

# LDO - Week 2

## Previous Week:

- Met with Tal to discuss layout issues.
- Mostly completed the OTA layout design.
- The OTA layout passed LVS and DRC, except for one remaining error, which we are working with Tal to resolve.
- Extracted QRC but the OTA output is stuck at 0V in simulations.

## This Week:

- Resolving the outstanding DRC issue.
- Finalizing the BGR layout.
- Running simulations to verify the layout.



```
#####
##                                ##
##          C A L I B R E   S Y S T E M          ##
##                                ##
##          L V S   R E P O R T                   ##
##                                ##
#####
```

```
REPORT FILE NAME:      OTA.lvs.report
LAYOUT NAME:          OTA.sp ('OTA')
SOURCE NAME:          OTA.src.net ('OTA')
RULE FILE:            _DFM_LVS_RC_CALIBRE_N28HP_1p9M_5x1y1z1U_ALRDL.v1.0_3p_
CREATION TIME:        Wed Mar 26 19:10:41 2025
CURRENT DIRECTORY:    /project/tsmc28mmwave/users/yaishorf/ws/calibrelvs/OTA
USER NAME:            yaishorf
CALIBRE VERSION:      v2022.1_36.16    Tue Mar 1 14:26:36 PST 2022
```

#### OVERALL COMPARISON RESULTS

```

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CORRECT
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#####
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#####
```

```
*****
CELL SUMMARY
*****
```

Result	Layout	Source
-----	-----	-----
CORRECT	OTA	OTA

```
*****
LVS PARAMETERS
*****
```

☒ ✖ Check IO\_CONNECT\_CORE\_NET\_VOLTAGE\_IS\_CORE:WARNING1

1

☒ ✖ Cell OTA\_symbol

1

☒ ✖ Check DIODMY\_L:WARNING

1

IO\_CONNECT\_CORE\_NET\_VOLTAGE\_IS\_CORE:WARNING1 { @ USE\_IO\_VOLTAGE\_ON\_CORE\_TO\_IO\_NET option is off in this DRC run.

@ 1. It will use low voltage space rules to do DRC, as you do not assign the voltage marker & the net connects to IO MOS and core MOS simultaneously

@ 2. If the designer knows some nets use high voltage,

@ please turn on USE\_IO\_VOLTAGE\_ON\_CORE\_TO\_IO\_NET option to check high voltage space rules conservatively.

@ 3. If you turn on USE\_IO\_VOLTAGE\_ON\_CORE\_TO\_IO\_NET option, you might find some high voltage space violations are actually false errors

@ because these nets actually use low voltage. You can turn off the option.

@ 4. It is strongly recommended to assign voltage marker layer on the nets connect to IO MOS and core MOS simultaneously.

@ 5. This warning is just a reminder, not a gated item for tape-out.

COPY CHIPx



Quantus Run (on micron9.en...)

The Quantus run "OTA" completed successfully  
The output is in :



Library: LDO

Cell: OTA

View: smart\_RCC\_typical

Close