

Project Title: OAI 32 static

Group Number: 7



INDRAPRASTHA INSTITUTE *of*
INFORMATION TECHNOLOGY
DELHI

Group Members :

Hariom Tiwari : 20222194

Harsh: 2022195

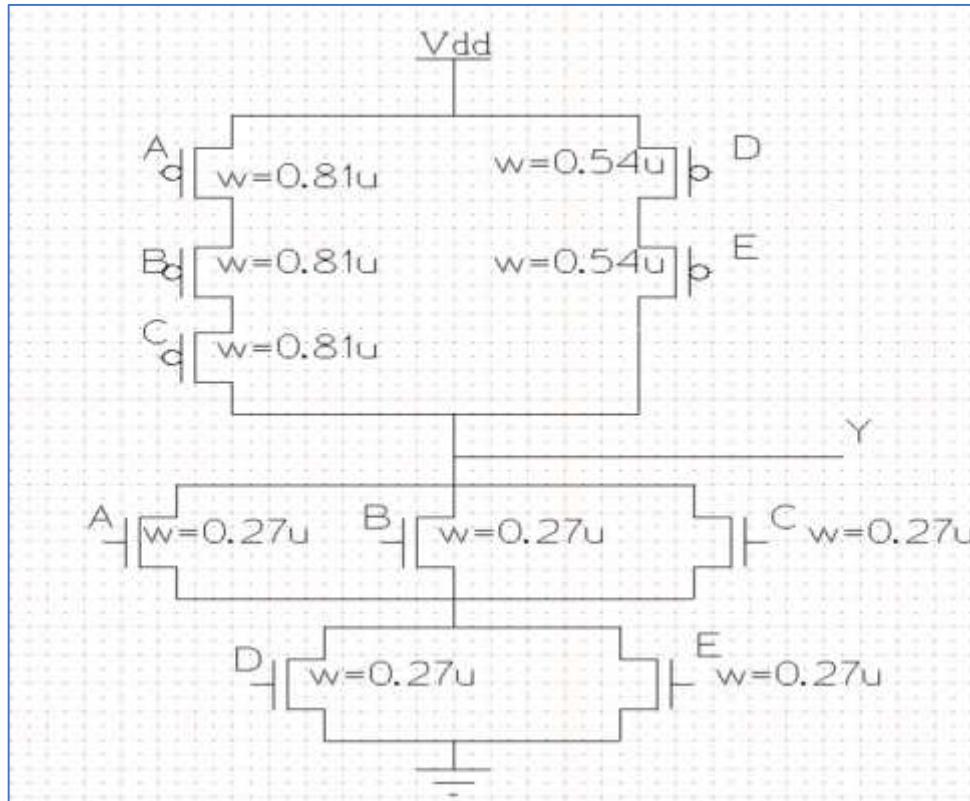
Himeksh Malhotra : 2022218

Mohit Mehra : 2022301

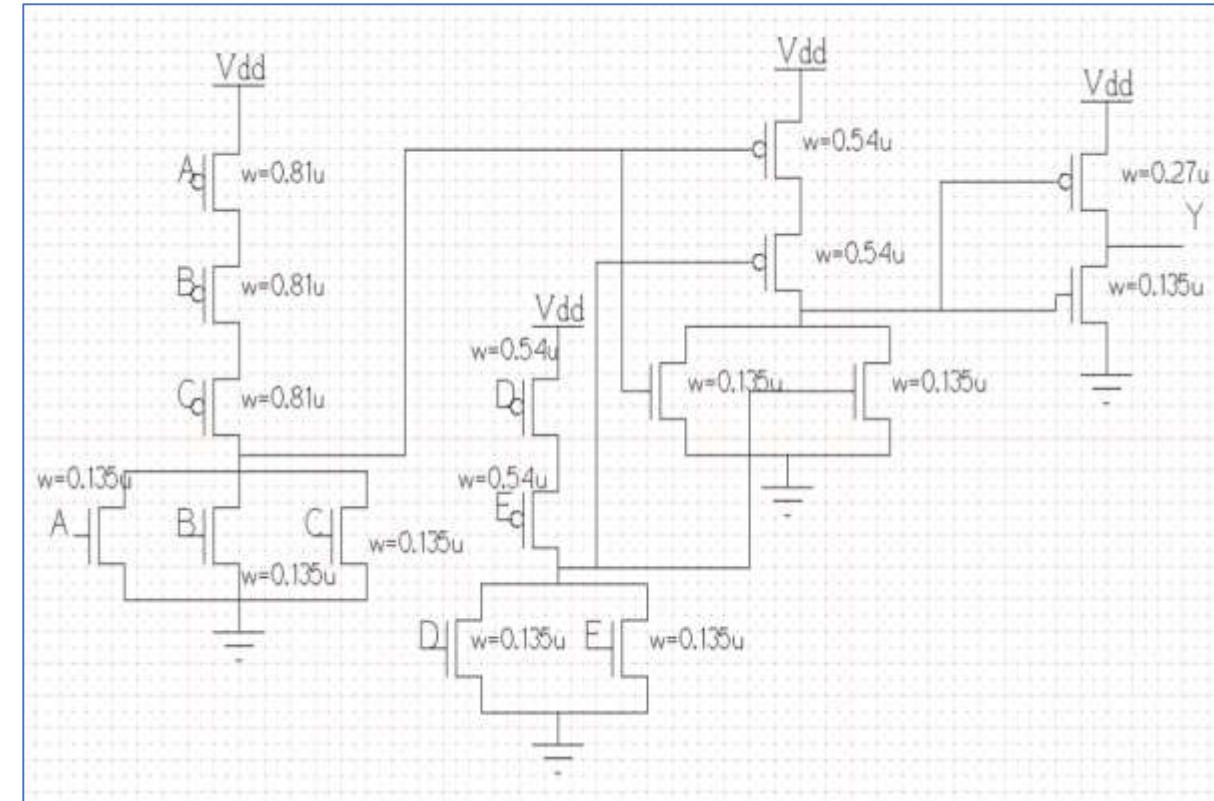




Schematic + Sizing



