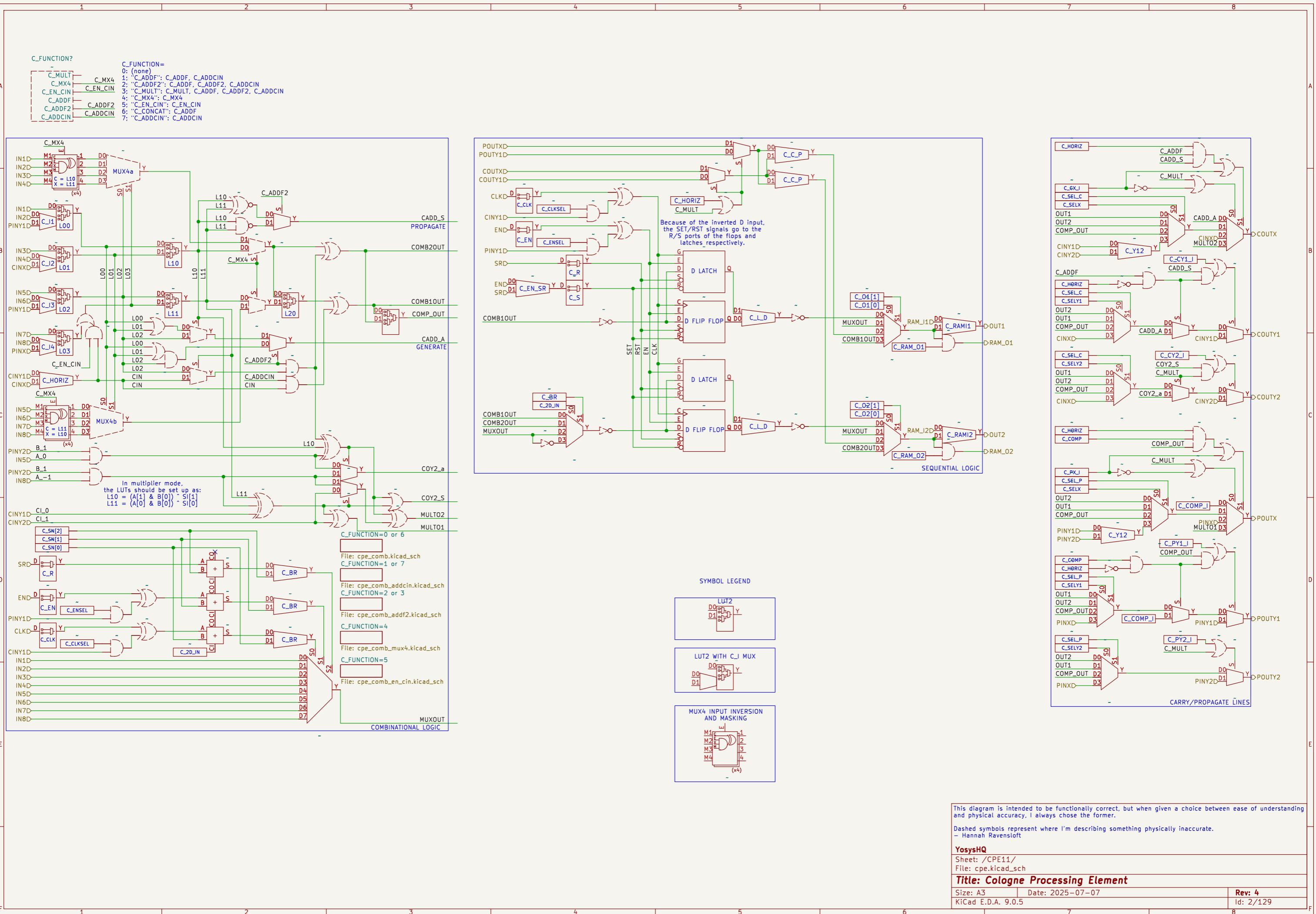
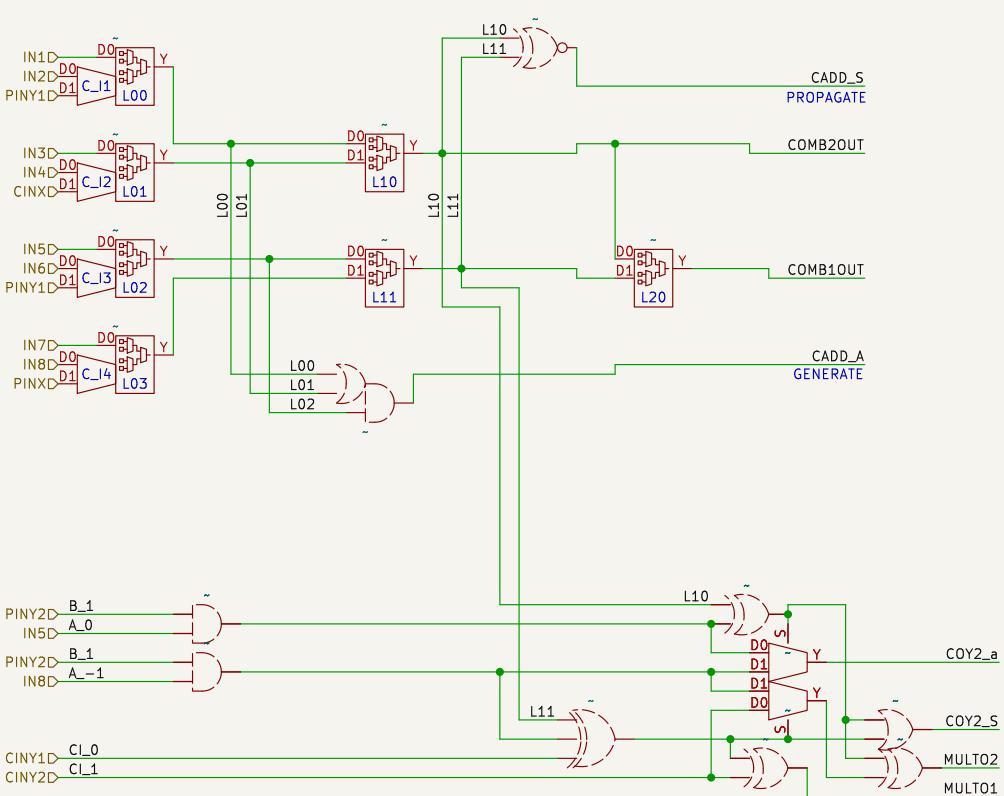




