**Metrics for net Petri net**

**Density metric**

0.04099636741048261

**Details**

|F| = 158

|P X T| = 1927

**Extended Cardoso metric**

71.0

**Details**

Place source 1 = 1

Place sink 2 = 0

Place sink 3 = 1

Place sink 4 = 1

Place notDoneFirst 5 = 2

Place doneFirst 6 = 5

Place childSource 7 = 2

Place childSink 8 = 1

Place doChild 9 = 1

Place childSource 10 = 2

Place childSink 11 = 1

Place doChild 12 = 1

Place middle 13 = 2

Place notDoneFirst 14 = 2

Place doneFirst 15 = 5

Place childSource 16 = 2

Place childSink 17 = 1

Place doChild 18 = 1

Place childSource 19 = 2

Place childSink 20 = 1

Place doChild 21 = 1

Place sink 22 = 1

Place notDoneFirst 23 = 2

Place doneFirst 24 = 5

Place childSource 25 = 2

Place childSink 26 = 1

Place doChild 27 = 1

Place childSource 28 = 2

Place childSink 29 = 1

Place doChild 30 = 1

Place middle 31 = 2

Place sink 32 = 1

Place middle 33 = 2

Place notDoneFirst 34 = 2

Place doneFirst 35 = 5

Place childSource 36 = 2

Place childSink 37 = 1

Place doChild 38 = 1

Place childSource 39 = 2

Place childSink 40 = 1

Place doChild 41 = 1

Metric = 71

**Extended Cyclomatic metric**

111.0

**Details**

|E| = 154

|V| = 67

p = 24

**Number of arcs**

158.0

**Details**

**Number of places**

41.0

**Details**

**Number of transitions**

47.0

**Details**

**Structuredness metric**

633995.0

**Details**

SEQUENCE sink 3

Removed place sink 3

Added arc from Accepted to notDoneFirst 5

Added arc from Accepted to childSource 10

Added arc from Accepted to childSource 7

Removed transition tau start

Sum = 2.0

Metric = 2.0

SEQUENCE sink 4

Removed place sink 4

Added arc from tau finish to childSource 28

Added arc from tau finish to childSource 25

Added arc from tau finish to notDoneFirst 23

Removed transition tau start

Sum = 2.0

Metric = 2.0

SEQUENCE sink 32

Removed place sink 32

Added arc from tau from tree to sink 2

Removed transition Completed

Sum = 2.0

Metric = 2.0

UNSTRUCTURED doChild 12 -> middle 13

In place doChild 18

Out transition tau firstDoChild

In transition tau firstDoChild

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau skipChild

In transition tau skipChild

Out transition tau skipChild

In transition tau skipChild

In place doChild 21

Out transition tau firstDoChild

In transition tau firstDoChild

Out place childSource 19

In place childSink 17

Out place doneFirst 15

In place doneFirst 15

Out place middle 13

In place childSink 20

In place doChild 12

Out place childSource 16

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau start

In transition tau finish

Out place notDoneFirst 14

|F| = 36

|P U T| = 20

Sum = 850.0

DiffP = 2

DiffT = 1

Added arc from tau start to middle 13

Removed place doChild 18

Removed transition tau firstDoChild

Removed transition Accepted

Removed transition tau laterDoChild

Removed transition tau skipChild

Removed transition tau skipChild

Removed place doChild 21

Removed transition Queued

Removed transition tau firstDoChild

Removed place childSource 19

Removed place childSink 17

Removed place doneFirst 15

Removed place childSink 20

Removed place childSource 16

Removed transition tau laterDoChild

Removed transition tau finish

Removed place notDoneFirst 14

Metric = 1700.0

UNSTRUCTURED sink 22 -> middle 33

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau firstDoChild

In transition tau firstDoChild

Out transition tau skipChild

In transition tau skipChild

In place doChild 38

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau skipChild

In transition tau skipChild

Out place middle 33

Out transition tau start

In place sink 22

Out place notDoneFirst 34

Out place doneFirst 35

In place doneFirst 35

Out place childSource 36

In place childSink 40

Out place childSource 39

Out transition tau firstDoChild

In transition tau firstDoChild

In place doChild 41

In transition tau finish

In place childSink 37

|F| = 36

|P U T| = 20

Sum = 850.0

DiffP = 2

DiffT = 1

Added arc from tau start to middle 33

Removed transition tau laterDoChild

Removed transition tau firstDoChild

Removed transition tau skipChild

Removed place doChild 38

Removed transition tau laterDoChild

Removed transition Completed

Removed transition tau skipChild

Removed place notDoneFirst 34

Removed place doneFirst 35

Removed place childSource 36

Removed place childSink 40

Removed transition Accepted

Removed place childSource 39

Removed transition tau firstDoChild

Removed place doChild 41

Removed transition tau finish

Removed place childSink 37

Metric = 1700.0

UNSTRUCTURED source 1 -> sink 2

Out place notDoneFirst 23

In place doChild 27

In place doChild 9

In place childSink 11

In place childSink 8

Out transition tau skipChild

In transition tau skipChild

Out transition tau laterDoChild

In transition tau laterDoChild

Out place middle 31

Out place doneFirst 6

In place doneFirst 6

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau firstDoChild

In transition tau firstDoChild

Out place notDoneFirst 5

In place childSink 29

Out transition tau skipChild

In transition tau skipChild

In place sink 22

Out place childSource 28

Out place childSource 7

Out transition tau laterDoChild

In transition tau laterDoChild

Out transition tau laterDoChild

In transition tau laterDoChild

Out place doneFirst 24

In place doneFirst 24

Out transition tau firstDoChild

In transition tau firstDoChild

Out transition tau skipChild

In transition tau skipChild

Out transition tau firstDoChild

In transition tau firstDoChild

In place doChild 30

Out place childSource 25

Out place middle 33

Out place childSource 10

Out transition tau firstDoChild

In transition tau firstDoChild

Out place middle 13

In transition tau finish

In place doChild 12

Out transition Accepted

Out transition tau finish

In transition tau finish

Out transition tau skipChild

In transition tau skipChild

In place childSink 26

|F| = 84

|P U T| = 48

Sum = 633995.0

DiffP = 1

DiffT = 1

Added arc from Accepted to sink 2

Removed place notDoneFirst 23

Removed place doChild 27

Removed place doChild 9

Removed transition Queued

Removed place childSink 11

Removed place childSink 8

Removed transition tau skipChild

Removed transition tau laterDoChild

Removed place middle 31

Removed place doneFirst 6

Removed transition tau laterDoChild

Removed transition tau firstDoChild

Removed transition tau from tree

Removed place notDoneFirst 5

Removed place childSink 29

Removed transition tau start

Removed transition tau skipChild

Removed place sink 22

Removed transition tau from tree

Removed place childSource 28

Removed transition tau start

Removed place childSource 7

Removed transition Accepted

Removed transition tau laterDoChild

Removed transition Queued

Removed transition tau laterDoChild

Removed place doneFirst 24

Removed transition tau firstDoChild

Removed transition tau skipChild

Removed transition tau firstDoChild

Removed place doChild 30

Removed transition tau from tree

Removed transition tau from tree

Removed place childSource 25

Removed place middle 33

Removed transition tau from tree

Removed place childSource 10

Removed transition tau firstDoChild

Removed place middle 13

Removed transition tau finish

Removed place doChild 12

Removed transition Accepted

Removed transition tau finish

Removed transition tau skipChild

Removed place childSink 26

Metric = 633995.0