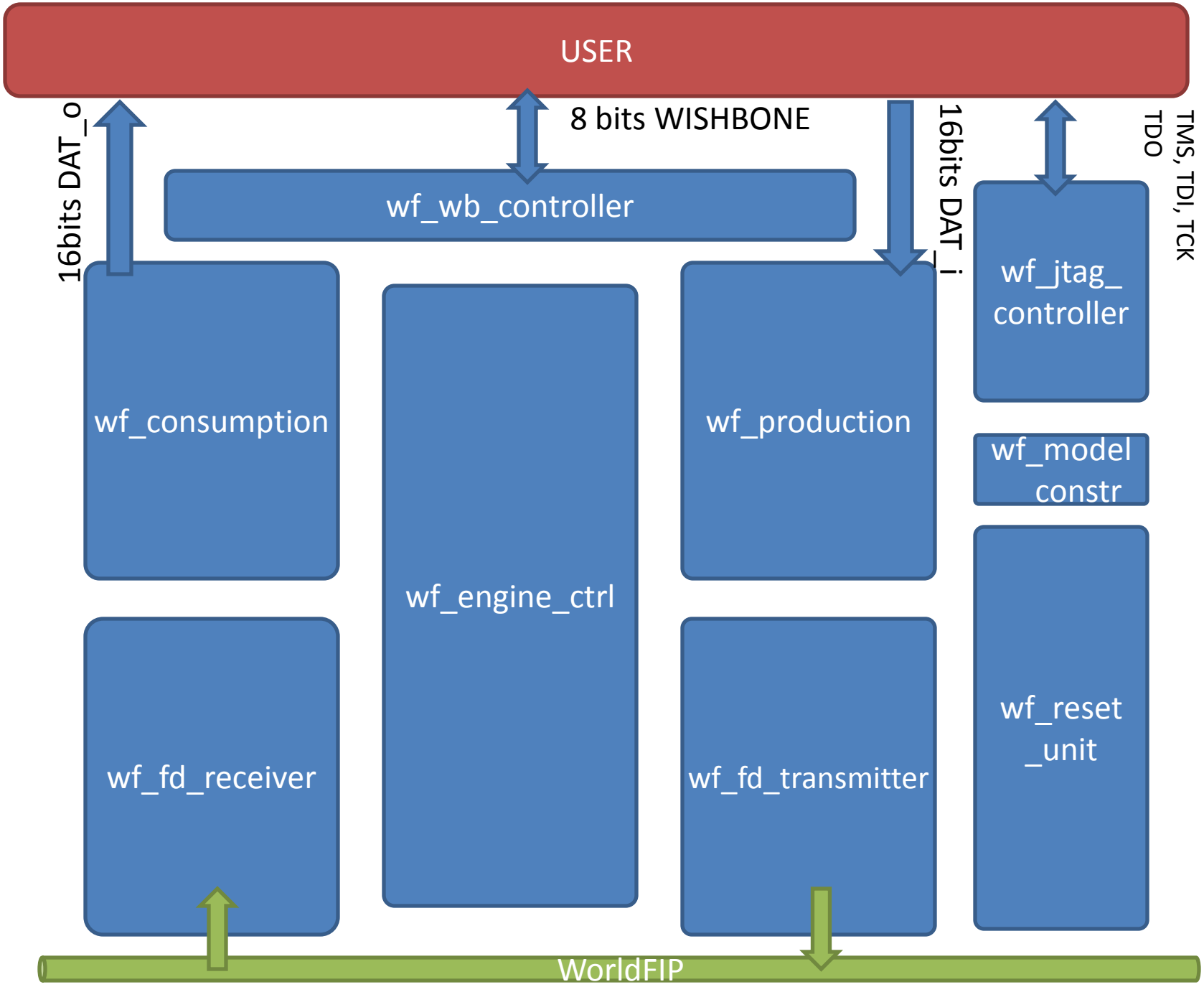
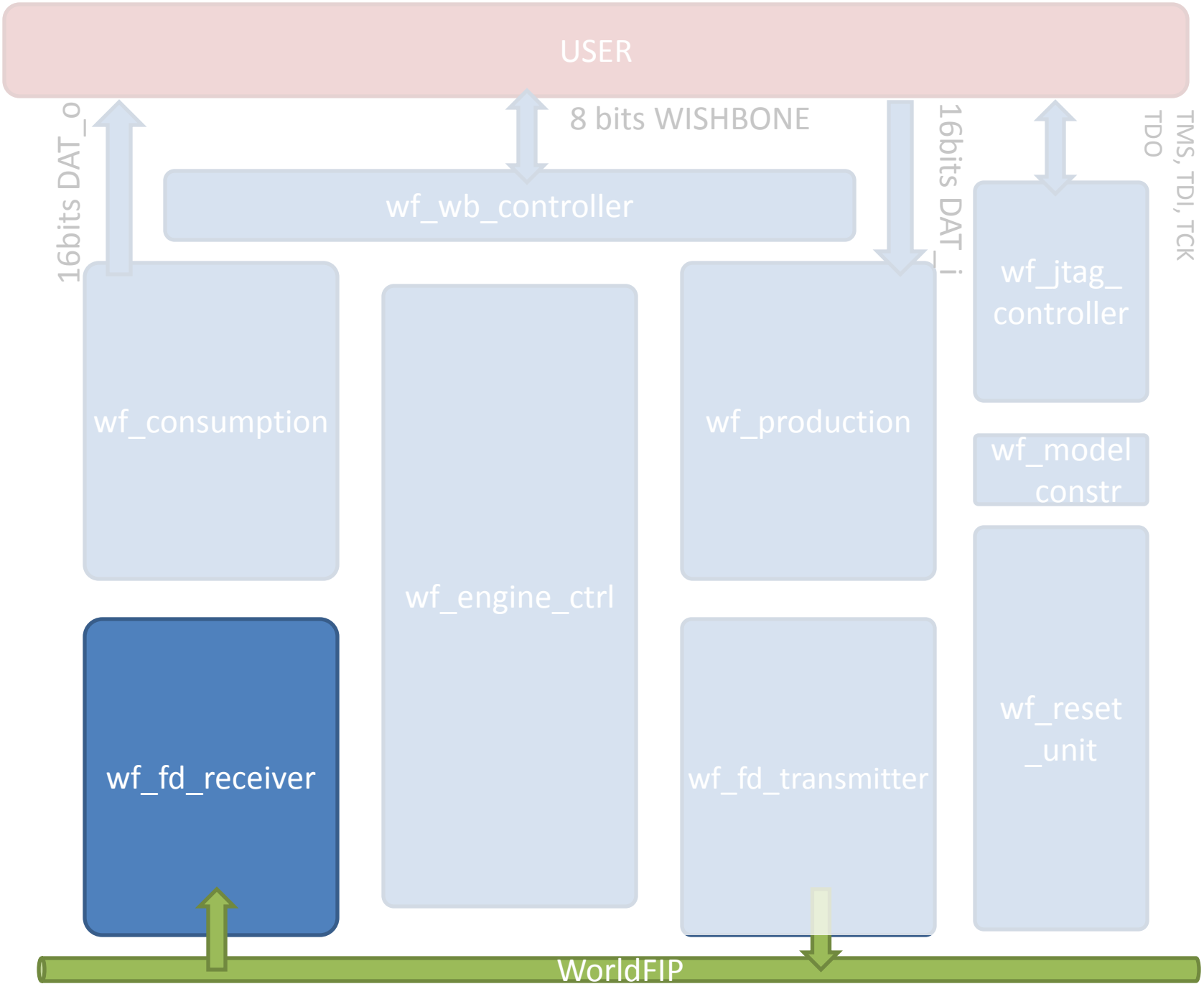
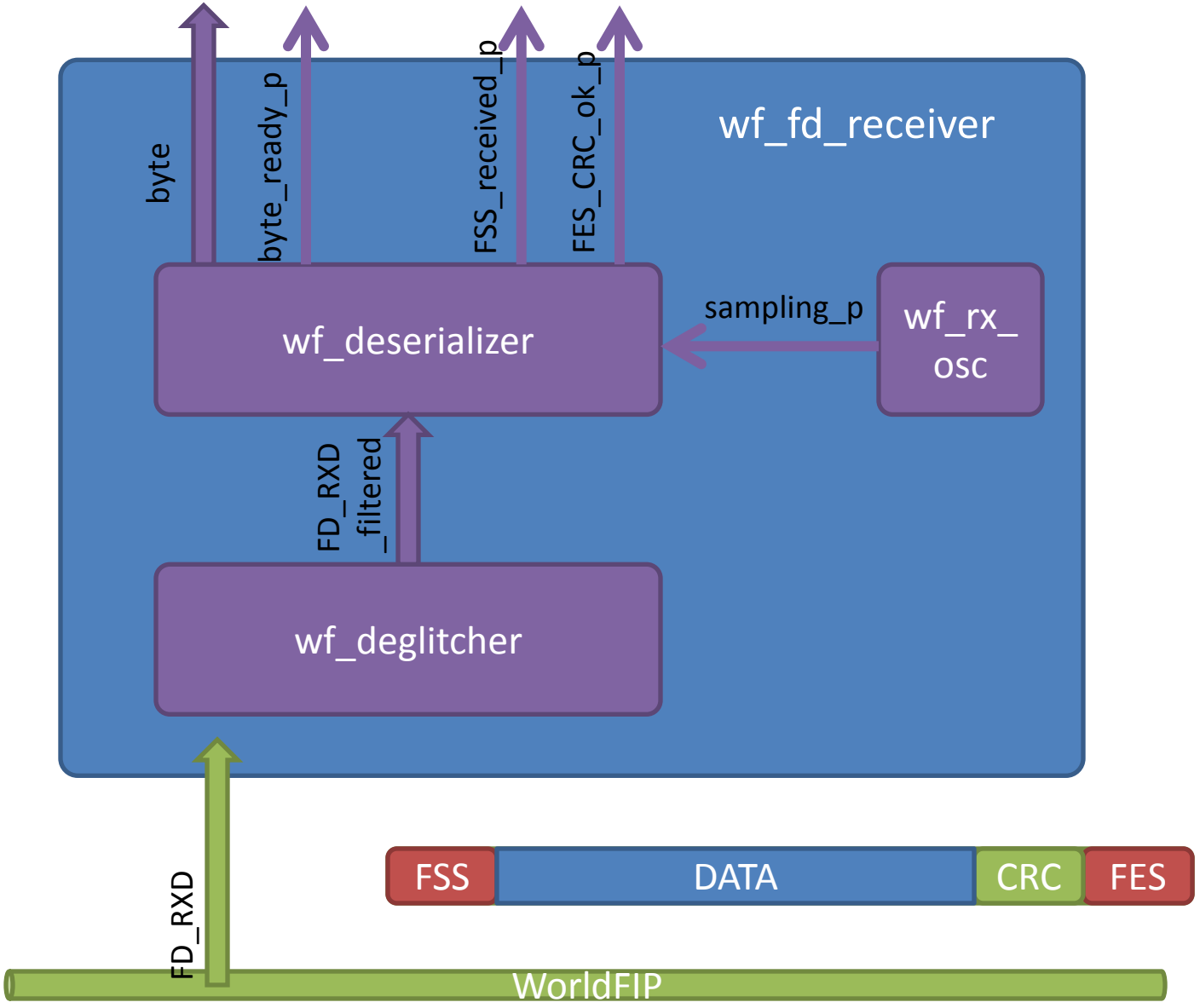