Only Plane 1 is depicted  
for conciseness; in the  
switchbox sheets you can  
see the connections to  
other planes.





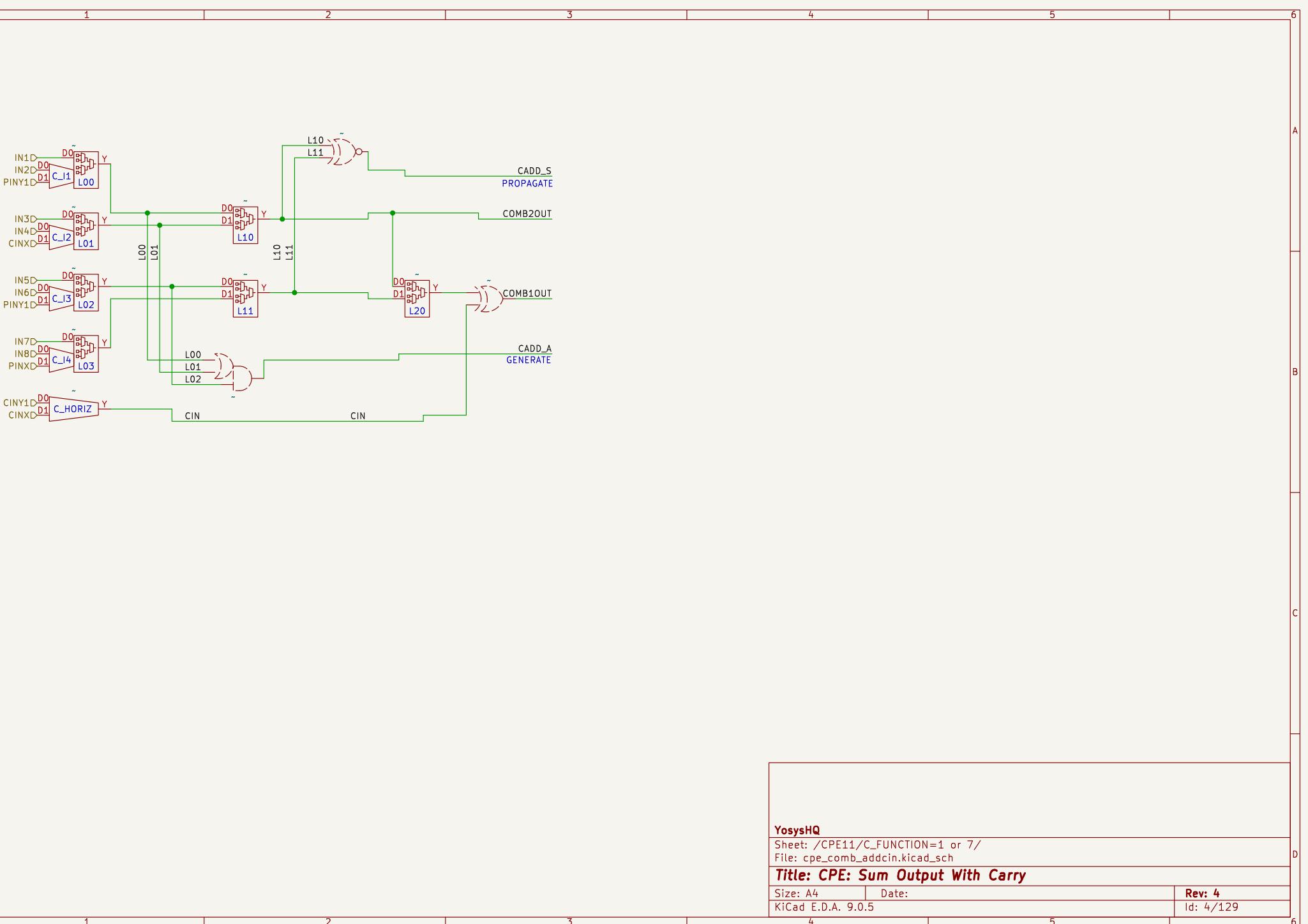
YosysHQ

Sheet: /CPE11/C\_FUNCTION=0 or 6/  
File: cpe\_comb.kicad\_sch

Title: CPE: Default Mode

Size: A4 Date:  
KiCad E.D.A. 9.0.5

Rev: 4  
Id: 3/129



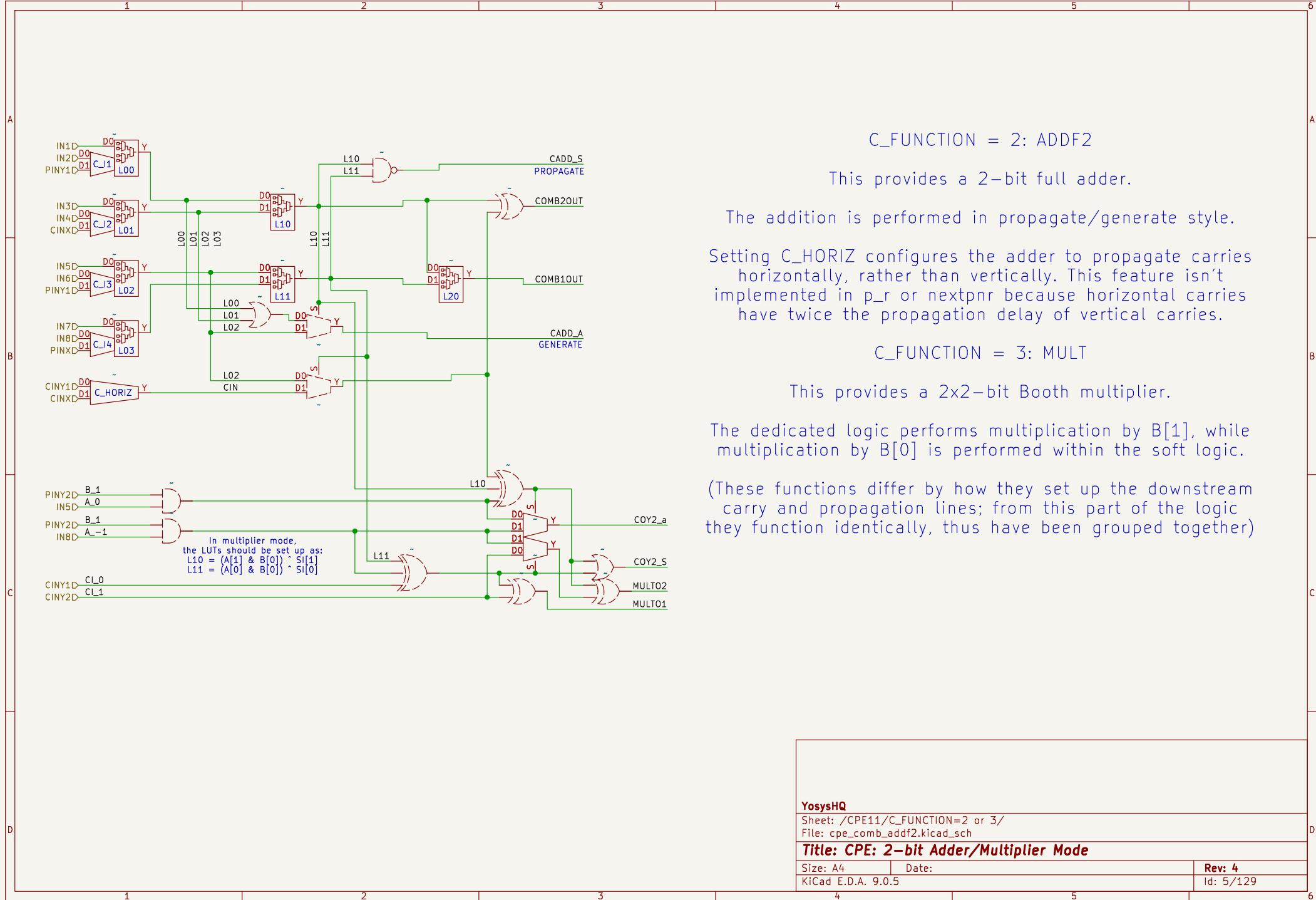
YosysHQ

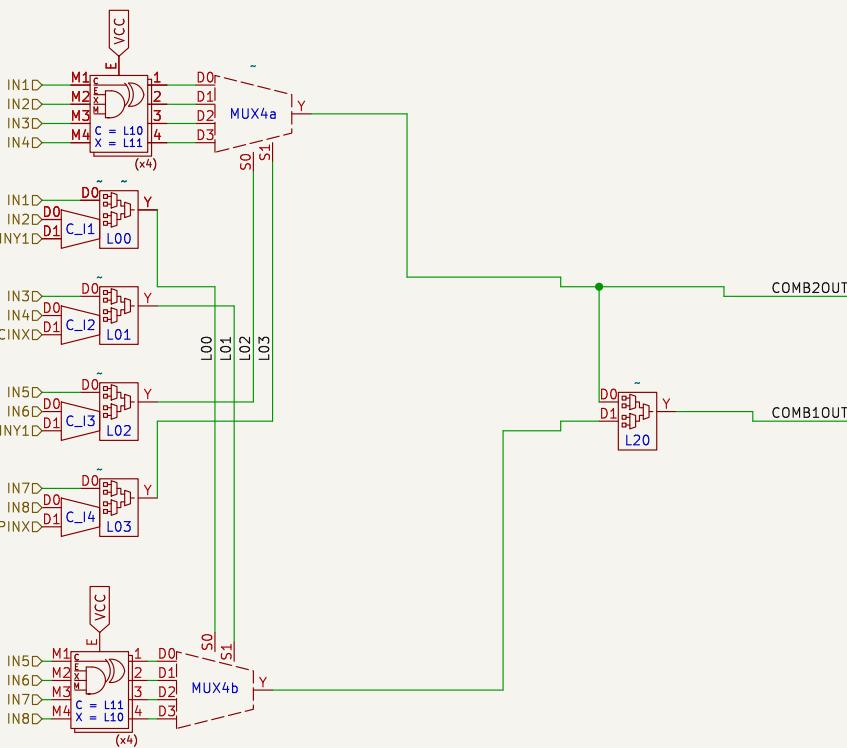
