incoming data

and sends it to the next stage.

the IP also notice the system when it is ready to receive new data.

inputs:

clk

resetN

ready\_internal

valid\_sys

data\_from\_sys

output:

data\_to\_encrypt

ready