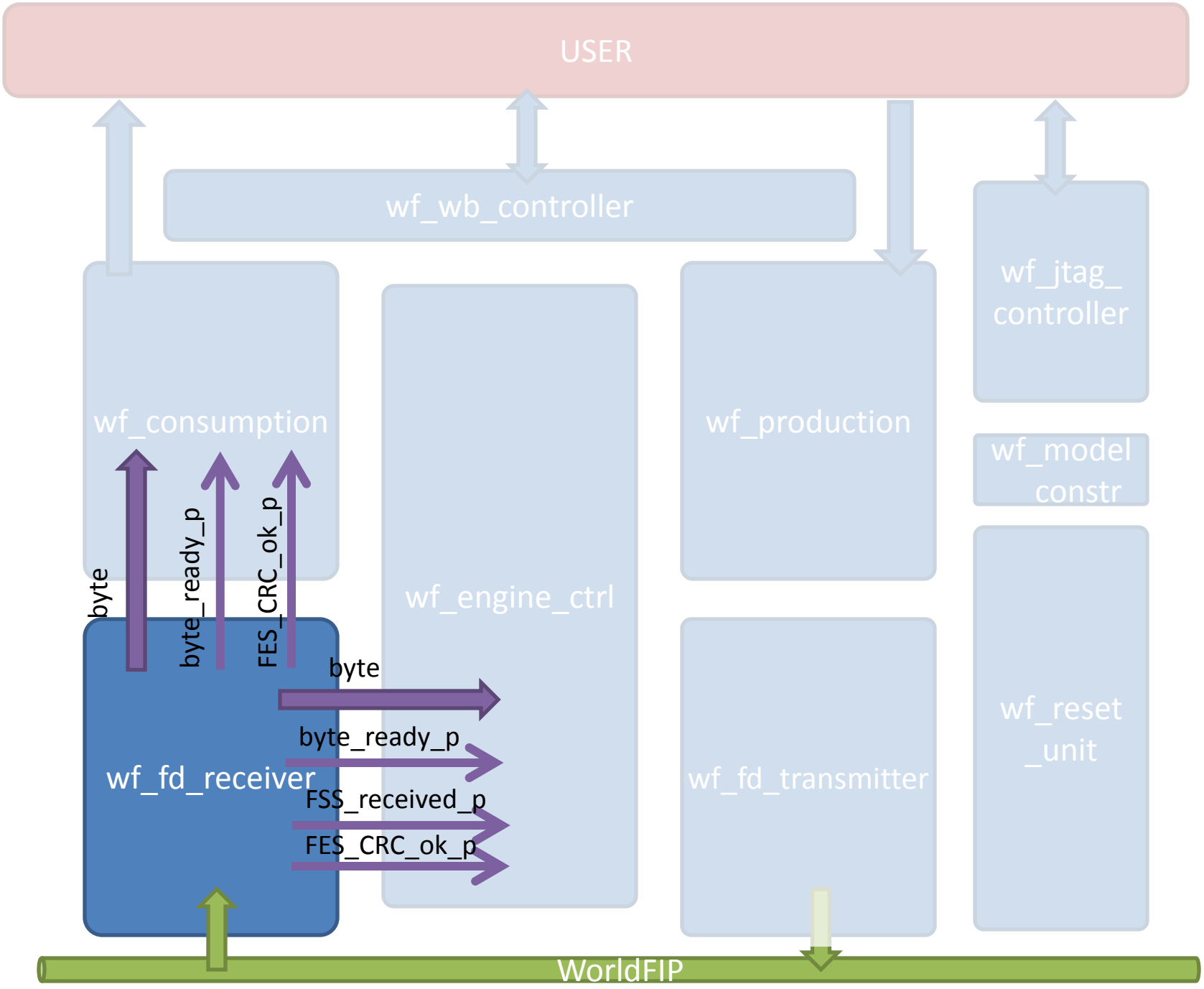
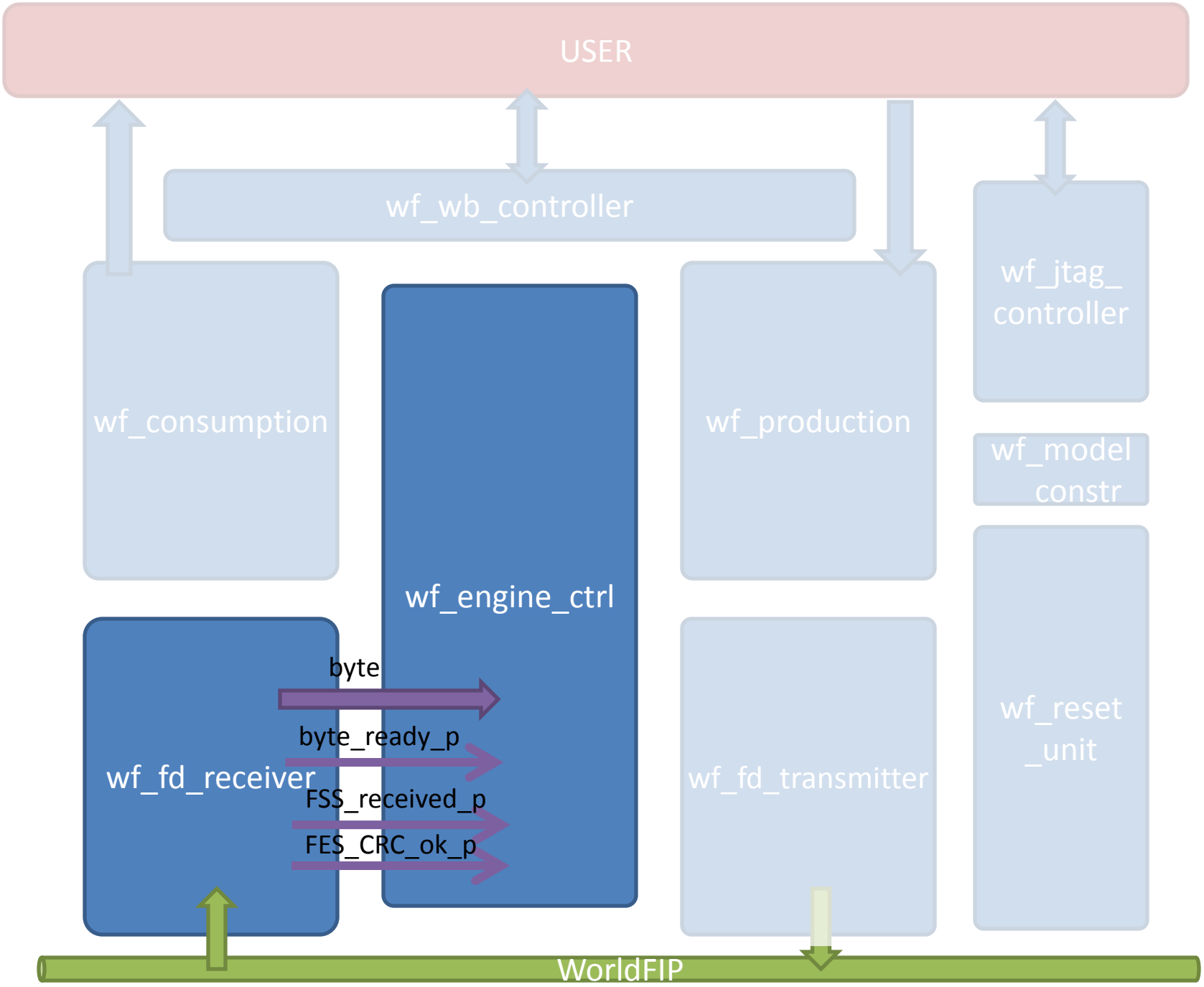
nanoFIP second code review
14 Nov 2011