Sheet: /CPE11/C\_FUNCTION=1 or 7/  
File: cpe\_comb\_addcin.kicad\_sch

Title: CPE: Sum Output With Carry

Size: A4 Date:  
KiCad E.D.A. 9.0.5

Rev: 4  
Id: 4/129





C\_FUNCTION = 4: MUX4

This provides a four-input multiplexer.

Input inversion is performed by setting the relevant config bit of the C input, while constant inputs are masked by clearing the relevant config bit of the X input.

YosysHQ

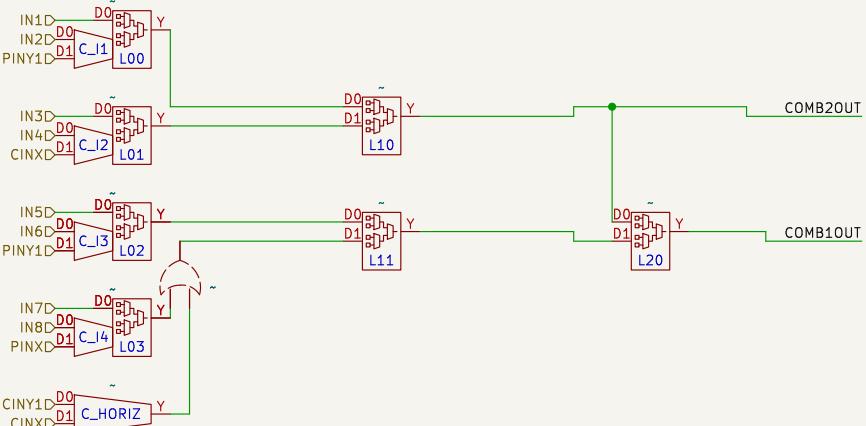
Sheet: /CPE11/C\_FUNCTION=4/  
File: cpe\_comb\_mux4.kicad\_sch

Title: CPE: 4-Input Multiplexer Mode

Size: A4 Date:

KiCad E.D.A. 9.0.5

Rev: 4  
Id: 6/129



C\_FUNCTION = 5: EN\_CIN

This is one of the more obscure CPE configurations.

The intended usecase of this is to source a signal from the carry lines to reduce routing delay.

