

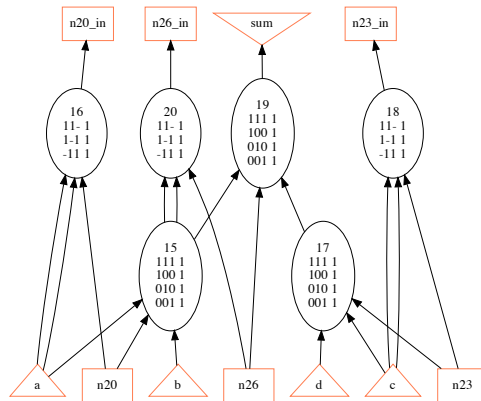
# LSV PA1

R10921104 王怡堯

## 1. network structure

Network structure visualized by ABC  
Benchmark "4numSerialAdder". Time was Fri Oct 8 00:53:48 2021.

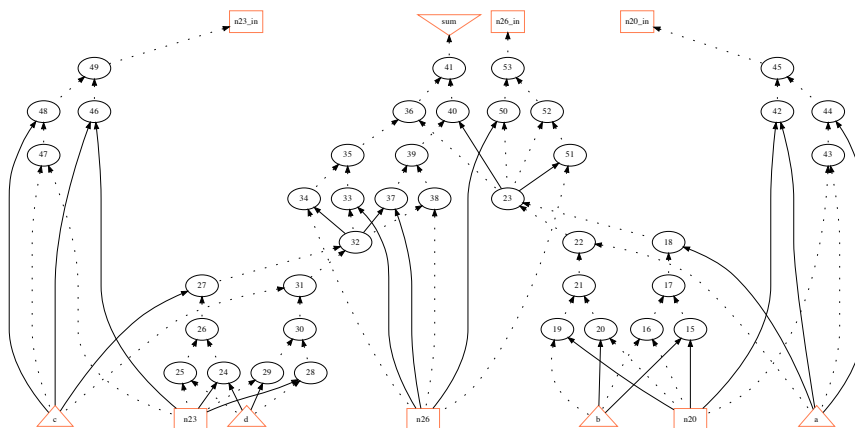
The network contains 6 logic nodes and 3 latches.



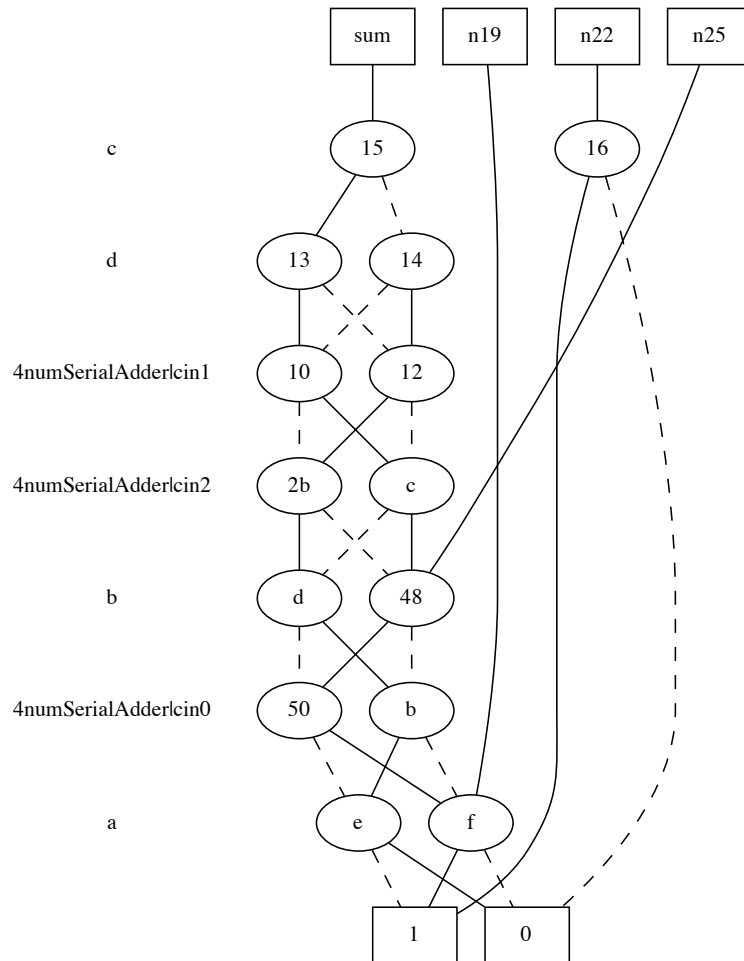
## AIG

Network structure visualized by ABC  
Benchmark "4numSerialAdder". Time was Fri Oct 8 01:01:05 2021.

The network contains 39 logic nodes and 3 latches.



## BDD



2.

(a)

(1)

**aig** – Only converts the node to AIG ,still a logic network.

**strash** – Transforms the whole network into an AIG.

(2)

**bdd**–Only converts the node to BDD ,still a logic network.

**collapsed** – Transforms the whole network into an BDD.

(b)

**logic**– Transforms the AIG into a logic network with the SOP representation of the two-input AND-gates.