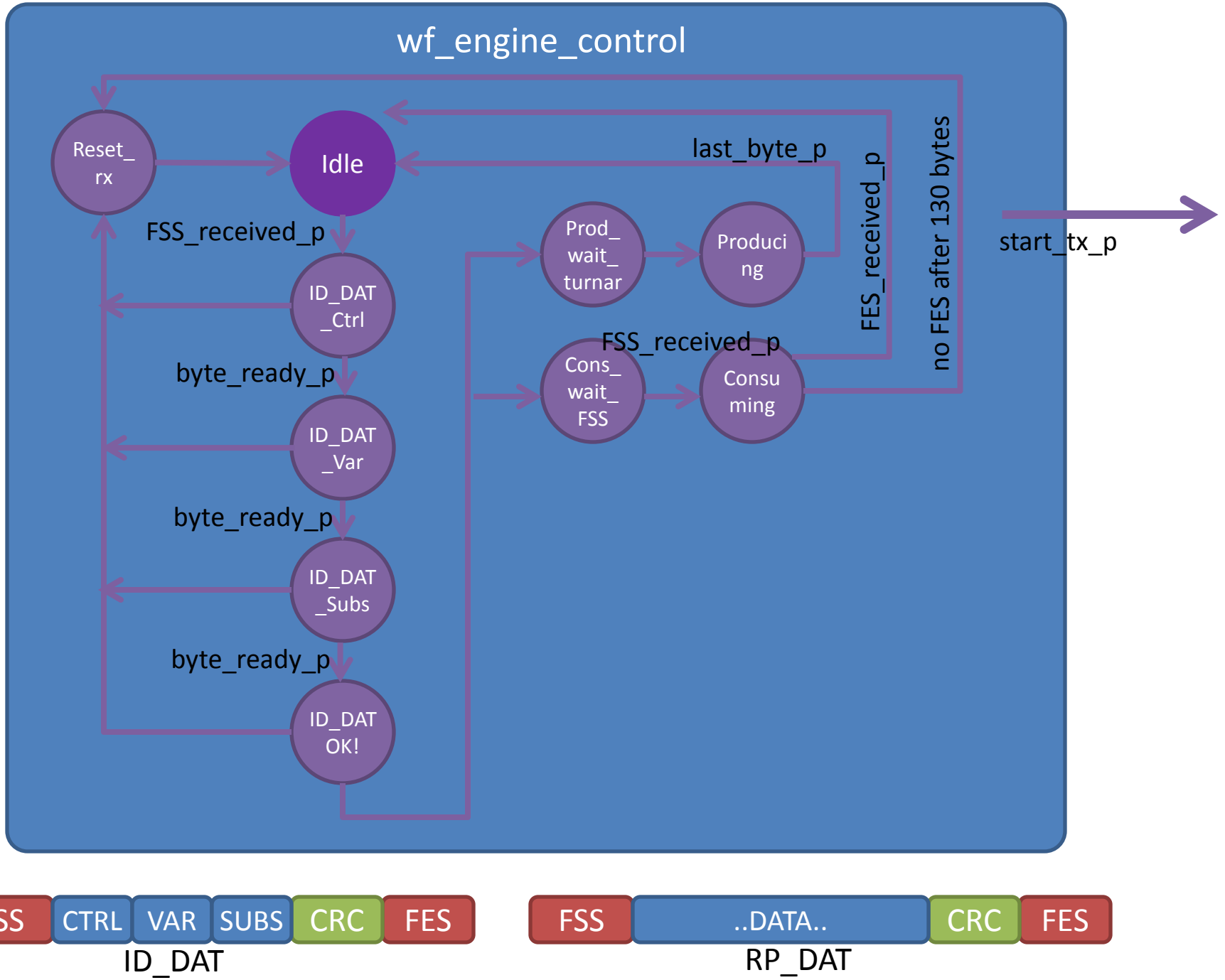

USER
16bits DAT_o
8 bits WISHBONE
16bits DAT_i
TMS, TDI, TCK
TDO
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_engine_ctrl
wf_production
wf_model
constr
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP

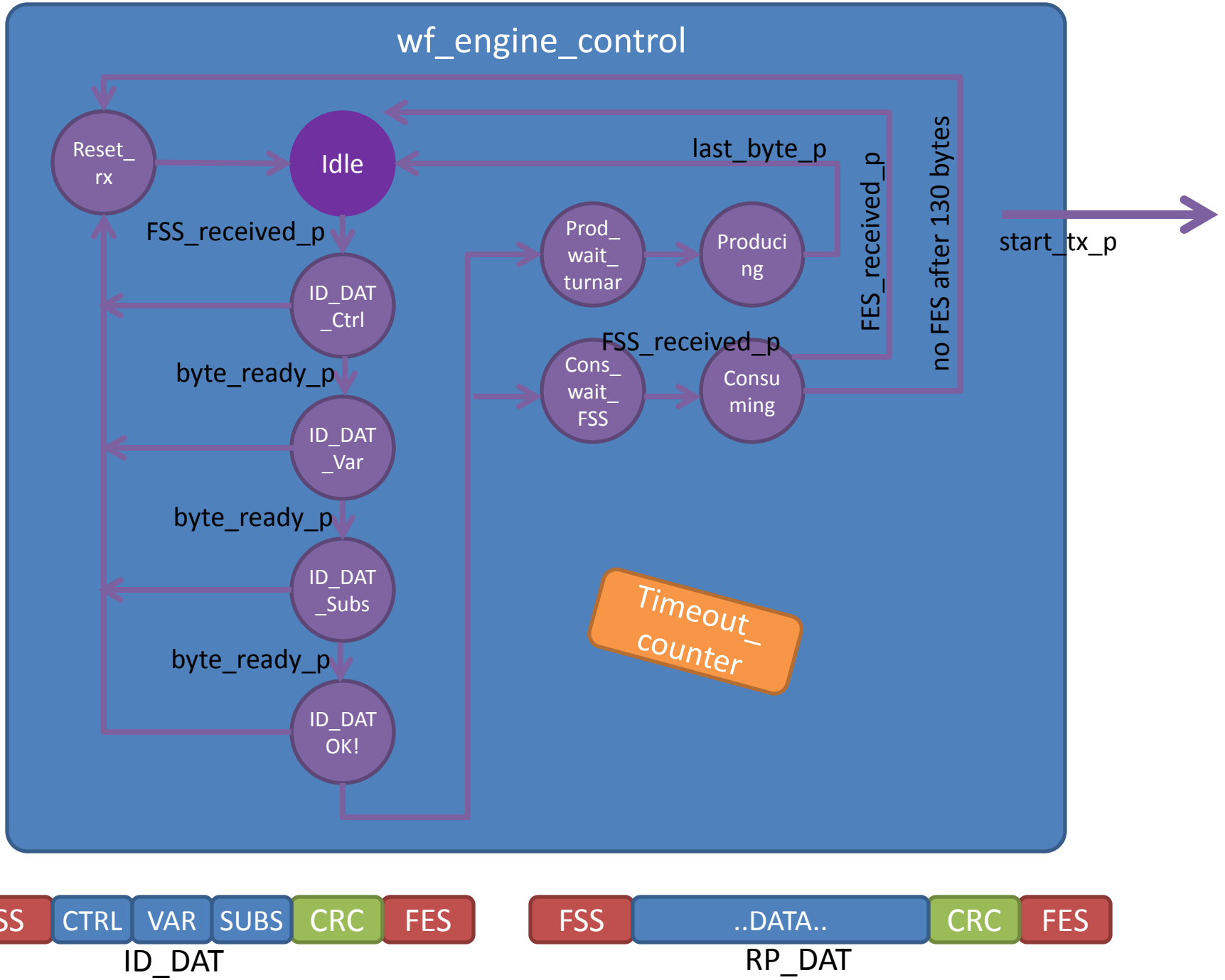

USER
8 bits WISHBONE
16bits DAT_o
16bits DAT_i
TMS, TDI, TCK
TDO
wf_wb_controller
wf_consumption
wf_engine_ctrl
wf_production
wf_jtag_
controller
wf_model
constr
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP

