

(a)

1 Activated Out-Data & 1 or more Acitvated In_Data :

- MMapApplication20Data2Node14 + MMapApplication21Data2Node14
- Data_INdatain_link_Node14_Node10Data2
- Data_INdatain_link_Node14_Node11Data2
- Data_INdatain_link_Node14_Node12Data2
- Data_INdatain_link_Node14_Node13Data2
- + Data_OUTdataout_link_Node14_Node10Data2
- + Data_OUTdataout_link_Node14_Node11Data2
- + Data_OUTdataout_link_Node14_Node12Data2
- + Data_OUTdataout_link_Node14_Node13Data2 = 0

Process0Application21Data2STofProcess5MustBeLessThanItsPeriod+ExecutionTimeNode0:
StartingTimeProcess0Application21Data2 <= 9.9

Process0Application21Data2Data2: [

- 99 Data_OUTdataout_link_Node0_Node1Data2 ^ 2
- Data_OUTdataout_link_Node0_Node1Data2 * Data_OUTTaskData2link_Node0_Node1
- + Data_OUTdataout_link_Node0_Node1Data2 * StartingTimeProcess0Application21Data2

] >= 0

(b)

One Application related to one Data only be mapped on one Node;480

connect d_out1_n1 to d_in1_n2;378

1 Activated Out-Data;221

1 Activated Out-Data & 1 or more Acitvated In_Data;185

1 Activated In-Data;74

each App mapped only on one Core;32

Process0Application11Data1STofProcess3MustBeLessThanItsPeriod+ExecutionTimeNode0;22

Process0Application01Data0STofProcess1MustBeLessThanItsPeriod+ExecutionTimeNode0;9

Process0Application21Data2STofProcess5MustBeLessThanItsPeriod+ExecutionTimeNode0;1

TaskData2link_Node9_Node8STofTask2MustBeLessThanItsPeriod-FrameLengthNode9;0

TaskData2link_Node9_Node6STofTask2MustBeGreaterThanZeroNode9;0