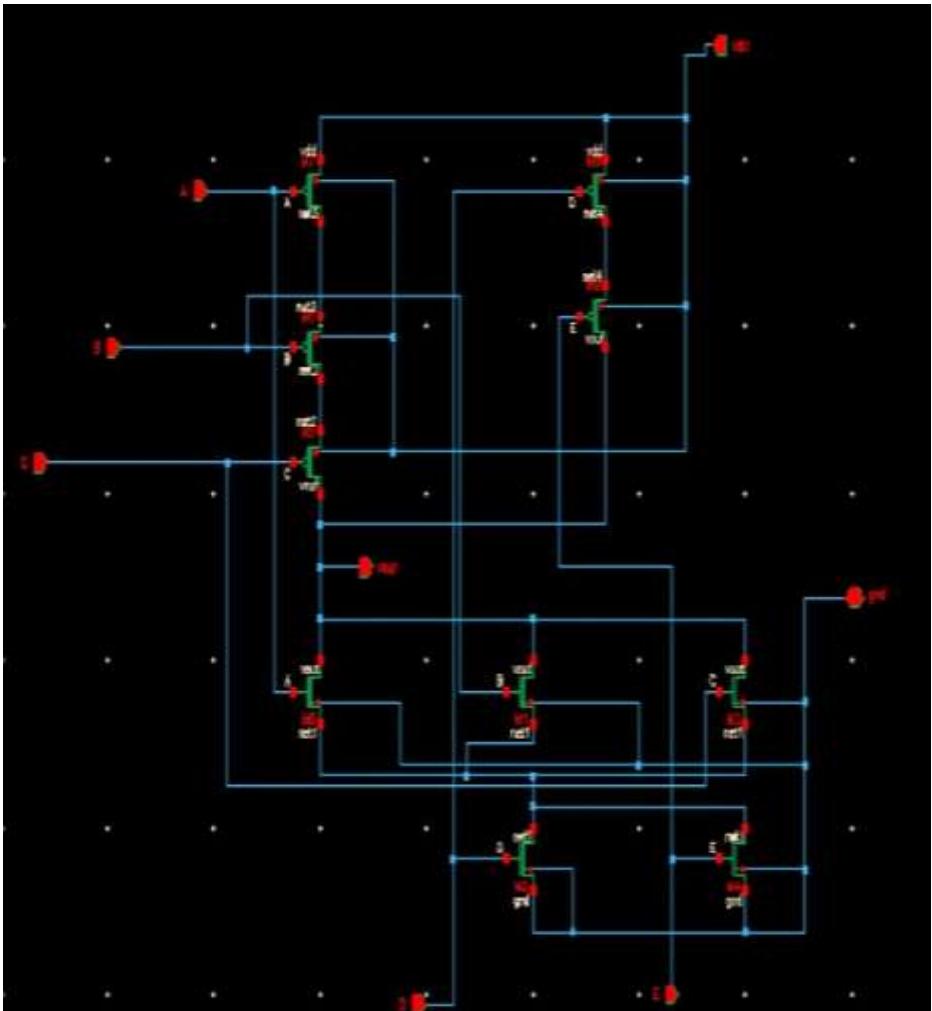
Complex



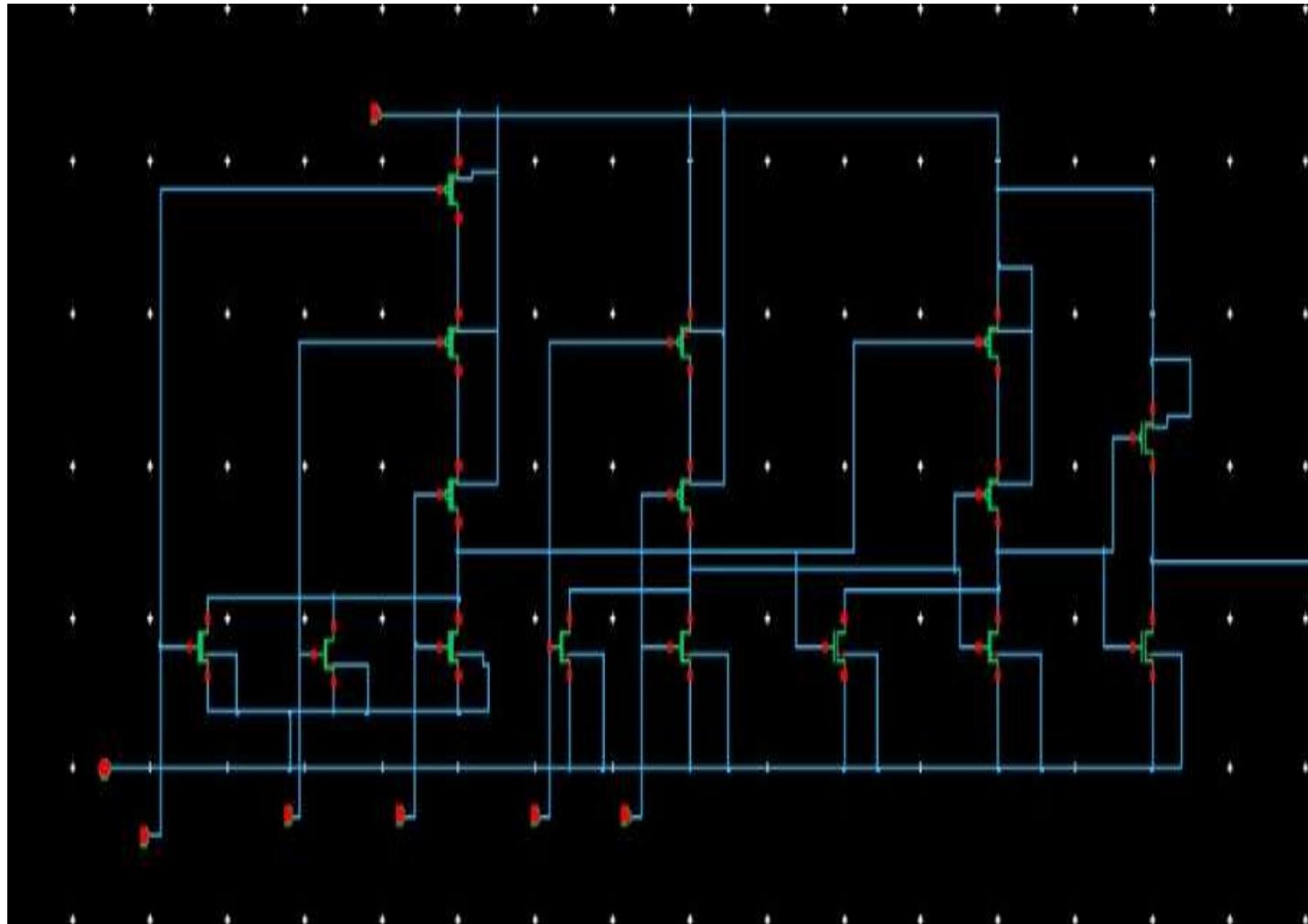
Non- Complex

Sizing is done according to unit size inverter.

