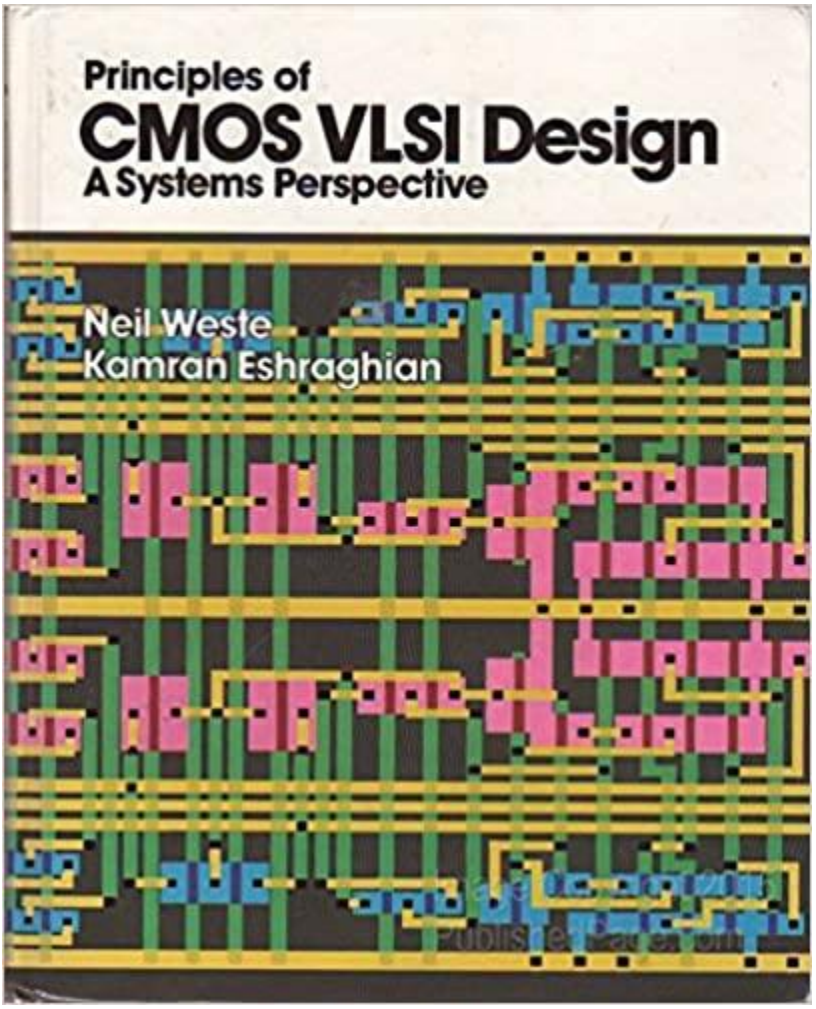
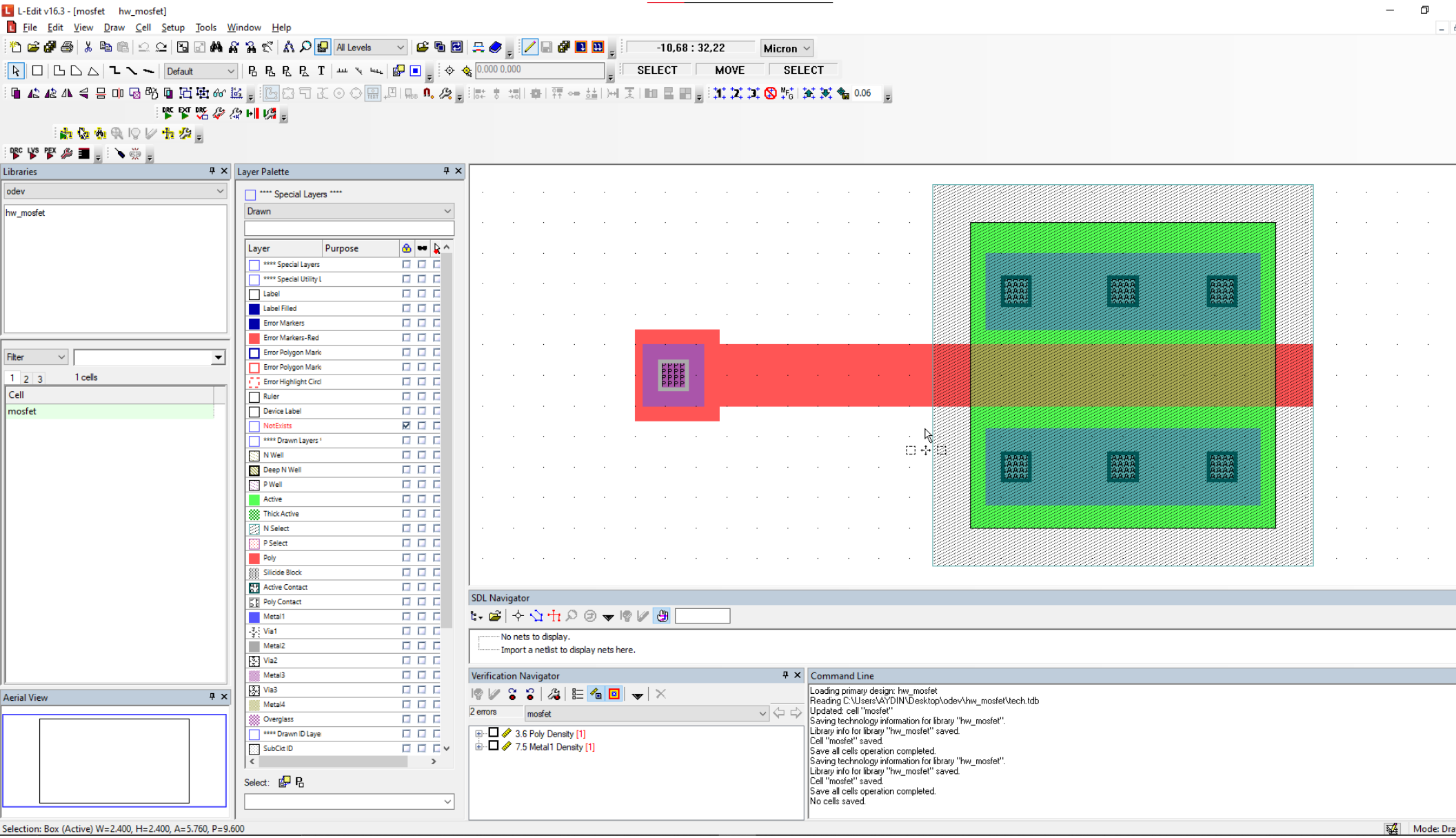
VLSI Design Assigment in L-Edit

