

## Design Hierarchy

```
*****
Library      : Lib
Cell         : PSDchipRev4
View         : layout
Option       : Top to bottom
Stop Level   : 32
*****
```

```
Lib sripad layout (1)
  Lib p layout (1)
  Lib j layout (1)
  Lib e layout (2)
  Lib h layout (1)
  Lib d layout (2)
  Lib i layout (1)
  Lib r layout (3)
  Lib a layout (2)
  Lib s layout (1)
Lib sindhuja layout (1)
  Lib n layout (1)
  Lib v layout (1)
  Lib r layout (1)
  Lib u layout (1)
  Lib a layout (2)
  Lib j layout (1)
  Lib h layout (1)
  Lib d layout (1)
  Lib i layout (2)
  Lib s layout (1)
Lib PSDchipRev4_pads layout (1)
  Lib lvltrans_PadVdd5_PSD layout_nostubs (2)
    Lib M3_M2 layout (6)
    Lib lvltrans_sample2 layout_suply (1)
      Lib M2_M1 layout (6)
    Lib PadVdd layout (1)
      Lib cnt layout (763)
      Lib substrate_tu_cntvia layout (2)
        Lib cnt layout (16)
        Lib vial layout (16)
        Lib cntviacnt layout (105)
      Lib substrate_tieup layout (2)
      Lib substrate_tiedown_m1 layout (2)
      Lib tieup layout (1)
      Lib pad_bond layout (1)
        Lib via2 layout (360)
        Lib vial layout (180)
      Lib nmos_esd360_m1 layout (1)
        Lib nmos_esd180_m1 layout (2)
          Lib esd_nmostopbot_m1 layout (2)
            Lib nmos15_50topbot_m1 layout (1)
              Lib cnt layout (34)
              Lib vial layout (28)
            Lib esd_nmos1550mid_m1 layout (2)
              Lib nmos15_50mid_m1 layout (1)
                Lib cnt layout (31)
                Lib vial layout (32)
              Lib esd_nmos5015mid_m1 layout (2)
                Lib nmos50_15mid_m1 layout (1)
                  Lib cnt layout (31)
                  Lib vial layout (32)
                Lib pcnt layout (36)
          Lib tieup_cntvia layout (1)
            Lib cnt layout (79)
            Lib vial layout (48)
            Lib cntviacnt layout (669)
            Lib cnt_via_3 layout (2)
```

```
    Lib cnt layout (2)
    Lib vial layout (1)
    Lib vial layout (272)
    Lib cntviacnt layout (231)
Lib lvltrans_PadVdd5_PSD layout (1)
  gleLib lvltrans_sample2 layout_suply (1)
    SIUE_AMI_h_Layout M2_M1 layout (6)
    SIUE_AMI_h_Layout M3_M2 layout (6)
  Lib PadVdd layout (1)
    Lib cnt layout (763)
    Lib substrate_tu_cntvia layout (2)
      Lib cnt layout (16)
      Lib vial layout (16)
      Lib cntviacnt layout (105)
    Lib substrate_tieup layout (2)
    Lib substrate_tiedown_m1 layout (2)
    Lib tieup layout (1)
    Lib pad_bond layout (1)
      Lib via2 layout (360)
      Lib vial layout (180)
    Lib nmos_esd360_m1 layout (1)
      Lib nmos_esd180_m1 layout (2)
        Lib esd_nmostopbot_m1 layout (2)
          Lib nmos15_50topbot_m1 layout (1)
            Lib cnt layout (34)
            Lib vial layout (28)
          Lib esd_nmos1550mid_m1 layout (2)
            Lib nmos15_50mid_m1 layout (1)
              Lib cnt layout (31)
              Lib vial layout (32)
            Lib esd_nmos5015mid_m1 layout (2)
              Lib nmos50_15mid_m1 layout (1)
                Lib cnt layout (31)
                Lib vial layout (32)
          Lib pcnt layout (36)
        Lib tieup_cntvia layout (1)
          Lib cnt layout (79)
          Lib vial layout (48)
          Lib cntviacnt layout (669)
          Lib cnt_via_3 layout (2)
            Lib cnt layout (2)
            Lib vial layout (1)
          Lib vial layout (272)
        Lib cntviacnt layout (231)
Lib lvltrans_PadGnd_PSD layout_m2stub (2)
  SIUE_AMI_h_Layout M3_M2 layout (6)
  SIUE_AMI_h_Layout M2_M1 layout (1)
  gleLib lvltrans_sample2 layout_suply (1)
    SIUE_AMI_h_Layout M2_M1 layout (6)
  Lib cnt layout (443)
  Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib substrate_tieup_m1 layout (2)
    Lib cnt layout (18)
    Lib vial layout (18)
  Lib substrate_tiedown_m1 layout (2)
  Lib substrate_td_cntvia_m1 layout (2)
    Lib cnt layout (36)
    Lib vial layout (37)
    Lib cntviacnt layout (61)
  Lib pmos_esd360_m1 layout (1)
    Lib pmos_esd180_m1 layout (2)
      Lib cnt layout (208)
      Lib esd_pmostopbot_m1 layout (2)
        Lib mos15_50topbot_m1 layout (1)
          Lib cnt layout (34)
```

```
    Lib vial layout (22)
    Lib esd_pmos1550mid_m1 layout (2)
    Lib mos15_50mid_m1 layout (1)
    Lib cnt layout (31)
    Lib vial layout (26)
    Lib esd_pmos5015mid_m1 layout (2)
    Lib mos50_15mid_m1 layout (1)
    Lib cnt layout (31)
    Lib vial layout (25)
    Lib pcnt layout (35)
    Lib vial layout (90)
    Lib vial layout (130)
    Lib tiedown layout (1)
    Lib tiedown_cntvia layout (1)
    Lib cnt layout (192)
    Lib vial layout (52)
    Lib cnt_via_3 layout (6)
    Lib cnt layout (2)
    Lib vial layout (1)
    Lib cntviacnt layout (731)
    Lib lvltrans_PadGnd_PSD layout_nostubs (4)
    SIUE_AMI_h_Layout M3_M2 layout (6)
    gleLib lvltrans_sample2 layout_suply (1)
    SIUE_AMI_h_Layout M2_M1 layout (6)
    Lib cnt layout (443)
    Lib pmos_esd360_m1 layout (1)
    Lib pmos_esd180_m1 layout (2)
    Lib cnt layout (208)
    Lib esd_pmostopbot_m1 layout (2)
    Lib mos15_50topbot_m1 layout (1)