Schematic + Sizing

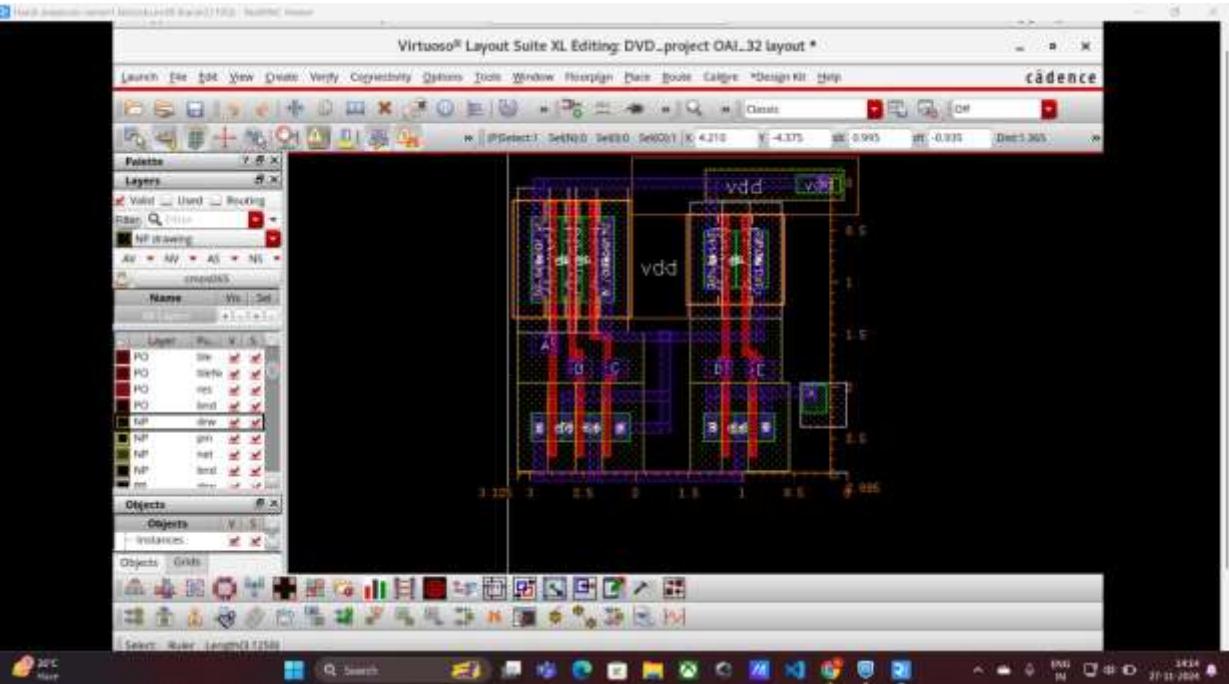


Complex



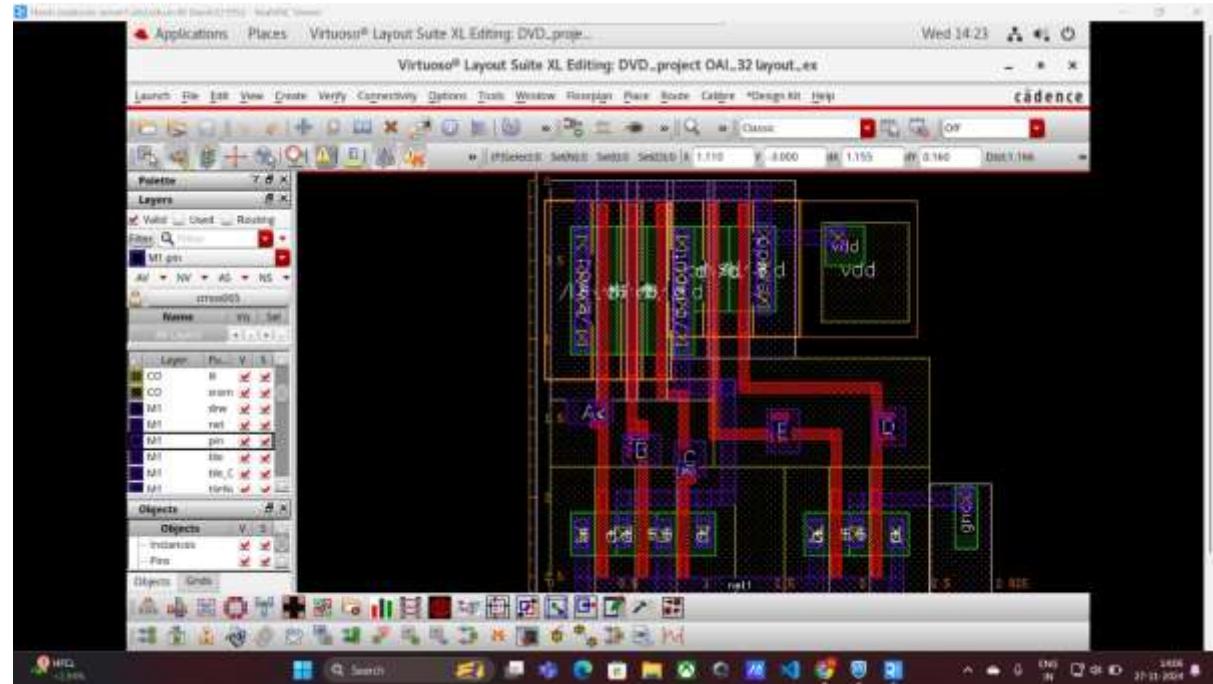
Non- Complex

Layout of OAI32(STATIC)(COMPLEX)



Height= 2.65um (13 tracks)