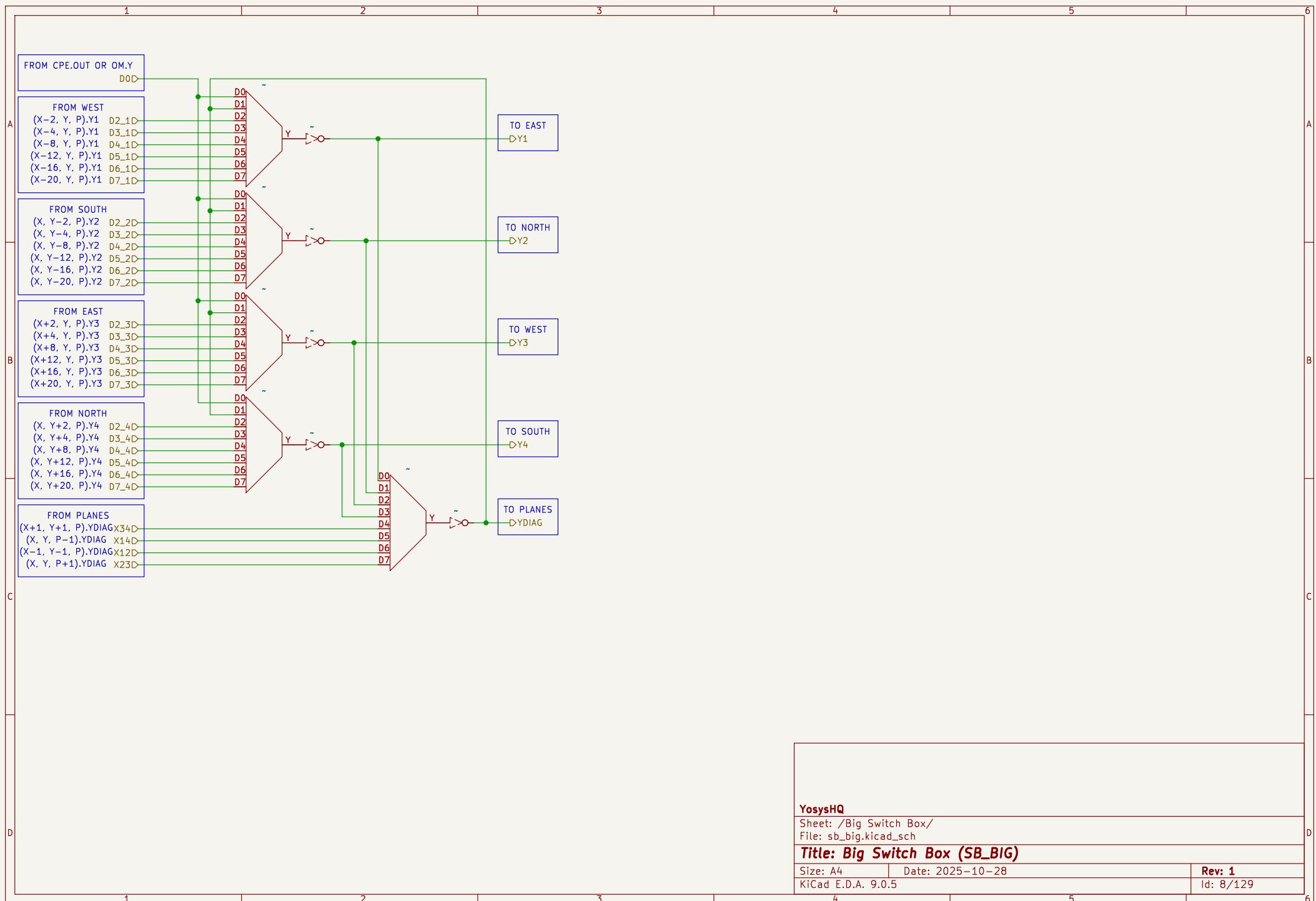
**YosysHQ**

Sheet: /CPE11/C\_FUNCTION=5/  
File: cpe\_comb\_en\_cin.kicad\_sch

**Title: CPE: Sum Input With Carry**

Size: A4 Date:  
KiCad E.D.A. 9.0.5

Rev: 4  
Id: 7/129



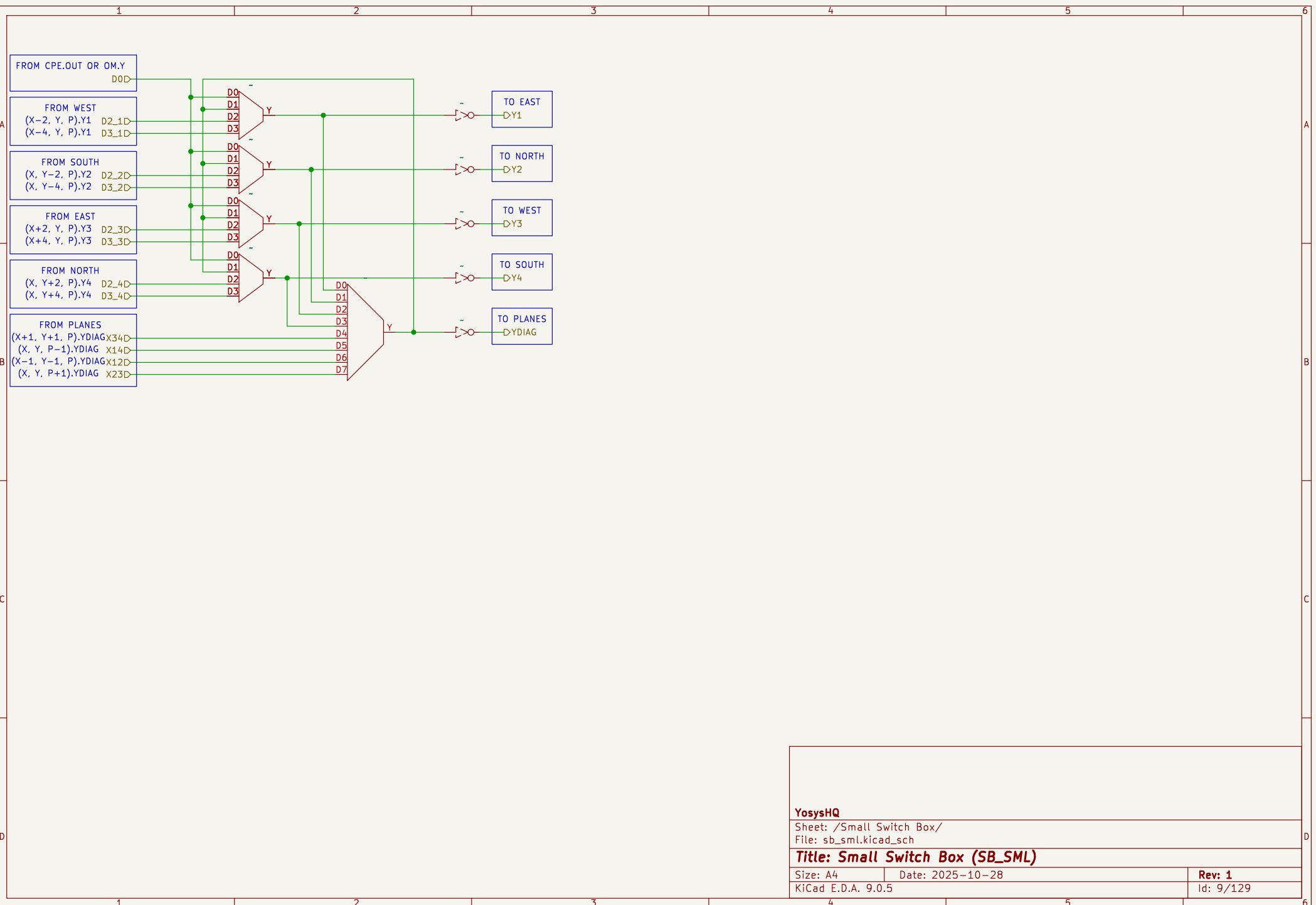