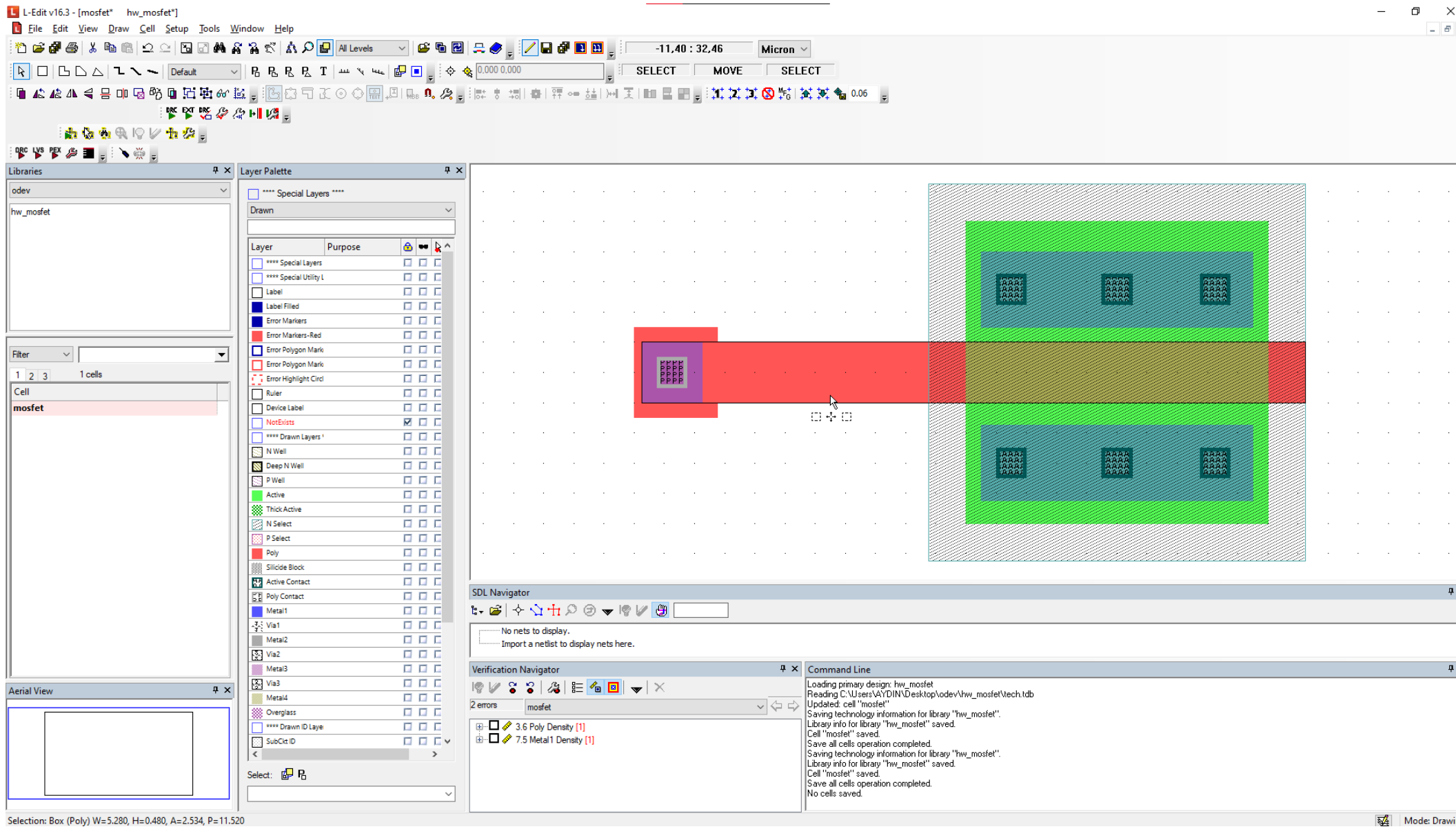


INTRODUCTION TO ENGINEERING APPLICATIONS

Prof. Dr. Alp Oral Salman
Prof. Dr. Ali Tangel

Ahmed Göktuğ Aydın – **200208054**


L-Edit v16.3 - [mosfet hw_mosfet]
File Edit View Draw Cell Setup Tools Window Help
All Levels
-10,68 : 32,22
Micron
Default
SELECT
MOVE
SELECT
Libraries
odev
hw_mosfet
Filter
1 2 3
1 cells
Cell
mosfet
Aerial View
Layer Palette
**** Special Layers ****
Drawn
Layer
Purpose
**** Special Layers
**** Special Utility L
Label
Label Filled
Error Markers
Error Markers-Red
Error Polygon Mark
Error Polygon Mark
Error Highlight Circl
Ruler
Device Label
NotExists
**** Drawn Layers *
N Well
Deep N Well
P Well
Active
Thick Active
N Select
P Select
Poly
Silicide Block
Active Contact
Poly Contact
Metal1
Via1
Metal2
Via2
Metal3
Via3
Metal4
Overglass
**** Drawn ID Laye
SubCkt ID
Select:
SDL Navigator
No nets to display.
Import a netlist to display nets here.
Verification Navigator
2 errors
mosfet
3.6 Poly Density [1]
7.5 Metal1 Density [1]
Command Line
Loading primary design: hw_mosfet
Reading C:\Users\AYDIN\Desktop\odev\hw_mosfet\tech.tdb
Updated: cell "mosfet"
Saving technology information for library "hw_mosfet".
Library info for library "hw_mosfet" saved.
Cell "mosfet" saved.
Save all cells operation completed.
Saving technology information for library "hw_mosfet".
Library info for library "hw_mosfet" saved.
Cell "mosfet" saved.
Save all cells operation completed.
No cells saved.
Selection: Box (Active) W=2.400, H=2.400, A=5.760, P=9.600


L-Edit v16.3 - [mosfet* hw_mosfet*]
File Edit View Draw Cell Setup Tools Window Help
All Levels
-11,40 : 32,46
Micron
Default
0,000 0,000
SELECT
MOVE
SELECT
0.06
Libraries
odev
hw_mosfet
Filter
1 2 3
1 cells
Cell
mosfet
Aerial View
Layer Palette
**** Special Layers ****
Drawn
Layer
Purpose
**** Special Layers
**** Special Utility L
Label