Area= 7.42 um sq

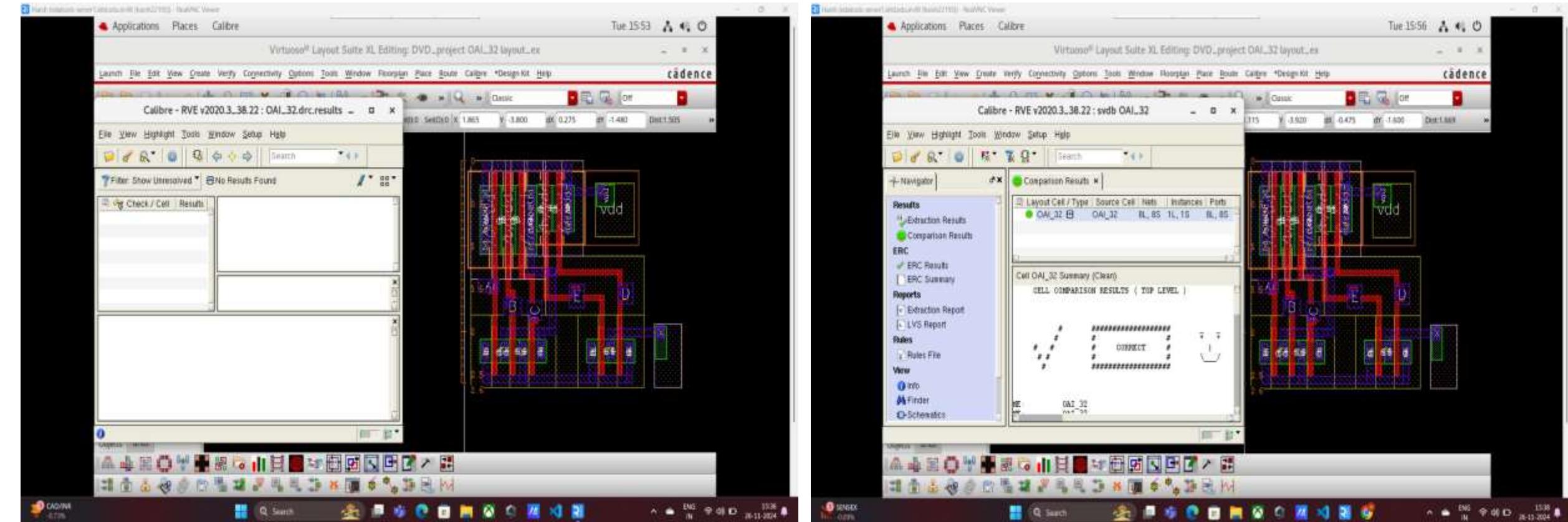


Final