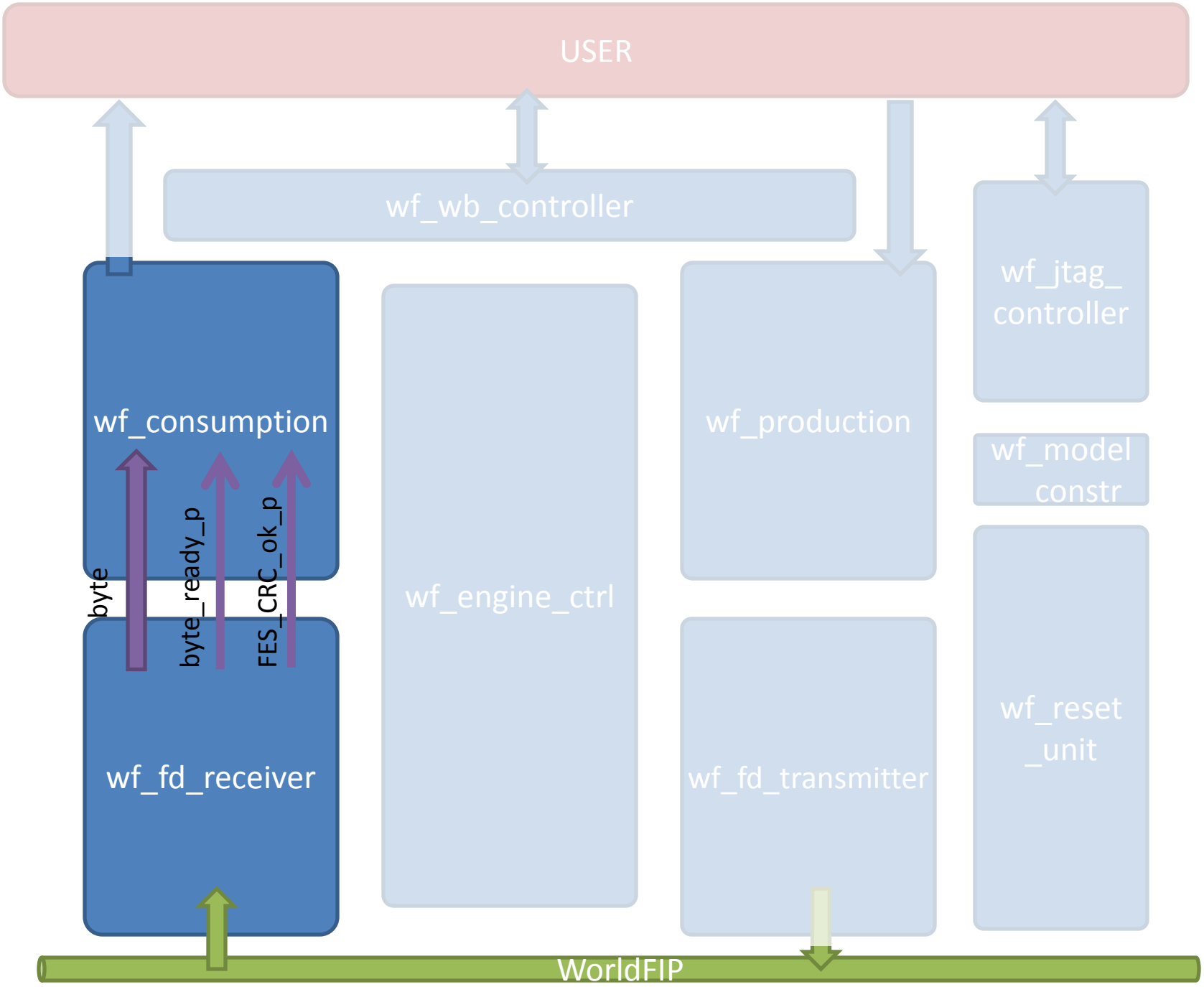

wf_fd_receiver
byte
byte_ready_p
FSS_received_p
FES_CRC_ok_p
wf_deserializer
sampling_p
wf_rx_
osc
FD_RXD
_filtered
wf_deglitcher
FD_RXD
FSS
DATA
CRC
FES
WorldFIP

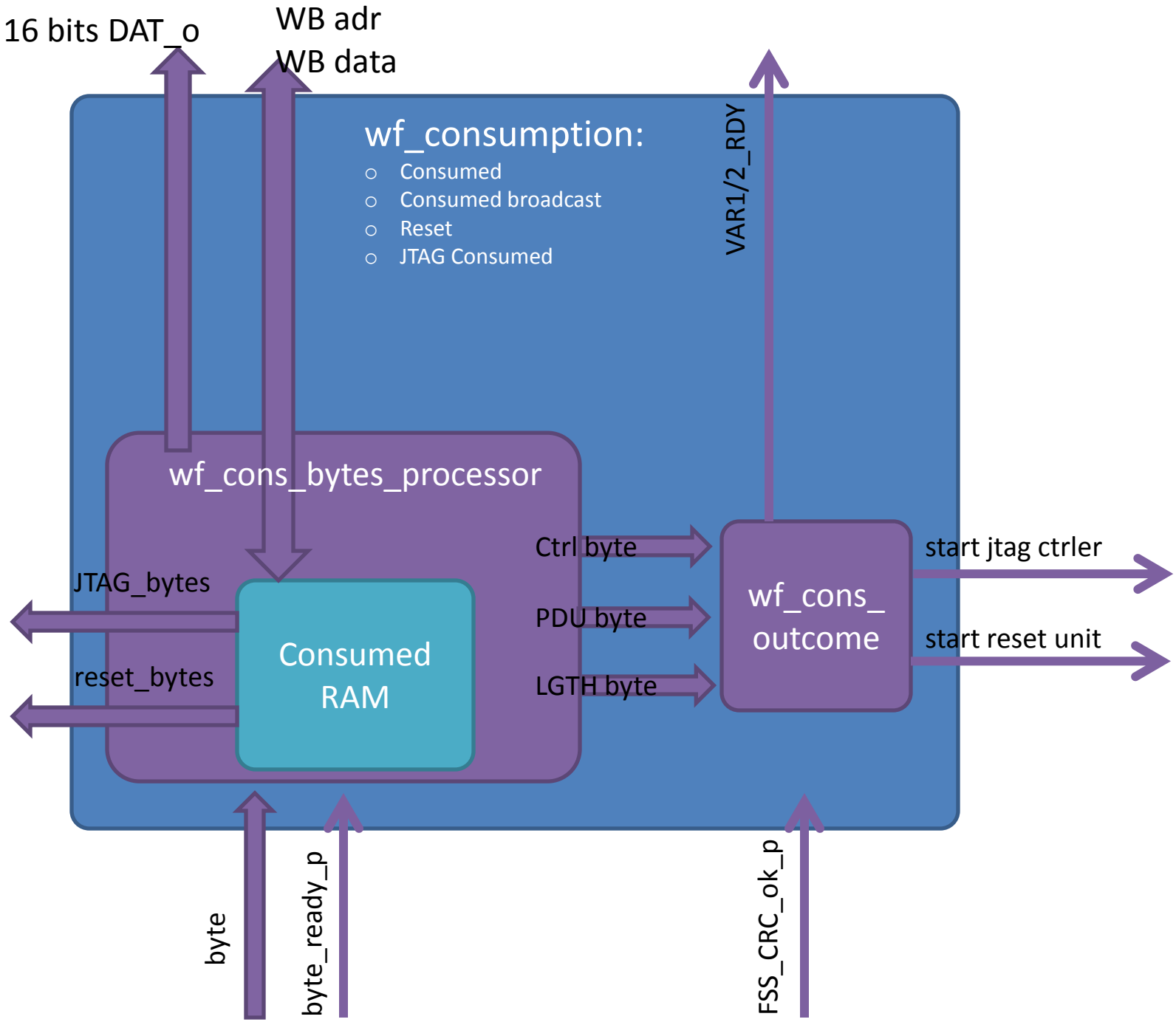

USER
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_engine_ctrl
wf_production
wf_model
constr
wf_reset
_unit
wf_fd_transmitter
byte
byte_ready_p
FES_CRC_ok_p
wf_fd_receiver
byte
byte_ready_p
FSS_received_p
FES_CRC_ok_p
WorldFIP

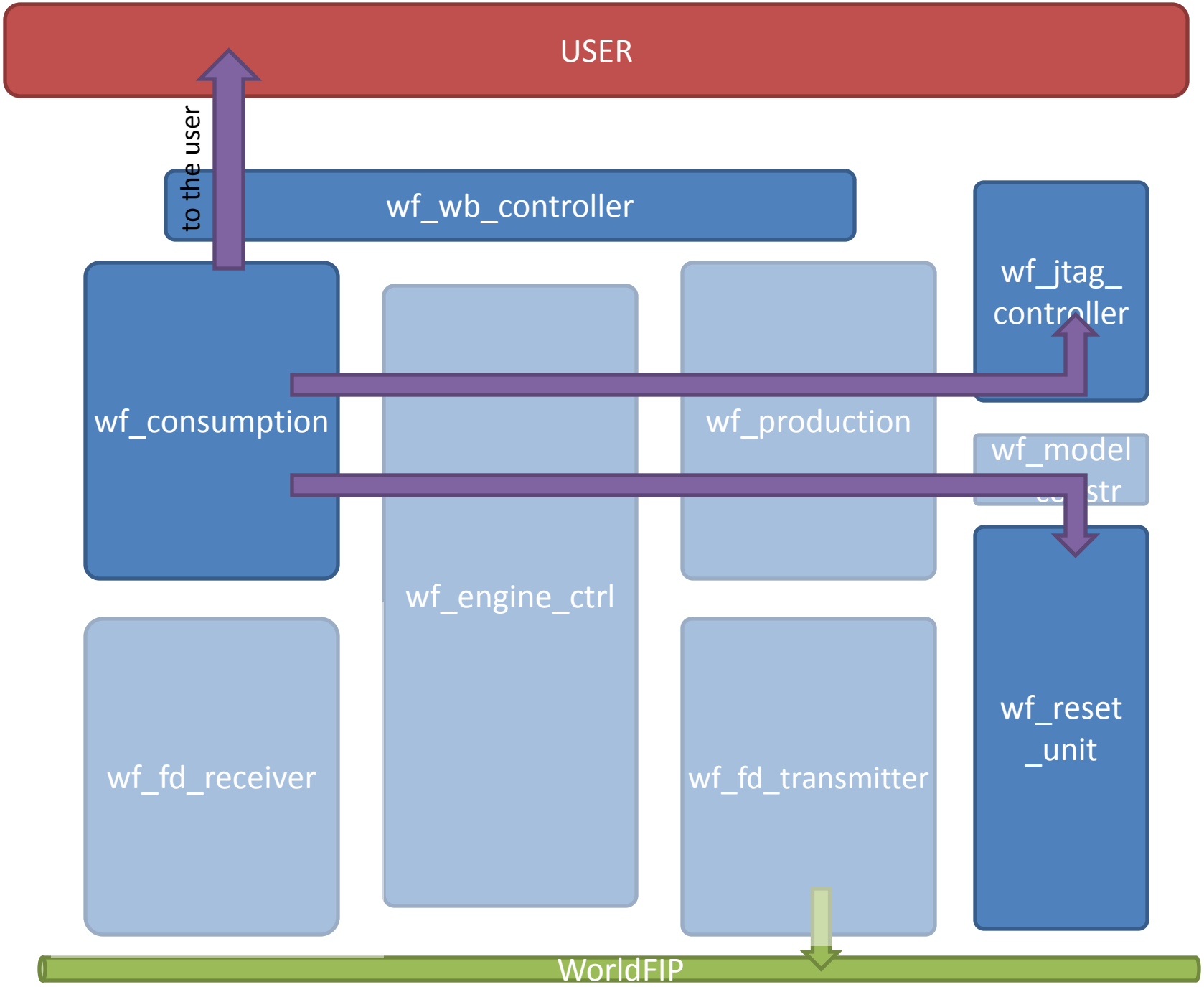

USER
wf_wb_controller
wf_consumption
wf_engine_ctrl
wf_production
wf_jtag_
controller
wf_model
constr
wf_reset
_unit
wf_fd_receiver
byte
byte_ready_p
FSS_received_p
FES_CRC_ok_p
wf_fd_transmitter
WorldFIP