YosysHQ

Sheet: /Big Switch Box/  
File: sb\_big.kicad\_sch

**Title: Big Switch Box (SB\_BIG)**

Size: A4 Date: 2025-10-28  
KiCad E.D.A. 9.0.5

Rev: 1  
Id: 8/129



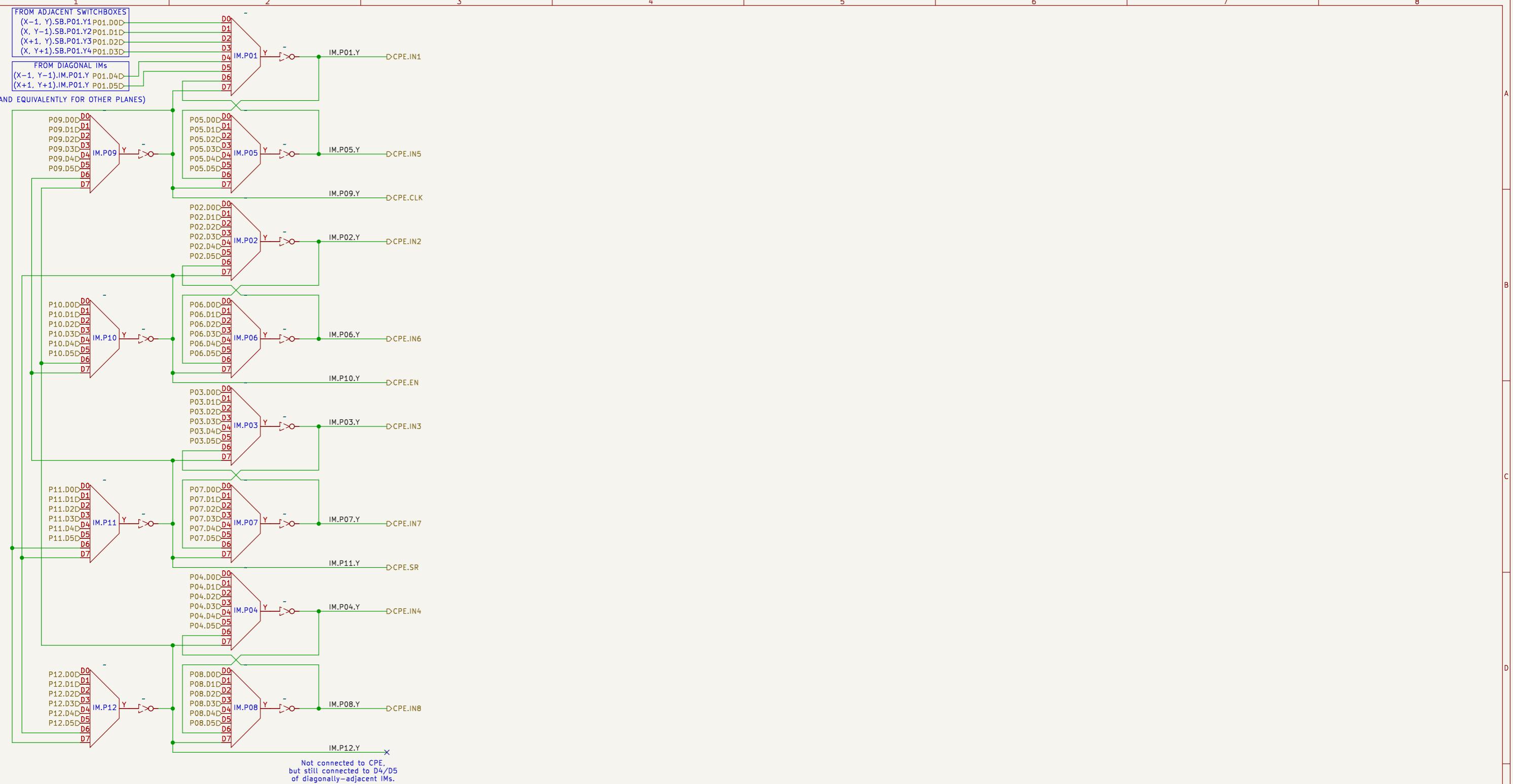
YosysHQ

Sheet: /Small Switch Box/  
File: sb\_sml.kicad\_sch