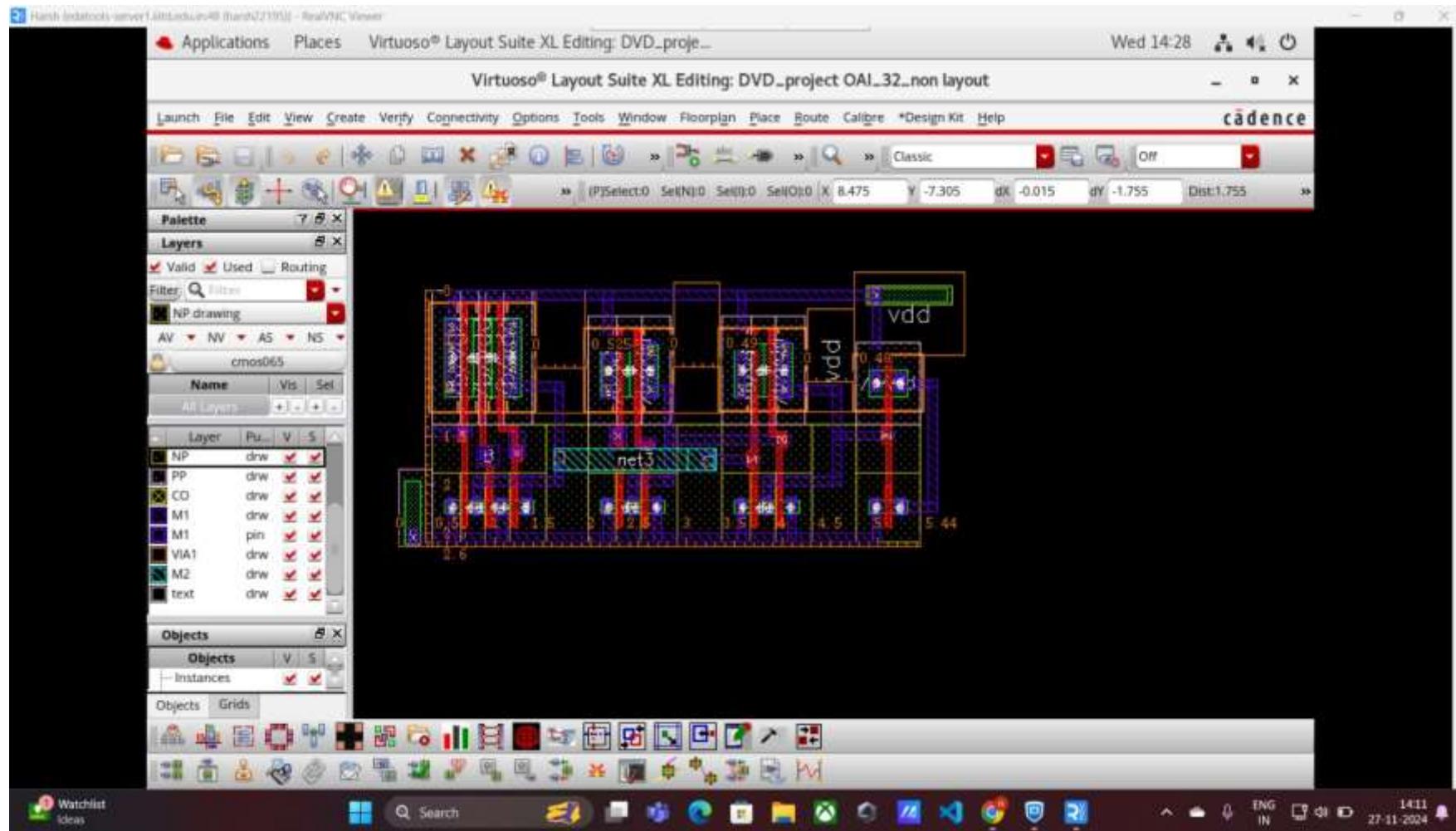
Height= 2.65um (13 tracks)