    Lib cnt layout (34)
    Lib vial layout (22)
    Lib esd_pmos1550mid_m1 layout (2)
    Lib mos15_50mid_m1 layout (1)
    Lib cnt layout (31)
    Lib vial layout (26)
    Lib esd_pmos5015mid_m1 layout (2)
    Lib mos50_15mid_m1 layout (1)
    Lib cnt layout (31)
    Lib vial layout (25)
    Lib pcnt layout (35)
    Lib vial layout (90)
    Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
    Lib substrate_tieup_m1 layout (2)
    Lib cnt layout (18)
    Lib vial layout (18)
    Lib tiedown layout (1)
    Lib tiedown_cntvia layout (1)
    Lib cnt layout (192)
    Lib vial layout (52)
    Lib cnt_via_3 layout (6)
    Lib cnt layout (2)
    Lib vial layout (1)
    Lib cntviacnt layout (731)
    Lib substrate_tiedown_m1 layout (2)
    Lib substrate_td_cntvia_m1 layout (2)
    Lib cnt layout (36)
    Lib vial layout (37)
    Lib cntviacnt layout (61)
    Lib vial layout (130)
    Lib lvltrans_PadVdd_PSD layout_nostubs (4)
    SIUE_AMI_h_Layout M3_M2 layout (6)
    gleLib lvltrans_sample2 layout_suply (1)
    SIUE_AMI_h_Layout M2_M1 layout (6)
    Lib PadVdd layout (1)
```

```
Lib cnt layout (763)
Lib substrate_tu_cntvia layout (2)
  Lib cnt layout (16)
  Lib vial layout (16)
  Lib cntviacnt layout (105)
Lib substrate_tieup layout (2)
Lib substrate_tiedown_m1 layout (2)
Lib tieup layout (1)
Lib pad_bond layout (1)
  Lib via2 layout (360)
  Lib vial layout (180)
Lib nmos_esd360_m1 layout (1)
  Lib nmos_esd180_m1 layout (2)
    Lib esd_nmostopbot_m1 layout (2)
      Lib nmos15_50topbot_m1 layout (1)
        Lib cnt layout (34)
        Lib vial layout (28)
      Lib esd_nmos1550mid_m1 layout (2)
        Lib nmos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
        Lib esd_nmos5015mid_m1 layout (2)
          Lib nmos50_15mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (32)
          Lib pcnt layout (36)
      Lib tieup_cntvia layout (1)
        Lib cnt layout (79)
        Lib vial layout (48)
        Lib cntviacnt layout (669)
        Lib cnt_via_3 layout (2)
          Lib cnt layout (2)
          Lib vial layout (1)
        Lib vial layout (272)
      Lib cntviacnt layout (231)
Lib lvltrans_PadOut_PSD layout (7)
  Lib M3_M2 layout (4)
  Lib M2_M1 layout (2)
  Lib lvltrans_sample2 layout1 (1)
    Lib M2_M1 layout (6)
  Lib padbidirhe layout (1)
    Lib pad_bond layout (1)
      Lib via2 layout (360)
      Lib vial layout (180)
    Lib pad_pmos layout (1)
      Lib pcnt layout (28)
      Lib cnt layout (918)
      Lib vial layout (628)
    Lib pad_nmos layout (1)
      Lib cnt layout (23)
      Lib vial layout (59)
    Lib pad_bidirhe layout (1)
      Lib pcnt layout (38)
      Lib pad_esd_r100 layout (2)
        Lib res2 layout (9)
      Lib cnt layout (504)
      Lib vial layout (200)
Lib lvltrans_PadInc_PSD layout (35)
  Lib lvltrans_sample2 layout (1)
    Lib epm layout (14)
    Lib enm layout (10)
    Lib M2_M1 layout (25)
    Lib POLY_M1 layout (10)
    Lib nwell_contact layout (24)
    Lib pwell_contact layout (31)
  Lib krish_PadInc_PSD layout (1)
    Lib padbidirhe layout (1)
```

```
    Lib pad_bond layout (1)
      Lib via2 layout (360)
      Lib vial layout (180)
    Lib pad_pmos layout (1)
      Lib pcnt layout (28)
      Lib cnt layout (918)
      Lib vial layout (628)
    Lib pad_nmos layout (1)
      Lib cnt layout (23)
      Lib vial layout (59)
    Lib pad_bidirhe layout (1)
      Lib pcnt layout (38)
      Lib pad_esd_r100 layout (2)
        Lib res2 layout (9)
      Lib cnt layout (504)
      Lib vial layout (200)
    Lib M2_M1 layout (2)
    Lib M3_M2 layout (6)
  Lib lvltrans_PadBidirHE_PSD layout (13)
    Lib M3_M2 layout (10)
    Lib lvltrans_sample2 layout (1)
      Lib epm layout (14)
      Lib enm layout (10)
      Lib M2_M1 layout (25)
      Lib POLY_M1 layout (10)
      Lib nwell_contact layout (24)
      Lib pwell_contact layout (31)
    Lib M2_M1 layout (2)
    Lib pad_nmos layout (1)
      Lib cnt layout (23)
      Lib vial layout (59)
    Lib pad_bidirhe layout (1)
      Lib pcnt layout (38)
      Lib pad_esd_r100 layout (2)
        Lib res2 layout (9)
      Lib cnt layout (504)
      Lib vial layout (200)
    Lib pad_pmos layout (1)
      Lib pcnt layout (28)
      Lib cnt layout (918)
      Lib vial layout (628)
    Lib pad_bond layout (1)
      Lib via2 layout (360)
      Lib vial layout (180)
  Lib lvltrans_PadAref_PSD layout (21)
    Lib PadAref layout (1)
    Lib pad_port layout (1)
    Lib substrate_tiedown_m1 layout (2)
    Lib substrate_tieup_m1 layout (2)
      Lib cnt layout (18)
      Lib vial layout (18)
    Lib cnt layout (644)
    Lib nmos_esd360_m1 layout (1)
      Lib nmos_esd180_m1 layout (2)
        Lib esd_nmostopbot_m1 layout (2)
          Lib nmos15_50topbot_m1 layout (1)
            Lib cnt layout (34)
            Lib vial layout (28)
        Lib esd_nmos1550mid_m1 layout (2)
          Lib nmos15_50mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (32)
        Lib esd_nmos5015mid_m1 layout (2)
          Lib nmos50_15mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (32)