**Title: Small Switch Box (SB\_SML)**

Size: A4 Date: 2025-10-28  
KiCad E.D.A. 9.0.5

Rev: 1  
Id: 9/129



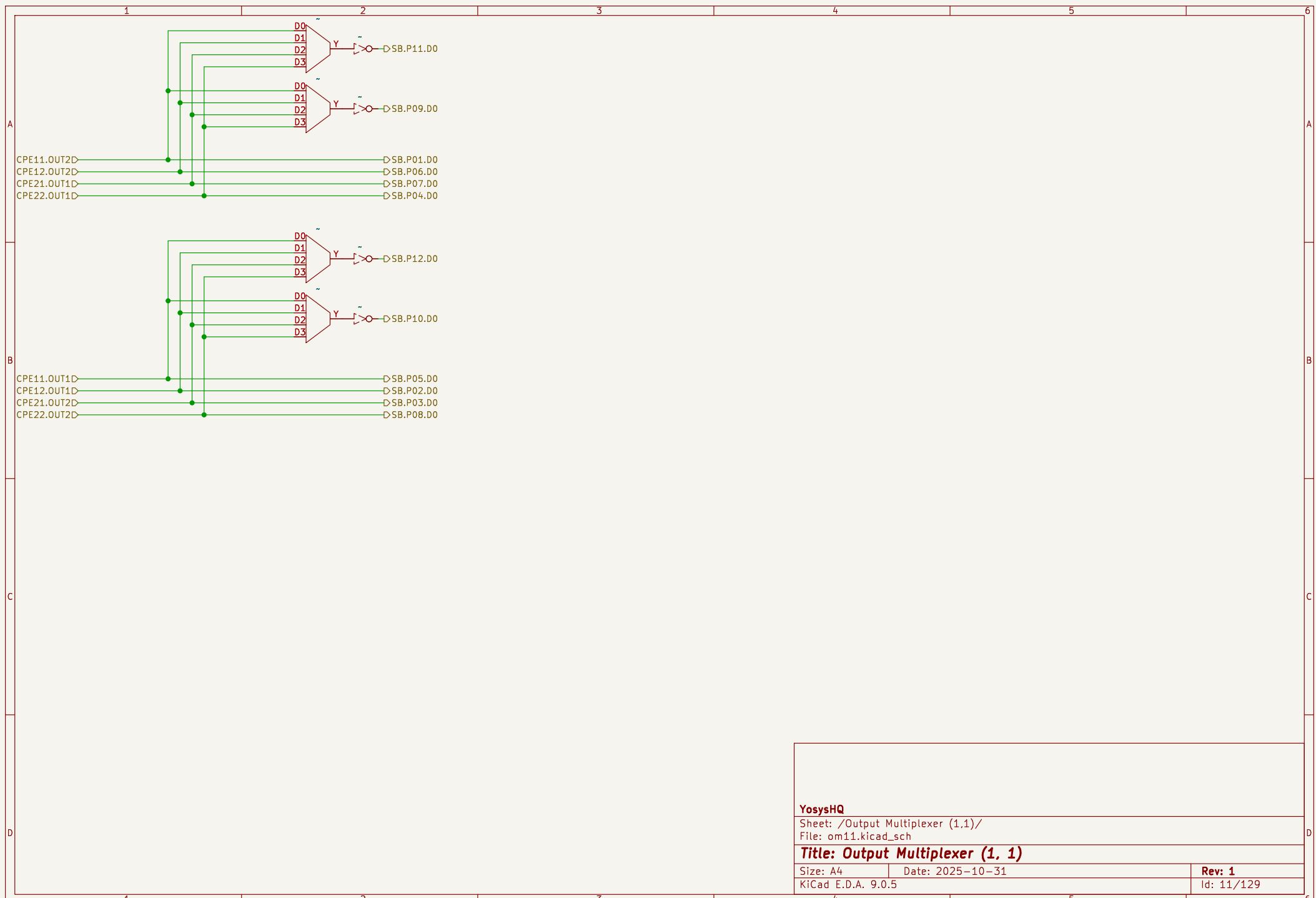
YosysHQ

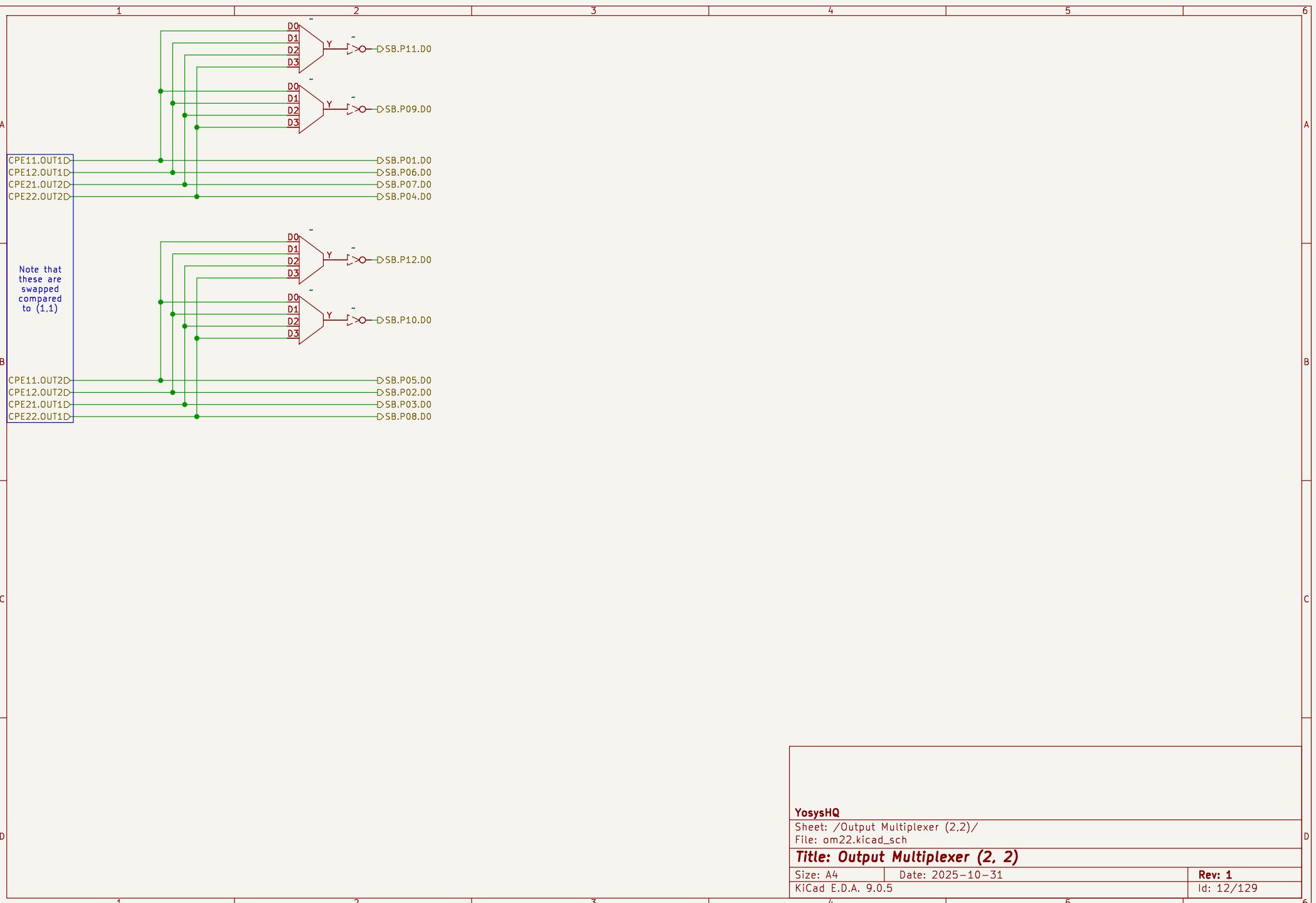
Sheet: /Input Multiplexer/  
File: im.kicad\_sch

**Title: Input Multiplexer (IM)**

Size: A3 | Date:  
KiCad E.D.A. 9.0.5

Rev: 1 | Id: 10/129





YosysHQ

Sheet: /Output Multiplexer (2,2)/  
File: om22.kicad\_sch

**Title: Output Multiplexer (2, 2)**

Size: A4 Date: 2025-10-31  
KiCad E.D.A. 9.0.5

Rev: 1  
Id: 12/129