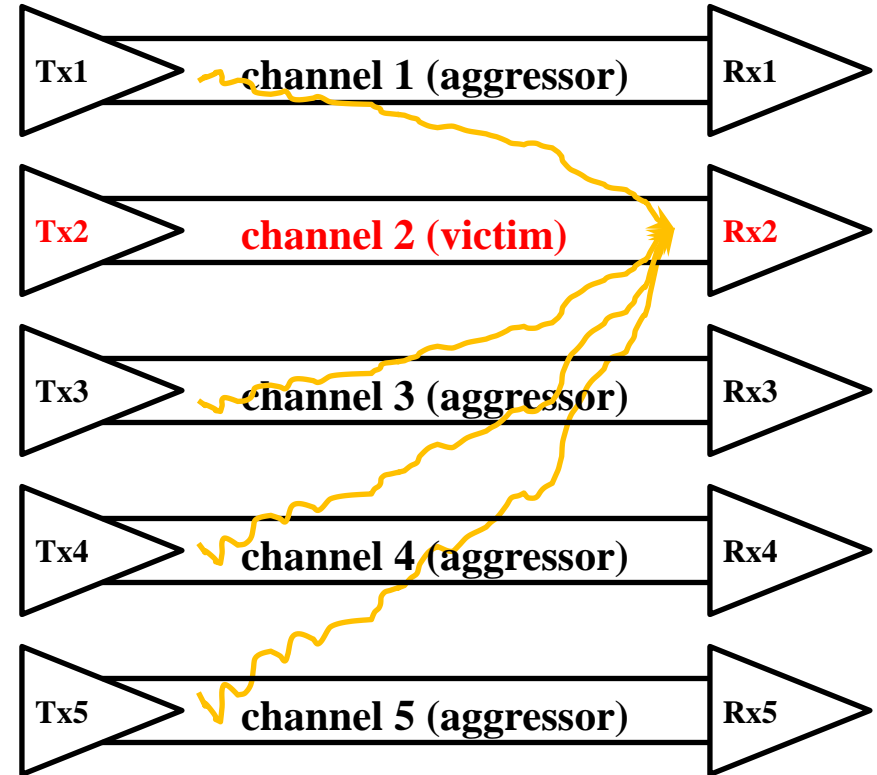
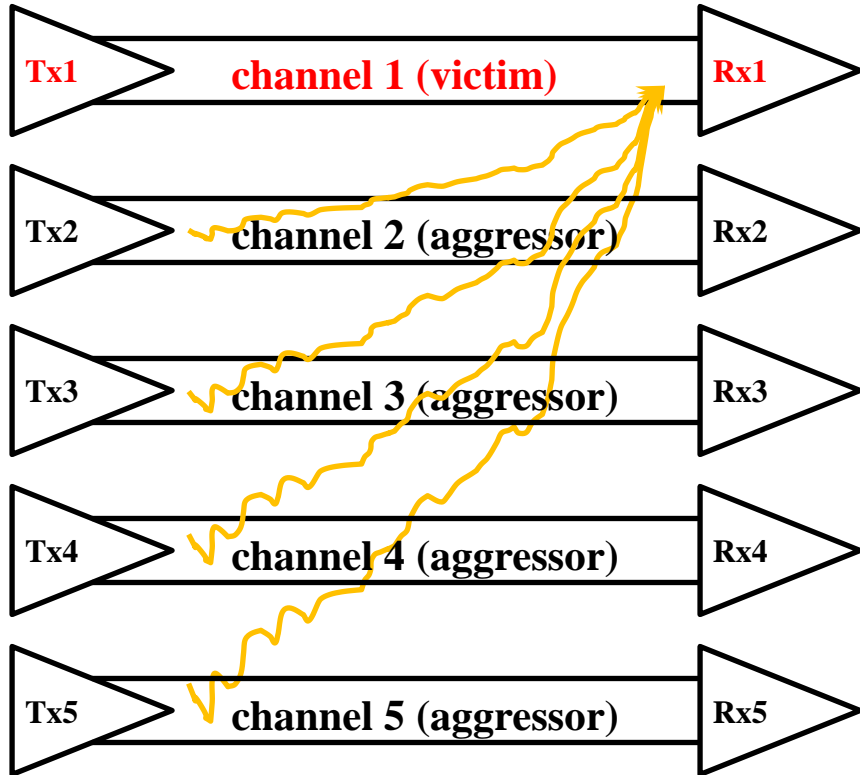


impulse_matrix and cross talk in IBIS-AMI



and so on...