      Lib pcnt layout (36)
```

```
Lib pmos_esd360_m1 layout (1)
  Lib pmos_esd180_m1 layout (2)
    Lib cnt layout (208)
    Lib esd_pmostopbot_m1 layout (2)
      Lib mos15_50topbot_m1 layout (1)
        Lib cnt layout (34)
        Lib vial layout (22)
      Lib esd_pmos1550mid_m1 layout (2)
        Lib mos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (26)
        Lib esd_pmos5015mid_m1 layout (2)
          Lib mos50_15mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (25)
          Lib pcnt layout (35)
          Lib vial layout (90)
    Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib vial layout (301)
  Lib cntviacnt layout (81)
Lib lvltrans_PadGnd_PSD layout (3)
  gleLib lvltrans_sample2 layout_suply (1)
  SIUE_AMI_h_Layout M2_M1 layout (6)
  SIUE_AMI_h_Layout M3_M2 layout (6)
  Lib cnt layout (443)
  Lib substrate_tiedown_m1 layout (2)
  Lib substrate_td_cntvia_m1 layout (2)
    Lib cnt layout (36)
    Lib vial layout (37)
    Lib cntviacnt layout (61)
  Lib substrate_tieup_m1 layout (2)
    Lib cnt layout (18)
    Lib vial layout (18)
  Lib tiedown layout (1)
  Lib tiedown_cntvia layout (1)
    Lib cnt layout (192)
    Lib vial layout (52)
    Lib cnt_via_3 layout (6)
      Lib cnt layout (2)
      Lib vial layout (1)
    Lib cntviacnt layout (731)
  Lib pmos_esd360_m1 layout (1)
  Lib pmos_esd180_m1 layout (2)
    Lib cnt layout (208)
    Lib esd_pmostopbot_m1 layout (2)
      Lib mos15_50topbot_m1 layout (1)
        Lib cnt layout (34)
        Lib vial layout (22)
      Lib esd_pmos1550mid_m1 layout (2)
        Lib mos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (26)
        Lib esd_pmos5015mid_m1 layout (2)
          Lib mos50_15mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (25)
          Lib pcnt layout (35)
          Lib vial layout (90)
    Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib vial layout (130)
Lib lvltrans_PadVdd_PSD layout (3)
  gleLib lvltrans_sample2 layout_suply (1)
  SIUE_AMI_h_Layout M2_M1 layout (6)
```

```
SIUE_AMI_h_Layout M3_M2 layout (6)
Lib PadVdd layout (1)
  Lib cnt layout (763)
  Lib substrate_tu_cntvia layout (2)
    Lib cnt layout (16)
    Lib vial layout (16)
    Lib cntviacnt layout (105)
  Lib substrate_tieup layout (2)
  Lib substrate_tiedown_m1 layout (2)
  Lib tieup layout (1)
  Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib nmos_esd360_m1 layout (1)
    Lib nmos_esd180_m1 layout (2)
      Lib esd_nmostopbot_m1 layout (2)
        Lib nmos15_50topbot_m1 layout (1)
          Lib cnt layout (34)
          Lib vial layout (28)
      Lib esd_nmos1550mid_m1 layout (2)
        Lib nmos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
      Lib esd_nmos5015mid_m1 layout (2)
        Lib nmos50_15mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
      Lib pcnt layout (36)
  Lib tieup_cntvia layout (1)
    Lib cnt layout (79)
    Lib vial layout (48)
    Lib cntviacnt layout (669)
    Lib cnt_via_3 layout (2)
      Lib cnt layout (2)
      Lib vial layout (1)
  Lib vial layout (272)
  Lib cntviacnt layout (231)
Lib krish_PadAref_PSD layout (20)
  Lib PadAref layout (1)
  Lib pad_port layout (1)
  Lib substrate_tiedown_m1 layout (2)
  Lib substrate_tieup_m1 layout (2)
    Lib cnt layout (18)
    Lib vial layout (18)
  Lib cnt layout (644)
  Lib nmos_esd360_m1 layout (1)
    Lib nmos_esd180_m1 layout (2)
      Lib esd_nmostopbot_m1 layout (2)
        Lib nmos15_50topbot_m1 layout (1)
          Lib cnt layout (34)
          Lib vial layout (28)
      Lib esd_nmos1550mid_m1 layout (2)
        Lib nmos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
      Lib esd_nmos5015mid_m1 layout (2)
        Lib nmos50_15mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
      Lib pcnt layout (36)
  Lib pmos_esd360_m1 layout (1)
    Lib pmos_esd180_m1 layout (2)
      Lib cnt layout (208)
      Lib esd_pmostopbot_m1 layout (2)
        Lib mos15_50topbot_m1 layout (1)
          Lib cnt layout (34)
          Lib vial layout (22)
```

```
    Lib esd_pmos1550mid_m1 layout (2)
      Lib mos15_50mid_m1 layout (1)
        Lib cnt layout (31)
      Lib vial layout (26)
    Lib esd_pmos5015mid_m1 layout (2)
      Lib mos50_15mid_m1 layout (1)
        Lib cnt layout (31)
      Lib vial layout (25)
    Lib pcnt layout (35)
    Lib vial layout (90)
  Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib vial layout (301)
  Lib cntviacnt layout (81)
Lib krish_PadGnd_PSD layout (3)
  Lib cnt layout (443)
  Lib substrate_tiedown_m1 layout (2)
  Lib substrate_td_cntvia_m1 layout (2)
    Lib cnt layout (36)
    Lib vial layout (37)
    Lib cntviacnt layout (61)
  Lib substrate_tieup_m1 layout (2)
    Lib cnt layout (18)
    Lib vial layout (18)
  Lib tiedown layout (1)
  Lib tiedown_cntvia layout (1)
    Lib cnt layout (192)
    Lib vial layout (52)
    Lib cnt_via_3 layout (6)
      Lib cnt layout (2)
      Lib vial layout (1)
    Lib cntviacnt layout (731)
  Lib pmos_esd360_m1 layout (1)
  Lib pmos_esd180_m1 layout (2)
    Lib cnt layout (208)