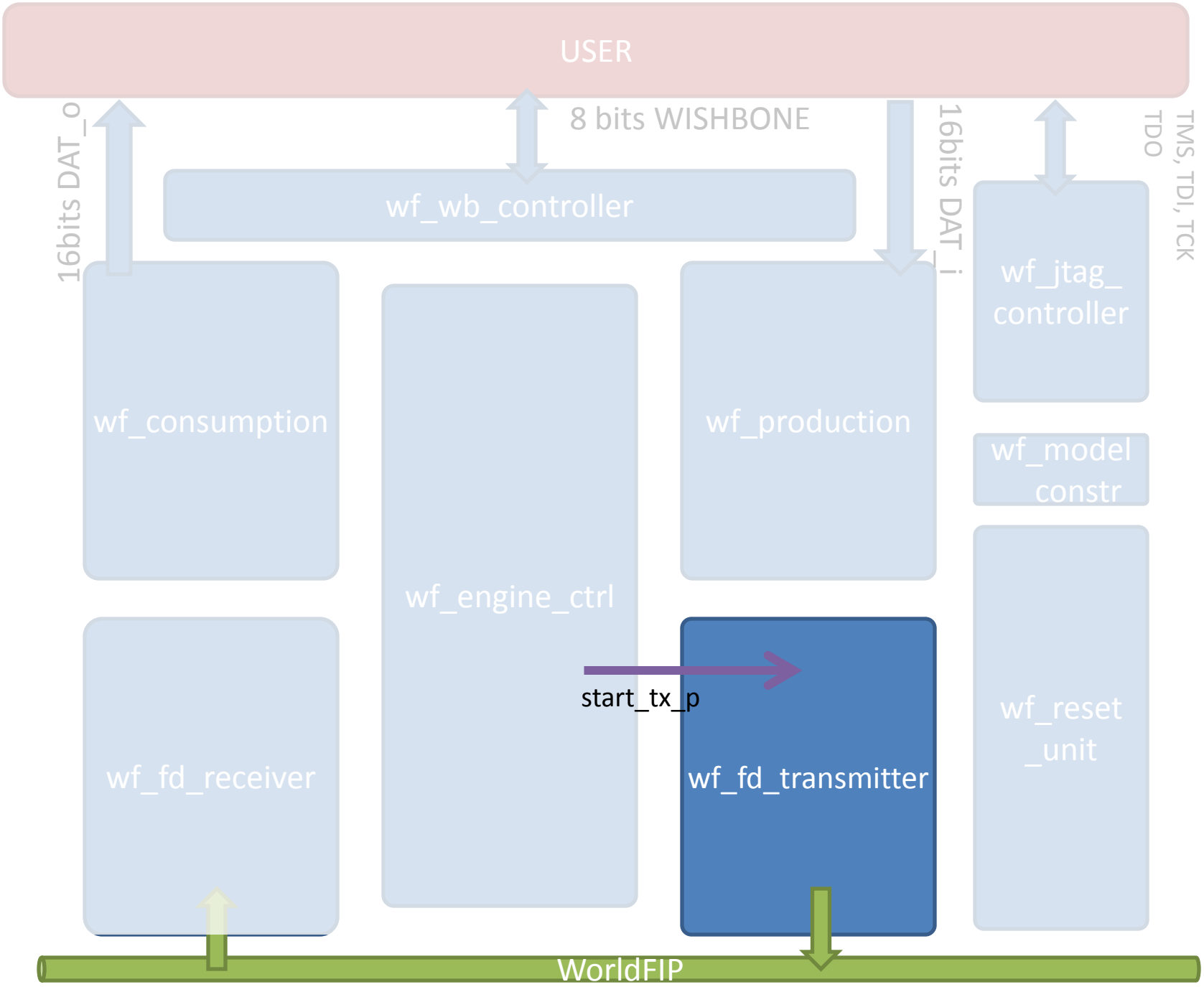

wf_engine_control
Reset_
rx
Idle
last_byte_p
FES_received_p
no FES after 130 bytes
start_tx_p
FSS_received_p
ID_DAT
_Ctrl
Prod_
wait_
turnar
Produci
ng
byte_ready_p
FSS_received_p
Cons_
wait_
FSS
Consu
ming
ID_DAT
_Var
byte_ready_p
ID_DAT
_Subs
byte_ready_p
ID_DAT
OK!
FSS
CTRL
VAR
SUBS
CRC
FES
ID_DAT
FSS
..DATA..
CRC
FES
RP_DAT

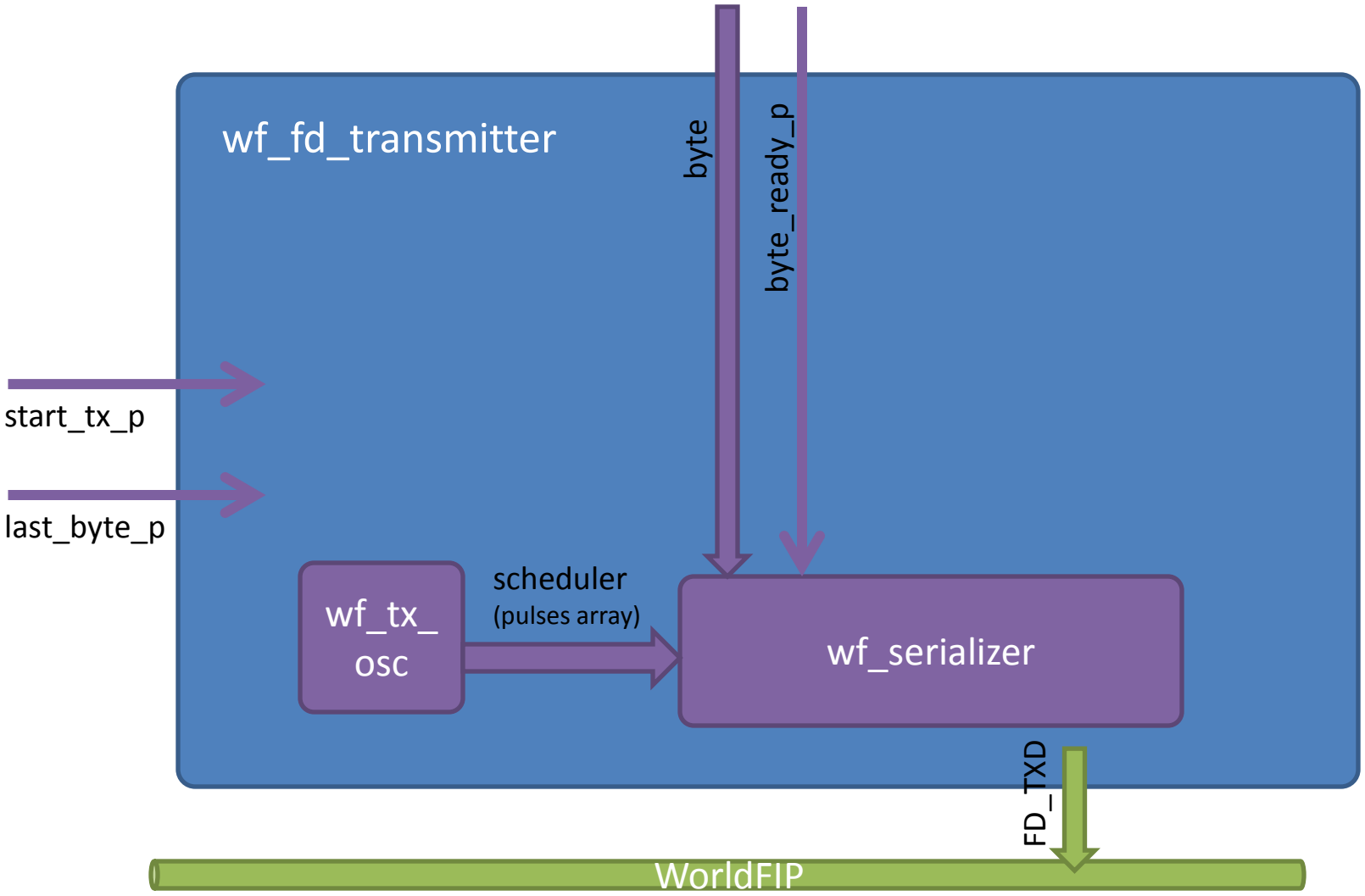

wf_engine_control
Reset_ rx
Idle
last_byte_p
FES_received_p
no FES after 130 bytes
start_tx_p
FSS_received_p
ID_DAT _Ctrl
Prod_ wait_ turnar
Produci ng
byte_ready_p
ID_DAT _Var
FSS_received_p
Cons_ wait_ FSS
Consu ming
byte_ready_p
ID_DAT _Subs
Timeout_ counter
byte_ready_p
ID_DAT OK!
FSS
CTRL
VAR
SUBS
CRC
FES
ID_DAT
FSS
..DATA..
CRC
FES
RP_DAT