Label Filled
Error Markers
Error Markers-Red
Error Polygon Mark
Error Polygon Mark
Error Highlight Circl
Ruler
Device Label
NotExists
**** Drawn Layers *
N Well
Deep N Well
P Well
Active
Thick Active
N Select
P Select
Poly
Silicide Block
Active Contact
Poly Contact
Metal1
Via1
Metal2
Via2
Metal3
Via3
Metal4
Overglass
**** Drawn ID Laye
SubCkt ID
Select:
SDL Navigator
No nets to display.
Import a netlist to display nets here.
Verification Navigator
2 errors
mosfet
3.6 Poly Density [1]
7.5 Metal1 Density [1]
Command Line
Loading primary design: hw_mosfet
Reading C:\Users\AYDIN\Desktop\odev\hw_mosfet\tech.tdb
Updated: cell "mosfet"
Saving technology information for library "hw_mosfet".
Library info for library "hw_mosfet" saved.
Cell "mosfet" saved.
Save all cells operation completed.
Saving technology information for library "hw_mosfet".
Library info for library "hw_mosfet" saved.
Cell "mosfet" saved.
Save all cells operation completed.
No cells saved.
Selection: Box (Poly) W=5.280, H=0.480, A=2.534, P=11.520
Mode: Drawi

```
********************************************************************************
* SPICE netlist generated by HiPer Verify's NetList Extractor
*
* Extract Date/Time: Thu Apr 22 15:37:42 2021
* L-Edit Version:    L-Edit Win64 16.30.20150626.05:33:01
*
* Rule Set Name:
* TDB File Name:     C:\Users\AYDIN\Desktop\hw_mosfet\lib.defs
* PX Command File:
* Command File:      C:\Users\AYDIN\Desktop\hw_mosfet\Generic_025.ext
* Cell Name:         mosfet
* Write Flat:        NO
********************************************************************************


.model NMOS

****************************************

M1 3 1 2 4 NMOS l=4.8e-007 w=2.4e-006 ad=2.016e-012 as=1.872e-012 pd=6.48e-006 ps=6.36e-006  $ (8.94 33.42 11.34 33.9)
* Top level device count
* M(NMOS)      1
* Number of devices: 1
* Number of nodes:   4
```