    Lib esd_pmostopbot_m1 layout (2)
      Lib mos15_50topbot_m1 layout (1)
        Lib cnt layout (34)
      Lib vial layout (22)
    Lib esd_pmos1550mid_m1 layout (2)
      Lib mos15_50mid_m1 layout (1)
        Lib cnt layout (31)
      Lib vial layout (26)
    Lib esd_pmos5015mid_m1 layout (2)
      Lib mos50_15mid_m1 layout (1)
        Lib cnt layout (31)
      Lib vial layout (25)
    Lib pcnt layout (35)
    Lib vial layout (90)
  Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
  Lib vial layout (130)
Lib krish_PadVdd_PSD layout (3)
  Lib PadVdd layout (1)
    Lib cnt layout (763)
    Lib substrate_tu_cntvia layout (2)
      Lib cnt layout (16)
      Lib vial layout (16)
      Lib cntviacnt layout (105)
    Lib substrate_tieup layout (2)
    Lib substrate_tiedown_m1 layout (2)
    Lib tieup layout (1)
  Lib pad_bond layout (1)
    Lib via2 layout (360)
    Lib vial layout (180)
```



```
Lib nmos_esd360_m1 layout (1)
  Lib nmos_esd180_m1 layout (2)
    Lib esd_nmostopbot_m1 layout (2)
      Lib nmos15_50topbot_m1 layout (1)
        Lib cnt layout (34)
        Lib vial layout (28)
      Lib esd_nmos1550mid_m1 layout (2)
        Lib nmos15_50mid_m1 layout (1)
          Lib cnt layout (31)
          Lib vial layout (32)
        Lib esd_nmos5015mid_m1 layout (2)
          Lib nmos50_15mid_m1 layout (1)
            Lib cnt layout (31)
            Lib vial layout (32)
          Lib pcnt layout (36)
        Lib tieup_cntvia layout (1)
          Lib cnt layout (79)
          Lib vial layout (48)
          Lib cntviacnt layout (669)
          Lib cnt_via_3 layout (2)
            Lib cnt layout (2)
            Lib vial layout (1)
          Lib vial layout (272)
          Lib cntviacnt layout (231)
Lib junaaid_name layout (1)
  Lib n layout (1)
  Lib d layout (1)
  Lib i layout (2)
  Lib a layout (2)
  Lib u layout (2)
  Lib text_j layout (1)
Lib jon layout (1)
  Lib n layout (2)
  Lib s layout (1)
  Lib l layout (1)
  Lib e layout (1)
  Lib j layout (1)
  Lib o layout (2)
Lib krish_nvallur layout (1)
  Lib r layout (1)
  Lib u layout (2)
  Lib l layout (2)
  Lib a layout (1)
  Lib v layout (1)
  Lib h layout (1)
Lib krish_ddasari layout (1)
  Lib i layout (1)
  Lib r layout (1)
  Lib s layout (1)
  Lib a layout (2)
  Lib d layout (2)
Lib vikram_name layout (1)
  Lib m layout (1)
  Lib a layout (1)
  Lib text_r layout (1)
  Lib k layout (1)
  Lib i layout (1)
  Lib v layout (2)
Lib naveen_name layout (1)
  Lib n layout (2)
  Lib d layout (1)
  Lib e layout (2)
  Lib v layout (1)
  Lib a layout (1)
Lib psdrev2_name layout (1)
  Lib v layout (1)
  Lib e layout (1)
```

```
Lib text_r layout (1)
Lib text_d layout (1)
Lib text_s layout (2)
Lib text_p layout (1)
Lib siue_name layout (1)
  Lib e layout (1)
  Lib u layout (1)
  Lib i layout (1)
  Lib s layout (1)
Lib mhall layout (1)
  Lib l layout (2)
  Lib a layout (1)
  Lib h layout (1)
  Lib m layout (1)
Lib jproctor layout (1)
  Lib text_j layout (1)
  Lib text_p layout (1)
  Lib text_r layout (2)
  Lib text_o layout (2)
  Lib text_c layout (1)
  Lib text_t layout (1)
Lib M3_M2 layout (2676)
Lib M2_M1 layout (4992)
Lib eight_channel layout (1)
  Lib channel layout (8)
    Lib rest_logic_backup layout (1)
    Lib revised_full_tvc layout (1)
    Lib revisedTVC layout (1)
    Lib TVCore layout (1)
      SIUE_AMI_h_Layout cap layout (2)
      SIUE_AMI_h_Layout nmos layout (4)
      SIUE_AMI_h_Layout pmos_SKILL layout (6)
      SIUE_AMI_h_Layout nmos_SKILL layout (1)
      SIUE_AMI_h_Layout ntap layout (9)
      Lib M2_M1 layout (52)
      SIUE_AMI_h_Layout ptap layout (11)
      Lib POLY_M1 layout (8)
    Lib TVCbuffer layout (1)
      SIUE_AMI_h_Layout pmos layout (34)
      SIUE_AMI_h_Layout nmos layout (6)
      SIUE_AMI_h_Layout cap layout (2)
      SIUE_AMI_h_Layout ptap layout (6)
      Lib M2_M1 layout (72)
      SIUE_AMI_h_Layout ntap layout (7)
      Lib POLY_M1 layout (16)
    Lib M2_M1 layout (5)
  Lib vr_vl_gen layout (1)
    Lib narrow_pulse_new1 layout (1)
      amis500cxatxx pipcnm layout (1)
      Lib epm layout (6)
      Lib enm layout (10)
      Lib POLY_M1 layout (7)
      SIUE_AMI_h_Layout ptap layout (2)
      SIUE_AMI_h_Layout ntap layout (2)
      Lib M2_M1 layout (24)
    Lib or2_tvc layout (2)
      SIUE_AMI_h_Layout nmos layout (1)
      SIUE_AMI_h_Layout pmos layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (1)
      Lib POLY_M1 layout (3)
      SIUE_AMI_h_Layout ptap layout (1)
      Lib via_dkdLib layout (2)
      Lib M2_M1 layout (10)
    Lib inv_4_tvc layout (2)
      SIUE_AMI_h_Layout pmos layout (4)
      SIUE_AMI_h_Layout nmos layout (4)
      Lib M2_M1 layout (6)
```

```
    SIUE_AMI_h_Layout ptap layout (1)
    Lib POLY_M1 layout (4)
  Lib DFSSR layout (3)
    SIUE_AMI_h_Layout pmos layout (6)
    SIUE_AMI_h_Layout nmos layout (7)
    Lib DFSSR_core layout_slave_revised (1)
      SIUE_AMI_h_Layout nmos layout (6)
      SIUE_AMI_h_Layout pmos layout (6)
      Lib POLY_M1 layout (8)
      SIUE_AMI_h_Layout ptap layout (1)
      Lib M2_M1 layout (9)
