Chapter 5 - PDK Examination - TRAINING - Bonus

Course authors (Git file)

1. Transistor count

- Load the gds of the standard cell AND4_1.
- How many transistors are in the cell?
- How to verify this with the use of another file from the PDK?

Next slide: Solution Spoiler!

SPOILER ALERT:

- The next slide contains the solution.
- Only proceed to the next slide if you want to see the solution right now!
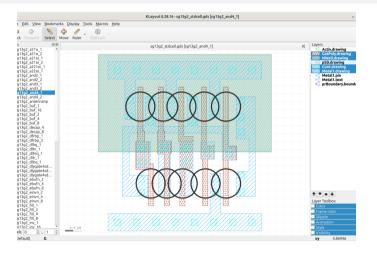
Solution: Transistor count

Figure 1: AND4_1

Solution: Transistor count in file

File: sg13g2_sdtcell.cdl

```
 1  MN4 net17 D VSS VSS sg13_lv_nmos m=1 w=640.00n l=130.00n ng=1
 2  MN3 net16 C net17 VSS sg13_lv_nmos m=1 w=640.00n l=130.00n ng=1
 3  MN2 net15 B net16 VSS sg13_lv_nmos m=1 w=640.00n l=130.00n ng=1
 4  MN1 net1 A net15 VSS sg13_lv_nmos m=1 w=640.00n l=130.00n ng=1
 5  MN0 X net1 VSS VSS sg13_lv_nmos m=1 w=740.00n l=130.00n ng=1
 6  MP0 net1 A VDD VDD sg13_lv_pmos m=1 w=840.00n l=130.00n ng=1
 7  MP4 X net1 VDD VDD sg13_lv_pmos m=1 w=1.12u l=130.00n ng=1
 8  MP3 net1 D VDD VDD sg13_lv_pmos m=1 w=840.00n l=130.00n ng=1
 9  MP2 net1 C VDD VDD sg13_lv_pmos m=1 w=840.00n l=130.00n ng=1
10  MP1 net1 B VDD VDD sg13_lv_pmos m=1 w=840.00n l=130.00n ng=1
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