**Metrics for net Petri net**

**Density metric**

0.04584040747028863

**Details**

|F| = 108

|P X T| = 1178

**Extended Cardoso metric**

48.0

**Details**

Place source 1 = 1

Place sink 2 = 0

Place sink 3 = 1

Place sink 4 = 1

Place sink 5 = 1

Place notDoneFirst 6 = 2

Place doneFirst 7 = 5

Place childSource 8 = 2

Place childSink 9 = 1

Place doChild 10 = 1

Place middle 11 = 2

Place childSource 12 = 2

Place childSink 13 = 1

Place doChild 14 = 1

Place sink 15 = 1

Place sink 16 = 2

Place sink 17 = 1

Place middle 18 = 2

Place replacement source 19 = 1

Place notDoneFirst 20 = 2

Place doneFirst 21 = 5

Place childSource 22 = 2

Place childSink 23 = 1

Place doChild 24 = 1

Place childSource 25 = 2

Place childSink 26 = 1

Place doChild 27 = 1

Place sink 28 = 1

Place sink 29 = 1

Place middle 30 = 2

Place sink 31 = 1

Metric = 48

**Extended Cyclomatic metric**

56.0

**Details**

|E| = 61

|V| = 35

p = 30

**Number of arcs**

108.0

**Details**

**Number of places**

31.0

**Details**

**Number of transitions**

38.0

**Details**

**Structuredness metric**

5952.0

**Details**

SEQUENCE sink 3

Removed place sink 3

Added arc from Accepted to sink 4

Removed transition Accepted

Sum = 2.0

Metric = 2.0

SEQUENCE sink 4

Removed place sink 4

Added arc from Accepted to childSource 8

Added arc from Accepted to notDoneFirst 6

Added arc from Accepted to childSource 12

Removed transition tau start

Sum = 3.0

Metric = 3.0

SEQUENCE sink 5

Removed place sink 5

Added arc from tau finish to sink 15

Removed transition Accepted

Sum = 2.0

Metric = 2.0

SEQUENCE sink 15

Removed place sink 15

Added arc from tau finish to sink 16

Removed transition Queued

Sum = 3.0

Metric = 3.0

CHOICE Accepted

Removed transition Completed

Sum = 2.0

Metric = 3.0

CHOICE Completed

Removed transition tau from tree

Sum = 2.0

Metric = 3.0

SEQUENCE sink 29

Removed place sink 29

Added arc from tau from tree to sink 31

Removed transition Completed

Sum = 4.0

Metric = 4.0

SEQUENCE sink 31

Removed place sink 31

Added arc from tau from tree to sink 2

Removed transition Completed

Sum = 5.0

Metric = 5.0

STATE MACHINE sink 17 -> sink 2

Sum = 16.0

DiffP = 2

Added arc from Queued to sink 2

Removed place sink 28

Removed place middle 30

Removed transition tau from tree

Removed transition Accepted

Removed transition tau from tree

Metric = 32.0

UNSTRUCTURED source 1 -> sink 16

Out place notDoneFirst 6

Out transition tau firstDoChild

In transition tau firstDoChild

In place doChild 10

In transition tau finish

Out transition Accepted

Out transition tau skipChild

In transition tau skipChild

Out place childSource 8

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau skipChild

In transition tau skipChild

Out place middle 11

Out place childSource 12

In place doChild 14

Out place doneFirst 7

In place doneFirst 7

Out transition tau laterDoChild

In transition tau laterDoChild

In place childSink 9

Out place sink 16

Out transition tau firstDoChild

In transition tau firstDoChild

In place childSink 13

|F| = 40

|P U T| = 23

Sum = 1440.0

DiffP = 2

DiffT = 1

Added arc from Accepted to sink 16

Removed place notDoneFirst 6

Removed transition tau firstDoChild

Removed place doChild 10

Removed transition tau finish

Removed transition tau skipChild

Removed transition tau from tree

Removed place childSource 8

Removed transition tau laterDoChild

Removed transition Queued

Removed transition tau skipChild

Removed place middle 11

Removed place childSource 12

Removed place doChild 14

Removed place doneFirst 7

Removed transition Accepted

Removed transition tau laterDoChild

Removed place childSink 9

Removed transition tau firstDoChild

Removed transition tau from tree

Removed place childSink 13

Metric = 2880.0

UNSTRUCTURED sink 16 -> sink 17

Out transition tau skipChild

In transition tau skipChild

In place doChild 27

Out place notDoneFirst 20

Out transition tau laterDoChild

In transition tau laterDoChild

In place childSink 23

In transition tau finish

In place childSink 26

Out place childSource 22

In place sink 17

Out transition tau laterDoChild

In transition tau laterDoChild

Out place sink 16

Out place doneFirst 21

In place doneFirst 21

Out transition tau start

Out place middle 18

Out place childSource 25

Out transition tau firstDoChild

In transition tau firstDoChild

Out transition tau firstDoChild

In transition tau firstDoChild

In place doChild 24

In place replacement source 19

Out transition tau skipChild

In transition tau skipChild

|F| = 44

|P U T| = 26

Sum = 1520.0

DiffP = 2

DiffT = 1

Added arc from tau start to sink 17

Removed transition tau skipChild

Removed place doChild 27

Removed place notDoneFirst 20

Removed transition tau laterDoChild

Removed place childSink 23

Removed transition tau finish

Removed transition Accepted

Removed transition Accepted

Removed transition tau from tree

Removed place childSink 26

Removed place childSource 22

Removed transition tau laterDoChild

Removed place doneFirst 21

Removed transition tau start

Removed place middle 18

Removed transition tau from tree

Removed place childSource 25

Removed transition tau firstDoChild

Removed transition tau firstDoChild

Removed place doChild 24

Removed place replacement source 19

Removed transition Queued

Removed transition tau skipChild

Metric = 3040.0

SEQUENCE sink 16

Removed place sink 16

Added arc from Accepted to sink 17

Removed transition tau start

Sum = 5920.0

Metric = 5920.0

SEQUENCE sink 17

Removed place sink 17

Added arc from Accepted to sink 2

Removed transition Queued

Sum = 5952.0

Metric = 5952.0