    Lib DFSSR_core layout_new_revised (1)
      SIUE_AMI_h_Layout nmos layout (6)
      SIUE_AMI_h_Layout pmos layout (6)
      Lib POLY_M1 layout (9)
      SIUE_AMI_h_Layout ptap layout (1)
      Lib M2_M1 layout (9)
    Lib M2_M1 layout (38)
    Lib POLY_M1 layout (7)
    SIUE_AMI_h_Layout ntap layout (6)
    Lib M2_M1 layout (99)
    SIUE_AMI_h_Layout ptap layout (29)
  Lib M2_M1 layout (12)
  Lib narrow_pulse_new layout (3)
    amis500cxatxx pipcnm layout (1)
    Lib epm layout (6)
    Lib enm layout (10)
    Lib POLY_M1 layout (7)
    SIUE_AMI_h_Layout ptap layout (3)
    SIUE_AMI_h_Layout ntap layout (2)
    Lib M2_M1 layout (26)
  Lib krish_triggering_logic layout (2)
    Lib krish_and layout1 (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (2)
      SIUE_AMI_h_Layout n_pcell layout (2)
      Lib M2_M1 layout (17)
      SIUE_AMI_h_Layout ptap layout (1)
      SIUE_AMI_h_Layout ntap layout (1)
      Lib POLY_M1 layout (3)
    Lib krish_or layout (1)
      SIUE_AMI_h_Layout nmos_SKILL layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (2)
      Lib dkd_via layout (2)
      SIUE_AMI_h_Layout ntap layout (1)
      Lib M2_M1 layout (19)
      SIUE_AMI_h_Layout ptap layout (1)
      Lib POLY_M1 layout (3)
    Lib M2_M1 layout (2)
  Lib sw_channel layout (2)
    SIUE_AMI_h_Layout pmos layout (2)
    SIUE_AMI_h_Layout nmos layout (2)
    Lib POLY_M1 layout (2)
    SIUE_AMI_h_Layout ntap layout (1)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib M2_M1 layout (22)
  Lib rst_logic_backup layout (1)
    Lib krish_and layout1 (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (2)
      SIUE_AMI_h_Layout n_pcell layout (2)
      Lib M2_M1 layout (17)
      SIUE_AMI_h_Layout ptap layout (1)
      SIUE_AMI_h_Layout ntap layout (1)
      Lib POLY_M1 layout (3)
    Lib krish_inv_widl layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (1)
      SIUE_AMI_h_Layout nmos_SKILL layout (1)
      Lib M2_M1 layout (5)
```

```
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
Lib d_flipflop_sr layout (1)
    Lib jp_pwell_contact layout (5)
    Lib jp_nwell_contact layout (1)
    Lib jp_via layout (21)
    Lib M2_M1 layout (20)
Lib one_shot_vari layout (1)
    SIUE_AMI_h_Layout cap layout (1)
    SIUE_AMI_h_Layout nmos layout (4)
    SIUE_AMI_h_Layout pmos layout (2)
    Lib schmitt layout (1)
        SIUE_AMI_h_Layout nmos layout (3)
        SIUE_AMI_h_Layout pmos layout (3)
        SIUE_AMI_h_Layout ptap layout (1)
        SIUE_AMI_h_Layout ntap layout (1)
        Lib POLY_M1 layout (3)
        Lib M2_M1 layout (17)
Lib rs_latch layout (1)
    Lib or_rslatch layout (2)
        SIUE_AMI_h_Layout pmos layout (2)
        SIUE_AMI_h_Layout nmos layout (1)
        Lib POLY_M1 layout (3)
        Lib M2_M1 layout (20)
        SIUE_AMI_h_Layout ptap layout (1)
        SIUE_AMI_h_Layout ntap layout (1)
Lib inv_widl layout (2)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
    Lib M2_M1 layout (16)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (6)
    Lib M2_M1 layout (96)
Lib M2_M1 layout (24)
Lib one_shot_5ns layout (1)
    SIUE_AMI_h_Layout cap layout (1)
    SIUE_AMI_h_Layout pmos layout (2)
    SIUE_AMI_h_Layout nmos layout (4)
    Lib schmitt layout (1)
        SIUE_AMI_h_Layout nmos layout (3)
        SIUE_AMI_h_Layout pmos layout (3)
        SIUE_AMI_h_Layout ptap layout (1)
        SIUE_AMI_h_Layout ntap layout (1)
        Lib POLY_M1 layout (3)
        Lib M2_M1 layout (17)
Lib rs_latch layout (1)
    Lib or_rslatch layout (2)
        SIUE_AMI_h_Layout pmos layout (2)
        SIUE_AMI_h_Layout nmos layout (1)
        Lib POLY_M1 layout (3)
        Lib M2_M1 layout (20)
        SIUE_AMI_h_Layout ptap layout (1)
        SIUE_AMI_h_Layout ntap layout (1)
Lib inv_widl layout (2)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
    Lib M2_M1 layout (16)
Lib M2_M1 layout (85)
```

```
Lib POLY_M1 layout (10)
  SIUE_AMI_h_Layout ntap layout (1)
Lib one_shot_100ns layout (1)
  SIUE_AMI_h_Layout cap layout (1)
  SIUE_AMI_h_Layout pmos layout (2)
  SIUE_AMI_h_Layout nmos layout (4)
Lib schmitt layout (1)
  SIUE_AMI_h_Layout nmos layout (3)
  SIUE_AMI_h_Layout pmos layout (3)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (3)
  Lib M2_M1 layout (17)
Lib rs_latch layout (1)
  Lib or_rslatch layout (2)
    SIUE_AMI_h_Layout pmos layout (2)
    SIUE_AMI_h_Layout nmos layout (1)
    Lib POLY_M1 layout (3)
    Lib M2_M1 layout (20)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
  Lib inv_widl layout (2)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
  Lib M2_M1 layout (16)
  Lib M2_M1 layout (53)
  Lib POLY_M1 layout (8)
  SIUE_AMI_h_Layout ntap layout (1)
Lib krishLib_or2 layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
  SIUE_AMI_h_Layout pmos layout (1)
  SIUE_AMI_h_Layout pmos_SKILL layout (1)
  Lib dkd_via layout (2)
  Lib POLY_M1 layout (3)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib M2_M1 layout (14)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib M2_M1 layout (105)
Lib krish_hit_logic layout (1)