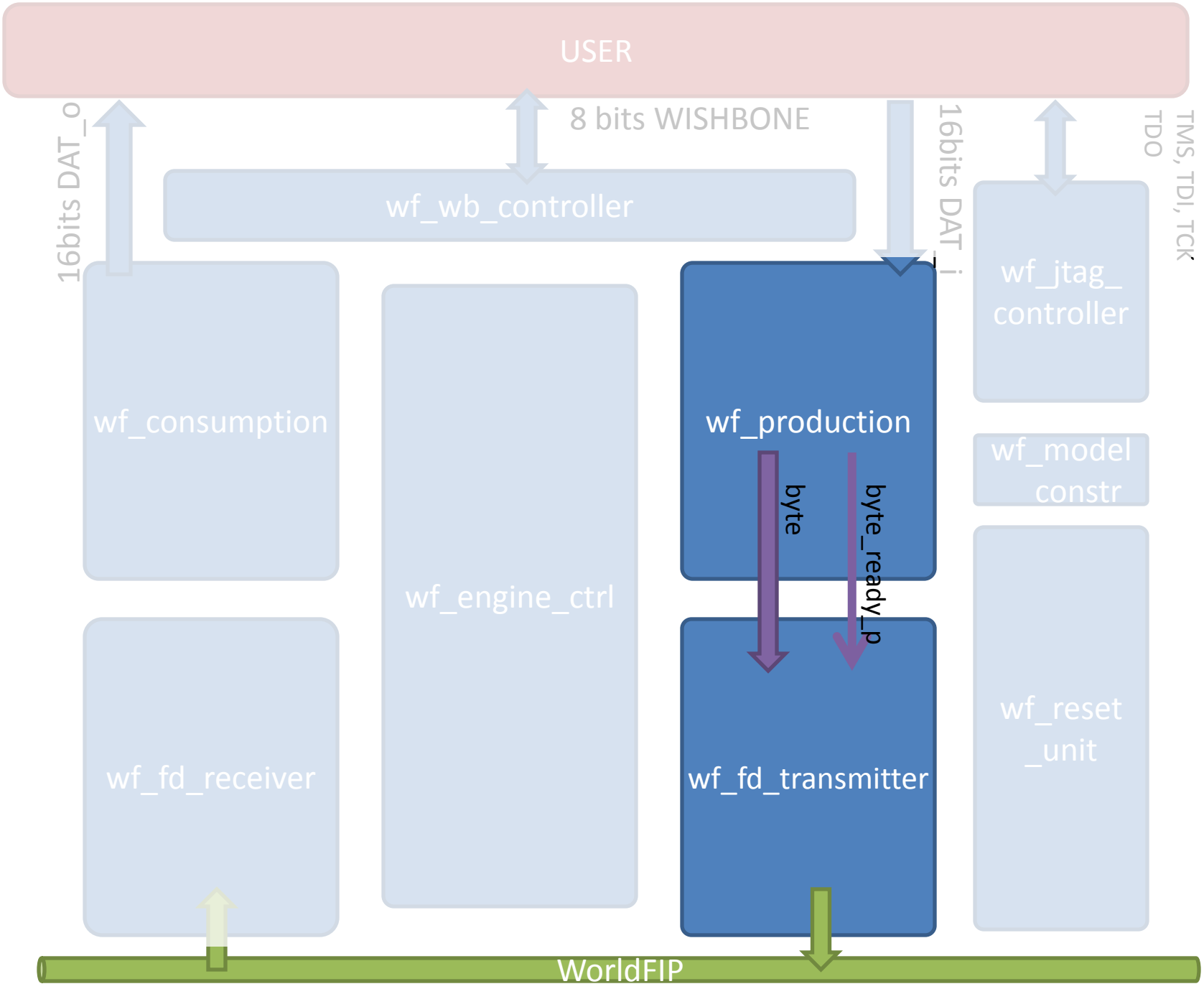

USER
wf_wb_controller
wf_consumption
byte
byte_ready_p
FES_CRC_ok_p
wf_fd_receiver
wf_engine_ctrl
wf_production
wf_fd_transmitter
wf_jtag_
controller
wf_model
constr
wf_reset
_unit
WorldFIP

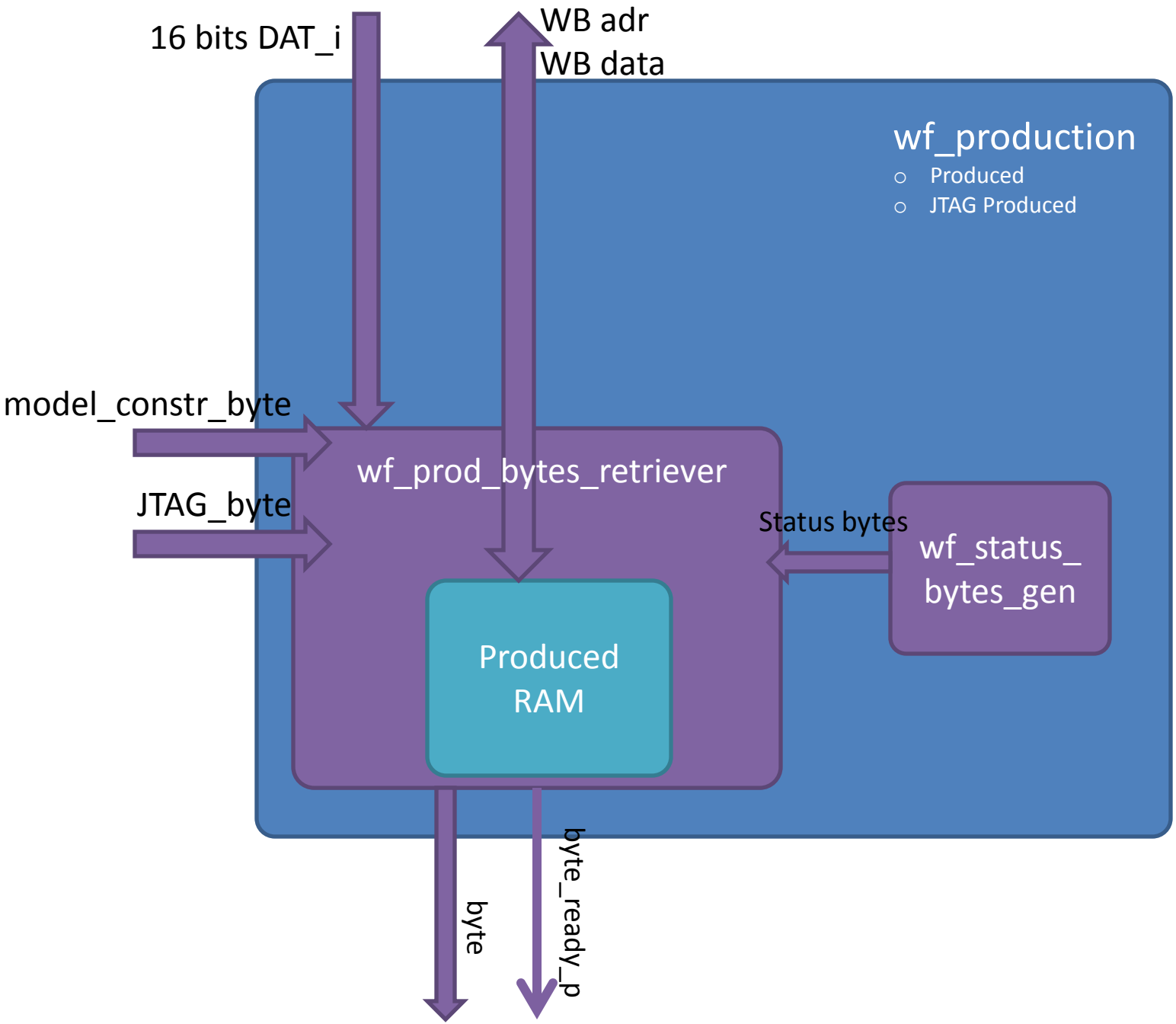

16 bits DAT_o
WB adr
WB data
wf_consumption:
Consumed
Consumed broadcast
Reset
JTAG Consumed
VAR1/2_RDY
wf_cons_bytes_processor
JTAG_bytes
reset_bytes
Consumed RAM
Ctrl byte
PDU byte
LGTH byte
wf_cons_ outcome
start jtag ctrler
start reset unit
byte
byte_ready_p
FSS_CRC_ok_p