Area= 7.42 um sq

DRC & LVS OF COMPLEX OAI32(STATIC)



Layout of OAI32(STATIC)(NON-COMPLEX)



Height= 2.6um (13 tracks)

Area= 14.144 um sq

DELAY AND POWER CALCULATION



Pre-layout

PVT: SS, 1.08V, 125 C	Complex	Non Complex
Tpd	514.31	759.12
Tcd	206.9	549.77

Post-layout

PVT: SS, 1.08V, 125 C	Complex	Non Complex
Tpd	459.43	718.23
Tcd	193.0	528.38

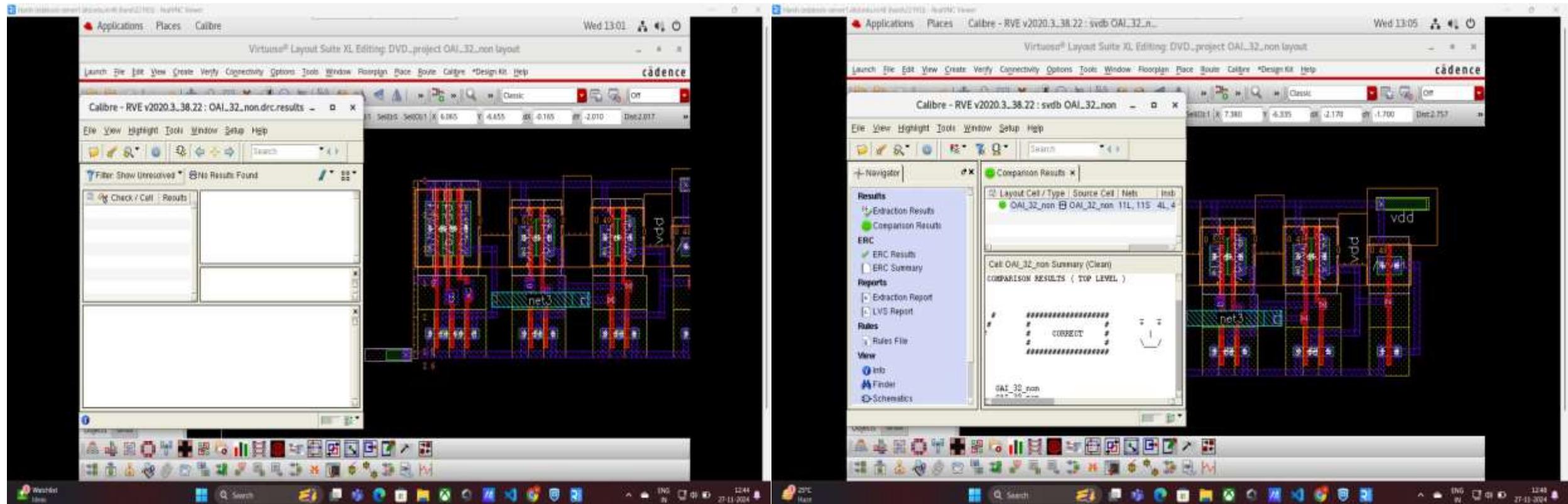
PVT: TT, 1.2V, 25C	Complex	Non Complex
Tpd	187.29	540.18
Tcd	113.01	303.89

PVT: TT, 1.2V, 25C	Complex	Non Complex
Tpd	149.30	528.98
Tcd	98.54	278.67

PVT: FF, 1.28V, -40C	Complex	Non Complex
Tpd	124.52	300.95
Tcd	120.47	204.67

PVT: TT, 1.28V, -40C	Complex	Non Complex
Tpd	112.98	288.29
Tcd	97.89	196.12

DRC & LVS OF NON-COMPLEX OAI32(STATIC)



Work Distribution



- **HARIOM AND HIMEKSH**– Non-Complex Schematic, Layout and Simulations
- **HARSH AND MOHIT**– Complex Schematic, Layout and Simulations