  SIUE_AMI_h_Layout pmos layout (1)
  SIUE_AMI_h_Layout nmos layout (2)
Lib narrow_pulse_new layout_hitlogic (1)
  amis500cxatxx pipcnm layout (1)
  Lib epm layout (6)
  Lib enm layout (10)
  Lib POLY_M1 layout (7)
  SIUE_AMI_h_Layout ptap layout (3)
  Lib M2_M1 layout (24)
Lib inv_long_mult layout (1)
  SIUE_AMI_h_Layout pmos layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
  Lib M2_M1 layout (5)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib POLY_M1 layout (1)
Lib single_mult_new layout (1)
  SIUE_AMI_h_Layout pmos_SKILL layout (2)
  Lib POLY_M1 layout (2)
  SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib M2_M1 layout (11)
Lib krish_buffer_4 layout (1)
  SIUE_AMI_h_Layout pmos_SKILL layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
```

```
Lib POLY_M1 layout (2)
SIUE_AMI_h_Layout ntap layout (1)
SIUE_AMI_h_Layout ptap layout (1)
Lib M2_M1 layout (8)
Lib krish_d_flipflop layout (1)
Lib jp_pwell_contact layout (3)
Lib jp_nwell_contact layout (3)
Lib jp_via layout (20)
Lib M2_M1 layout (15)
Lib krish_hy_res75k layout (1)
Lib krish_or layout (2)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
SIUE_AMI_h_Layout pmos_SKILL layout (2)
Lib dkd_via layout (2)
SIUE_AMI_h_Layout ntap layout (1)
Lib M2_M1 layout (19)
SIUE_AMI_h_Layout ptap layout (1)
Lib POLY_M1 layout (3)
Lib krish_and layout (2)
SIUE_AMI_h_Layout pmos_SKILL layout (2)
SIUE_AMI_h_Layout n_pcell layout (2)
Lib M2_M1 layout (17)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (3)
Lib krish_d_flipflop_sr layout (2)
Lib nwell_contact layout (1)
Lib pwell_contact layout (5)
Lib via layout (21)
Lib M2_M1 layout (20)
Lib krish_or_3inp layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (2)
SIUE_AMI_h_Layout pmos_SKILL layout (2)
Lib via layout (2)
Lib POLY_M1 layout (4)
SIUE_AMI_h_Layout ntap layout (1)
Lib M2_M1 layout (19)
SIUE_AMI_h_Layout ptap layout (1)
Lib krish_nor layout (1)
SIUE_AMI_h_Layout nmos layout (1)
SIUE_AMI_h_Layout pmos layout (1)
Lib POLY_M1 layout (2)
SIUE_AMI_h_Layout ntap layout (1)
Lib M2_M1 layout (10)
SIUE_AMI_h_Layout ptap layout (1)
Lib krish_inv_widl layout (3)
SIUE_AMI_h_Layout pmos_SKILL layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
Lib M2_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (1)
Lib POLY_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (17)
Lib M2_M1 layout (88)
Lib subchannel layout (3)
Lib krish_int_sw_array layout1 (1)
SIUE_AMI_h_Layout pmos layout (2)
SIUE_AMI_h_Layout nmos layout (10)
Lib M2_M1 layout (157)
SIUE_AMI_h_Layout ptap layout (5)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (11)
SIUE_AMI_h_Layout ntap layout (103)
Lib int_res_array_bak layout (1)
Lib M2_M1 layout (2)
Lib hy_res_50k_bak layout (1)
```

```
Lib unit_1k_res_bak layout (50)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_30k_bak layout (1)
  Lib unit_1k_res_bak layout (30)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_10k_bak layout (1)
  Lib unit_1k_res_bak layout (10)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_5k_bak layout (1)
  Lib unit_1k_res_bak layout (5)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_3k_bak layout (1)
  Lib unit_1k_res_bak layout (3)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_1k_bak layout (1)
  Lib unit_1k_res_bak layout (1)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_0_5k_bak layout (1)
  Lib unit_1k_res_bak layout (2)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib hy_res_0_33k_bak layout (1)
  Lib unit_1k_res_bak layout (3)
  SIUE_AMI_h_Layout hy layout (1)
  Lib M2_M1 layout (2)
Lib M2_M1 layout (220)
Lib integrator_amp layout (1)
  SIUE_AMI_h_Layout cap layout (2)
  SIUE_AMI_h_Layout nmos layout (22)
  SIUE_AMI_h_Layout pmos layout (23)
  Lib POLY_M1 layout (28)
  SIUE_AMI_h_Layout ntap layout (36)
  SIUE_AMI_h_Layout ptap layout (17)
  Lib M2_M1 layout (305)
Lib int_cap layout (1)
  SIUE_AMI_h_Layout cap layout (1)
  Lib POLY_M1 layout (1)
  Lib M2_M1 layout (2)
Lib dac layout (1)
  SIUE_AMI_h_Layout ny layout (1)
  SIUE_AMI_h_Layout hy layout (5)
Lib dac_reg layout (1)
  Lib jp_dac_and_latch layout (5)
  Lib jp_pwell_contact layout (4)
  Lib jp_nwell_contact layout (5)
  Lib jp_via layout (23)
  Lib POLY_M1 layout (3)
  Lib M2_M1 layout (33)
Lib inv_combo4 layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib M2_M1 layout (1)
  Lib POLY_M1 layout (4)
  Lib via layout (2)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib inv_dac layout (4)
  SIUE_AMI_h_Layout nmos layout (1)
  SIUE_AMI_h_Layout pmos layout (1)
  Lib via layout (1)
  Lib M2_M1 layout (1)
Lib dac_core layout (1)
  SIUE_AMI_h_Layout pmos_SKILL layout (19)
```

```
    SIUE_AMI_h_Layout nmos_SKILL layout (28)
    SIUE_AMI_h_Layout ntap layout (10)
    SIUE_AMI_h_Layout ptap layout (16)
    Lib POLY_M1 layout (21)
    Lib M2_M1 layout (286)
  Lib M2_M1 layout (39)
  Lib dec3to8 layout (1)
  Lib krish_and4_backup layout (8)
    SIUE_AMI_h_Layout nmos layout (5)
    SIUE_AMI_h_Layout pmos layout (2)
    Lib POLY_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib M2_M1 layout (24)