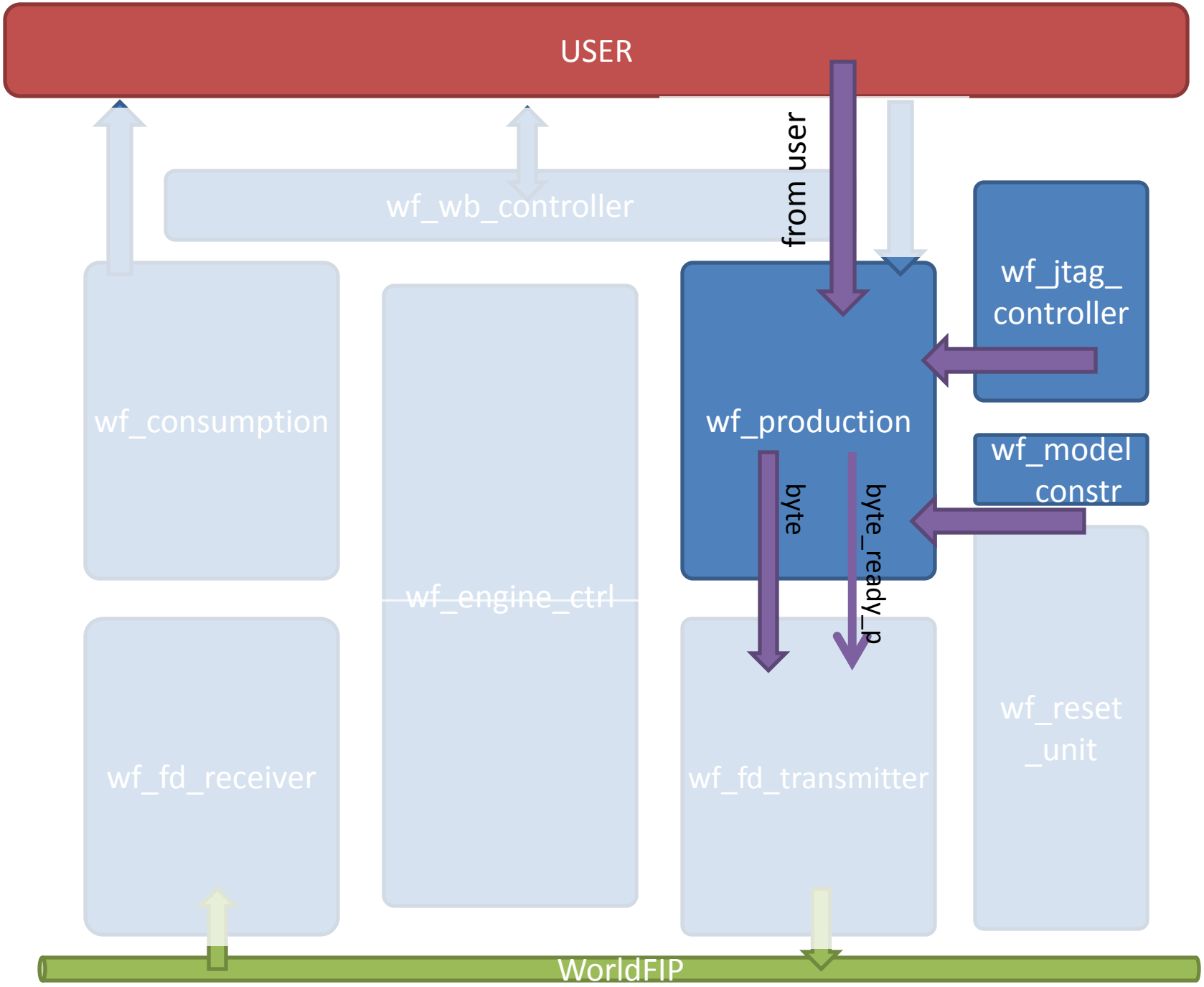

USER
to the user
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_production
wf_model
wf_engine_ctrl
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP

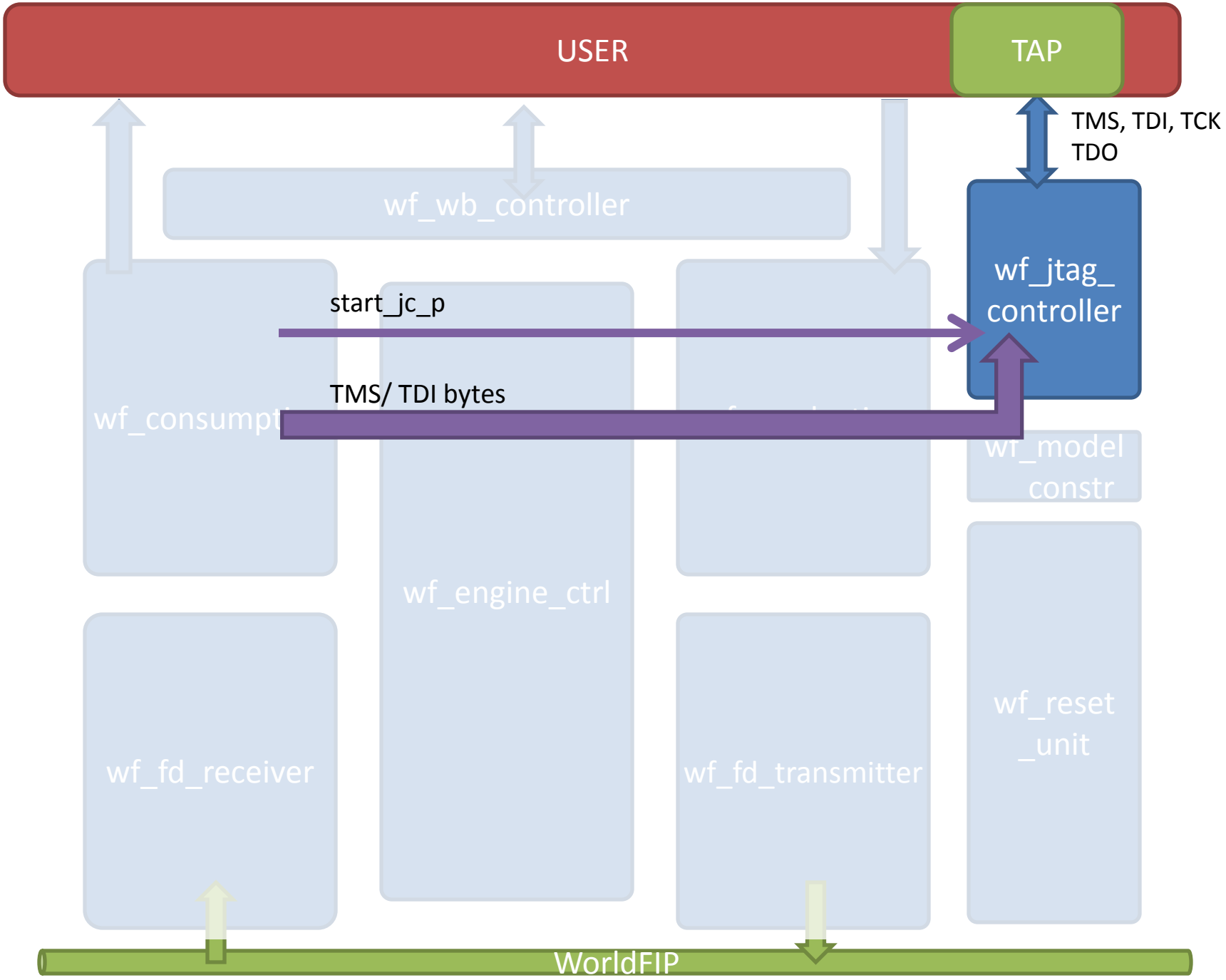

USER
8 bits WISHBONE
16bits DAT_o
16bits DAT_i
TMS, TDI, TCK
TDO
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_engine_ctrl
wf_production
wf_model
constr
start_tx_p
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP

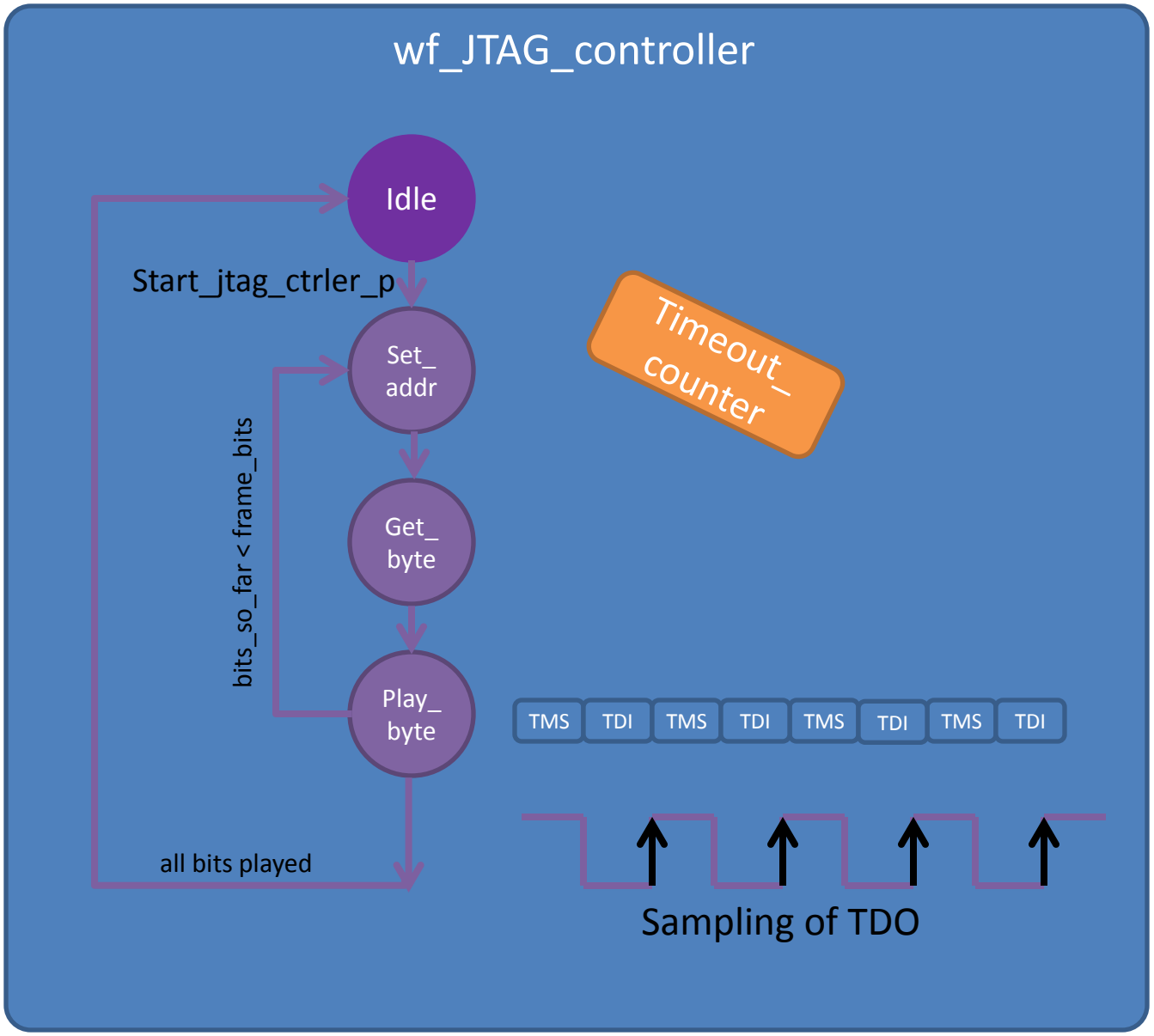

wf_fd_transmitter
byte
byte_ready_p
start_tx_p
last_byte_p
wf_tx_
osc
scheduler
(pulses array)
wf_serializer
FD_TXD
WorldFIP