impulse_matrix assembly chart (by column #)

impulse_matrix
column 1

impulse_matrix
column 2

impulse_matrix
column 3

impulse_matrix
column 4

impulse_matrix
column 5

Tx1: IR1_1
Tx2: IR2_2
Tx3: IR3_3
Tx4: IR4_4
Tx5: IR5_5

Tx1: IR1_2 **Tx1: IR1_3** **Tx1: IR1_4** **Tx1: IR1_5**
Tx2: IR2_1 **Tx2: IR2_3** **Tx2: IR2_4** **Tx2: IR2_5**
Tx3: IR3_1 **Tx3: IR3_2** **Tx3: IR3_4** **Tx3: IR3_5**
Tx4: IR4_1 **Tx4: IR4_2** **Tx4: IR4_3** **Tx4: IR4_5**
Tx5: IR5_1 **Tx5: IR5_2** **Tx5: IR5_3** **Tx5: IR5_4**

impulse_matrix
column 1

impulse_matrix
column 2

impulse_matrix
column 3

impulse_matrix
column 4

impulse_matrix
column 5

Rx1: Tx1Init(IR1_1)
Rx2: Tx2Init(IR2_2)
Rx3: Tx3Init(IR3_3)
Rx4: Tx4Init(IR4_4)
Rx5: Tx5Init(IR5_5)

Rx1: Tx2Init(IR2_1) **Rx1: Tx3Init(IR3_1)** **Rx1: Tx4Init(IR4_1)** **Rx1: Tx5Init(IR5_1)**
Rx2: Tx1Init(IR1_2) **Rx2: Tx3Init(IR3_2)** **Rx2: Tx4Init(IR4_2)** **Rx2: Tx5Init(IR5_2)**
Rx3: Tx1Init(IR1_3) **Rx3: Tx2Init(IR2_3)** **Rx3: Tx4Init(IR4_3)** **Rx3: Tx5Init(IR5_3)**
Rx4: Tx1Init(IR1_4) **Rx4: Tx2Init(IR2_4)** **Rx4: Tx3Init(IR3_4)** **Rx4: Tx5Init(IR5_4)**
Rx5: Tx1Init(IR1_5) **Rx5: Tx2Init(IR2_5)** **Rx5: Tx3Init(IR3_5)** **Rx5: Tx4Init(IR4_5)**

and so on...

The point here is that when cross talk analysis is included, the output of a certain Tx AMI_Init function cannot be passed directly to the corresponding Rx AMI_Init function (except for the first column). The EDA tool must first rearrange the content of each impulse_matrix before passing them to the Rx AMI_Init functions.

impulse_matrix assembly chart (by channel #)

Tx1 AMI_Init
impulse_matrix

col1: IR1_1
col2: IR1_2
col3: IR1_3
col4: IR1_4
col5: IR1_5

Tx2 AMI_Init
impulse_matrix

col1: IR2_2
col2: IR2_1
col3: IR2_3
col4: IR2_4
col5: IR2_5

Tx3 AMI_Init
impulse_matrix

col1: IR3_3
col2: IR3_1
col3: IR3_2
col4: IR3_4
col5: IR3_5

Tx4 AMI_Init
impulse_matrix

col1: IR4_4
col2: IR4_1
col3: IR4_2
col4: IR4_3
col5: IR4_5

Tx5 AMI_Init
impulse_matrix

col1: IR5_5
col2: IR5_1
col3: IR5_2
col4: IR5_3
col5: IR5_4

Rx1 AMI_Init
impulse_matrix

col1: Tx1Init(IR1_1)
col2: Tx2Init(IR2_1)
col3: Tx3Init(IR3_1)
col4: Tx4Init(IR4_1)
col5: Tx5Init(IR5_1)

Rx2 AMI_Init
impulse_matrix

col1: Tx2Init(IR2_2)
col2: Tx1Init(IR1_2)
col3: Tx3Init(IR3_2)
col4: Tx4Init(IR4_2)
col5: Tx5Init(IR5_2)

Rx3 AMI_Init
impulse_matrix

col1: Tx3Init(IR3_3)
col2: Tx1Init(IR1_3)
col3: Tx2Init(IR2_3)
col4: Tx4Init(IR4_3)
col5: Tx5Init(IR5_3)

Rx4 AMI_Init
impulse_matrix

col1: Tx4Init(IR4_4)
col2: Tx1Init(IR1_4)
col3: Tx2Init(IR2_4)
col4: Tx3Init(IR3_4)
col5: Tx5Init(IR5_4)

Rx5 AMI_Init
impulse_matrix

col1: Tx5Init(IR5_5)
col2: Tx1Init(IR1_5)
col3: Tx2Init(IR2_5)
col4: Tx3Init(IR3_5)
col5: Tx4Init(IR4_5)

and so on...

The point here is that when cross talk analysis is included, the output of a certain Tx AMI_Init function cannot be passed directly to the corresponding Rx AMI_Init function (except for the first column). The EDA tool must first rearrange the content of each impulse_matrix before passing them to the Rx AMI_Init functions.