  Lib krish_inv_small layout (3)
    SIUE_AMI_h_Layout pmos layout (1)
    SIUE_AMI_h_Layout nmos layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
  SIUE_AMI_h_Layout ptap layout (10)
  Lib M2_M1 layout (81)
  Lib and2 layout (1)
    SIUE_AMI_h_Layout pmos_SKILL layout (2)
    SIUE_AMI_h_Layout n_pcell layout (2)
    Lib M2_M1 layout (19)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (3)
  Lib d_flipflop layout (2)
  Lib jp_via layout (20)
  Lib jp_pwell_contact layout (3)
  Lib jp_nwell_contact layout (3)
  Lib M2_M1 layout (15)
  Lib delay_gen layout (2)
    SIUE_AMI_h_Layout ptap layout (6)
    Lib M2_M1 layout (40)
  Lib or2 layout (1)
    SIUE_AMI_h_Layout nmos layout (1)
    SIUE_AMI_h_Layout pmos layout (1)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    Lib POLY_M1 layout (3)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib via layout (2)
    Lib M2_M1 layout (14)
    SIUE_AMI_h_Layout ntap layout (1)
  Lib delay_gen_comparator layout (1)
    SIUE_AMI_h_Layout nmos layout (4)
    Lib POLY_M1 layout (4)
    Lib del_gen_500f_cap layout (3)
      SIUE_AMI_h_Layout cap layout (1)
      Lib POLY_M1 layout (1)
      Lib M2_M1 layout (2)
    Lib comparator_inv_buf_3 layout (1)
      SIUE_AMI_h_Layout nmos layout (5)
      SIUE_AMI_h_Layout pmos layout (7)
      Lib POLY_M1 layout (9)
      SIUE_AMI_h_Layout ntap layout (2)
      SIUE_AMI_h_Layout ptap layout (4)
      Lib M2_M1 layout (40)
    Lib comparator_core layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (8)
      SIUE_AMI_h_Layout nmos_SKILL layout (11)
      Lib POLY_M1 layout (9)
      SIUE_AMI_h_Layout ntap layout (4)
      SIUE_AMI_h_Layout ptap layout (5)
```



```
    Lib M2_M1 layout (66)
  Lib inv_small layout (2)
    SIUE_AMI_h_Layout nmos layout (1)
    SIUE_AMI_h_Layout pmos layout (1)
    Lib POLY_M1 layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (13)
  Lib M2_M1 layout (75)
Lib full_tac layout (1)
  SIUE_AMI_h_Layout ptap layout (4)
  Lib M2_M1 layout (49)
  Lib mux_small layout (1)
    SIUE_AMI_h_Layout pmos layout (3)
    SIUE_AMI_h_Layout nmos layout (3)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (3)
    SIUE_AMI_h_Layout ptap layout (3)
    Lib M2_M1 layout (15)
  Lib tac layout (1)
    SIUE_AMI_h_Layout pmos_SKILL layout (6)
    SIUE_AMI_h_Layout nmos_SKILL layout (3)
    SIUE_AMI_h_Layout ntap layout (5)
    Lib M2_M1 layout (44)
    SIUE_AMI_h_Layout ptap layout (10)
    Lib POLY_M1 layout (6)
  Lib tac_dec layout (1)
    SIUE_AMI_h_Layout ptap layout (4)
    Lib M2_M1 layout (21)
    Lib and2 layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (2)
      SIUE_AMI_h_Layout n_pcell layout (2)
      Lib M2_M1 layout (19)
      SIUE_AMI_h_Layout ptap layout (1)
      SIUE_AMI_h_Layout ntap layout (1)
      Lib POLY_M1 layout (3)
    Lib or2 layout (1)
      SIUE_AMI_h_Layout nmos layout (1)
      SIUE_AMI_h_Layout pmos layout (1)
      SIUE_AMI_h_Layout pmos_SKILL layout (1)
      Lib POLY_M1 layout (3)
      SIUE_AMI_h_Layout ptap layout (1)
    Lib via layout (2)
      Lib M2_M1 layout (14)
      SIUE_AMI_h_Layout ntap layout (1)
  Lib tac_cap_array layout (1)
    SIUE_AMI_h_Layout nmos layout (9)
    SIUE_AMI_h_Layout pmos layout (6)
    SIUE_AMI_h_Layout ptap layout (22)
    SIUE_AMI_h_Layout ntap layout (6)
    Lib POLY_M1 layout (6)
    Lib M2_M1 layout (86)
    Lib tac_3_2p_cap layout (1)
      SIUE_AMI_h_Layout cap layout (1)
      Lib POLY_M1 layout (1)
      Lib M2_M1 layout (2)
    Lib tac_100f_cap layout (1)
      SIUE_AMI_h_Layout cap layout (1)
      Lib POLY_M1 layout (1)
      Lib M2_M1 layout (2)
    Lib tac_400f_cap layout (2)
      Lib M2_M1 layout (2)
      Lib tac_200f_cap layout (2)
        SIUE_AMI_h_Layout cap layout (1)
        Lib POLY_M1 layout (1)
        Lib M2_M1 layout (2)
```

```
Lib width_gen4 layout (1)
  SIUE_AMI_h_Layout ptap layout (15)
  Lib M2_M1 layout (64)
  Lib inverters_orand layout (1)
    SIUE_AMI_h_Layout nmos layout (6)
    SIUE_AMI_h_Layout pmos layout (6)
    SIUE_AMI_h_Layout ntap layout (4)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib POLY_M1 layout (9)
    Lib M2_M1 layout (51)
  Lib andor layout (1)
    SIUE_AMI_h_Layout pmos layout (3)
    SIUE_AMI_h_Layout n_pcell layout (3)
    Lib POLY_M1 layout (11)
    SIUE_AMI_h_Layout ntap layout (2)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib M2_M1 layout (20)
  Lib latch layout (2)
    SIUE_AMI_h_Layout nmos layout (8)
    SIUE_AMI_h_Layout pmos layout (8)
    Lib POLY_M1 layout (6)
    Lib M2_M1 layout (25)
    SIUE_AMI_h_Layout ntap layout (4)
    SIUE_AMI_h_Layout ptap layout (3)
Lib sw_tx layout (1)
  SIUE_AMI_h_Layout nmos layout (2)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib M2_M1 layout (26)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (3)
Lib sub_buffer2 layout (1)
  SIUE_AMI_h_Layout nmos layout (2)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib POLY_M1 layout (2)
  SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib M2_M1 layout (38)