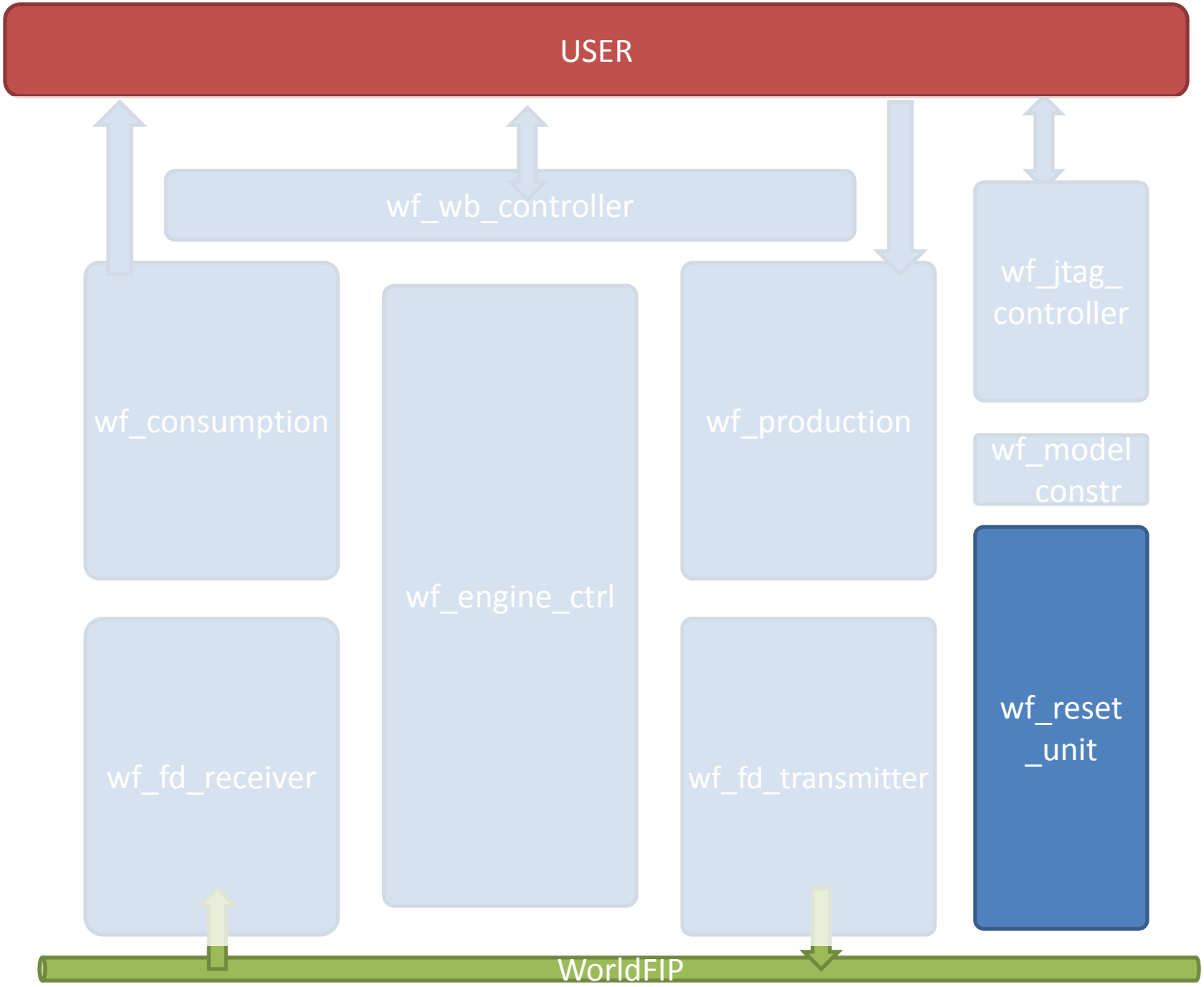

USER
8 bits WISHBONE
16bits DAT_o
16bits DAT_i
TMS, TDI, TCK
TDO
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_engine_ctrl
wf_production
byte
byte_ready_p
wf_model
constr
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP

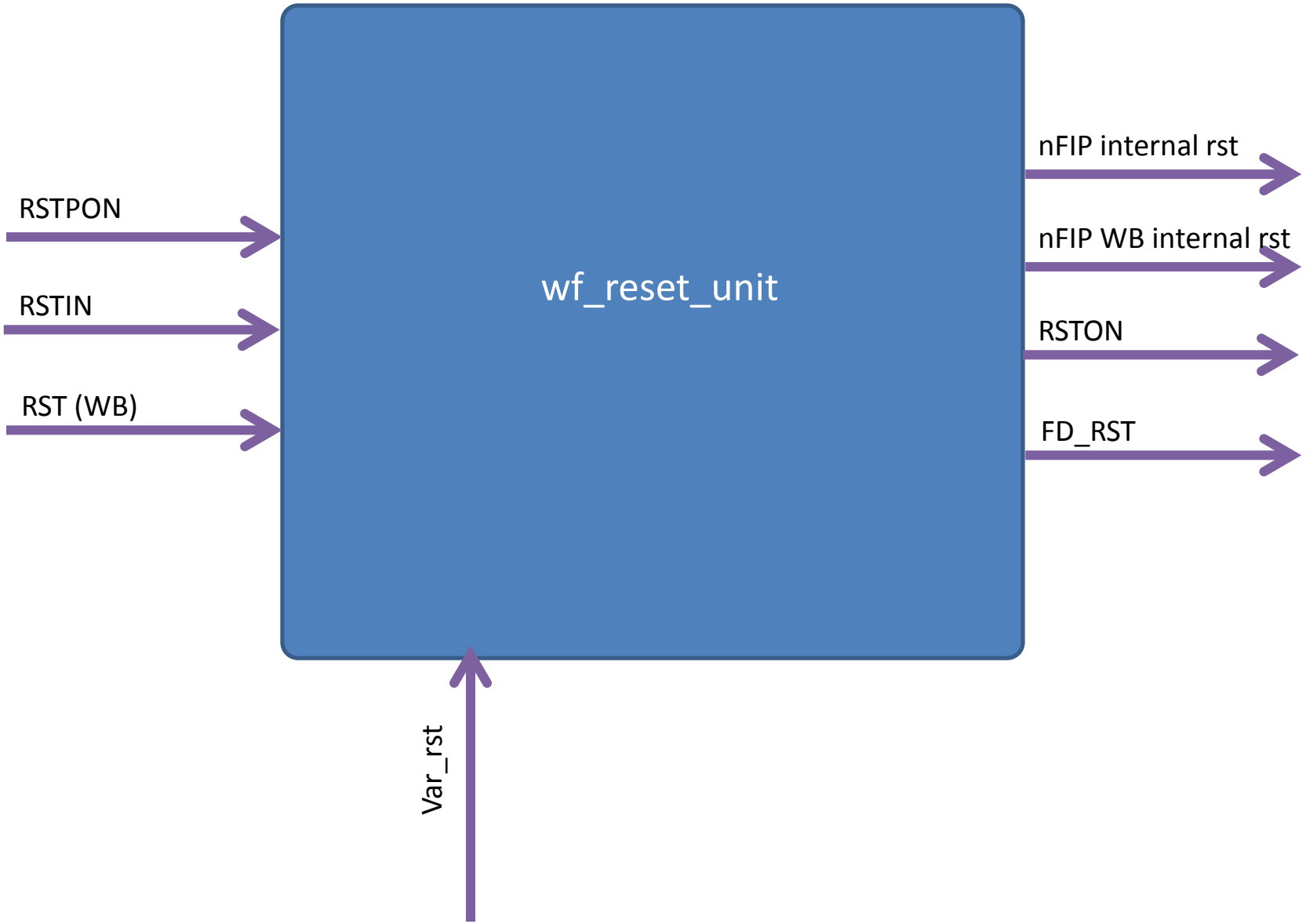

16 bits DAT_i
WB adr
WB data
wf_production
Produced
JTAG Produced
model_constr_byte
JTAG_byte
wf_prod_bytes_retriever
Status bytes
wf_status_
bytes_gen
Produced
RAM
byte
byte_ready_p


USER
from user
wf_wb_controller
wf_jtag_
controller
wf_consumption
wf_production
wf_model
constr
byte
byte_ready_p
wf_engine_ctrl
wf_fd_receiver
wf_fd_transmitter
wf_reset
_unit
WorldFIP


USER
TAP
TMS, TDI, TCK
TDO
wf_wb_controller
wf_jtag_
controller
start_jc_p
TMS/ TDI bytes
wf_consumpti
wf_model
constr
wf_engine_ctrl
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP


wf_JTAG_controller
Idle
Start_jtag_ctrler_p
Set_
addr
Get_
byte
Play_
byte
bits_so_far < frame_bits
all bits played
Timeout_
counter
TMS
TDI
TMS
TDI
TMS
TDI
TMS
TDI
Sampling of TDO


USER
wf_wb_controller
wf_consumption
wf_engine_ctrl
wf_production
wf_jtag_
controller
wf_model
constr
wf_reset
_unit
wf_fd_receiver
wf_fd_transmitter
WorldFIP


wf_reset_unit
RSTPON
RSTIN
RST (WB)
Var_rst
nFIP internal rst
nFIP WB internal rst
RSTON
FD_RST

Please focus on:

- wf_jtag_controller
- wf_engine_control
- wf_rx_deserializer
- wf_tx_transmitter
- wf_reset_unit