Lib nor2 layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib POLY_M1 layout (2)
  Lib M2_M1 layout (14)
  SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (1)
Lib and2_small layout (2)
  SIUE_AMI_h_Layout nmos layout (2)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib M2_M1 layout (18)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (3)
Lib M2_M1 layout (148)
Lib common layout (1)
  SIUE_AMI_h_Layout ptap layout (1296)
Lib krish_common_digital layout (1)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib krish_n_fet layout (1)
    SIUE_AMI_h_Layout nmos layout (1)
  Lib krish_and03 layout (2)
    SIUE_AMI_h_Layout pmos layout (2)
    SIUE_AMI_h_Layout nmos layout (2)
    Lib POLY_M1 layout (6)
    SIUE_AMI_h_Layout ntap layout (1)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib M2_M1 layout (21)
  Lib krish_mux21 layout (1)
```

```
SIUE_AMI_h_Layout pmos layout (3)
SIUE_AMI_h_Layout nmos layout (3)
Lib krish_inv_widl layout (1)
  SIUE_AMI_h_Layout pmos_SKILL layout (1)
  SIUE_AMI_h_Layout nmos_SKILL layout (1)
  Lib M2_M1 layout (5)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (1)
Lib POLY_M1 layout (6)
Lib M2_M1 layout (25)
Lib krish_inv_widl layout (3)
  SIUE_AMI_h_Layout pmos_SKILL layout (1)
  SIUE_AMI_h_Layout nmos_SKILL layout (1)
  Lib M2_M1 layout (5)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (1)
Lib config_reg layout (1)
  Lib krish_d_flipflop layout (48)
  Lib jp_pwell_contact layout (3)
  Lib jp_nwell_contact layout (3)
  Lib jp_via layout (20)
  Lib M2_M1 layout (15)
  Lib M2_M1 layout (216)
  SIUE_AMI_h_Layout ptap layout (16)
Lib krish_equal_logic layout (1)
  Lib krish_comp_nor layout (1)
  SIUE_AMI_h_Layout pmos layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib POLY_M1 layout (9)
  Lib M2_M1 layout (30)
  Lib krish_comparator layout (1)
  Lib krish_xor layout (8)
  SIUE_AMI_h_Layout pmos layout (2)
  SIUE_AMI_h_Layout nmos layout (2)
  SIUE_AMI_h_Layout ntap layout (1)
  SIUE_AMI_h_Layout ptap layout (1)
  Lib POLY_M1 layout (7)
  Lib M2_M1 layout (28)
  Lib M2_M1 layout (10)
  Lib M2_M1 layout (36)
Lib krish_en_logic layout (1)
  Lib krish_and layout (16)
  SIUE_AMI_h_Layout pmos_SKILL layout (2)
  SIUE_AMI_h_Layout n_pcell layout (2)
  Lib M2_M1 layout (17)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (3)
  Lib M2_M1 layout (42)
Lib krish_dec2to3_sc layout (1)
  Lib krish_and2_small layout (3)
  SIUE_AMI_h_Layout nmos layout (2)
  SIUE_AMI_h_Layout pmos layout (2)
  Lib M2_M1 layout (18)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
  Lib POLY_M1 layout (3)
Lib krish_inv_small layout (2)
  SIUE_AMI_h_Layout pmos layout (1)
  SIUE_AMI_h_Layout nmos layout (1)
  Lib M2_M1 layout (5)
  SIUE_AMI_h_Layout ptap layout (1)
  SIUE_AMI_h_Layout ntap layout (1)
```

```
Lib POLY_M1 layout (1)
Lib M2_M1 layout (32)
SIUE_AMI_h_Layout ptap layout (3)
Lib krish_enc_dec_logic layout (1)
Lib krish_dec5to32_backup layout (1)
Lib krish_pseudo_nor layout1 (16)
SIUE_AMI_h_Layout nmos layout (1)
SIUE_AMI_h_Layout pmos layout (1)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (6)
Lib M2_M1 layout (25)
Lib krish_pseudo_nor layout (16)
SIUE_AMI_h_Layout nmos layout (1)
SIUE_AMI_h_Layout pmos layout (1)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (6)
Lib M2_M1 layout (25)
Lib krish_inv_widl layout (5)
SIUE_AMI_h_Layout pmos_SKILL layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
Lib M2_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (1)
Lib POLY_M1 layout (38)
SIUE_AMI_h_Layout ptap layout (24)
Lib M2_M1 layout (163)
Lib krish_mux_5bit layout (1)
Lib krish_mux21 layout (5)
SIUE_AMI_h_Layout pmos layout (3)
SIUE_AMI_h_Layout nmos layout (3)
Lib krish_inv_widl layout (1)
SIUE_AMI_h_Layout pmos_SKILL layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
Lib M2_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (1)
Lib POLY_M1 layout (6)
Lib M2_M1 layout (25)
Lib M2_M1 layout (49)
Lib krish_enc32to5 layout (1)
Lib pseudo_or layout (1)
SIUE_AMI_h_Layout nmos layout (2)
SIUE_AMI_h_Layout pmos layout (1)
Lib krish_inv_widl layout (1)
SIUE_AMI_h_Layout pmos_SKILL layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
Lib M2_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
Lib POLY_M1 layout (1)
Lib POLY_M1 layout (18)
Lib M2_M1 layout (61)
SIUE_AMI_h_Layout ntap layout (1)
SIUE_AMI_h_Layout ptap layout (1)
Lib krish_pseudo_or layout (5)
SIUE_AMI_h_Layout nmos layout (2)
SIUE_AMI_h_Layout pmos layout (1)
Lib krish_inv_widl layout (1)
SIUE_AMI_h_Layout pmos_SKILL layout (1)
SIUE_AMI_h_Layout nmos_SKILL layout (1)
Lib M2_M1 layout (5)
SIUE_AMI_h_Layout ptap layout (1)
SIUE_AMI_h_Layout ntap layout (1)
```

```
    Lib POLY_M1 layout (1)
    Lib POLY_M1 layout (18)
    Lib M2_M1 layout (61)
    SIUE_AMI_h_Layout ntap layout (1)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib POLY_M1 layout (45)
    Lib M2_M1 layout (101)
    Lib krish_latch_5bit layout (1)
    Lib krish_latch_r layout (5)
    SIUE_AMI_h_Layout pmos layout (8)
    SIUE_AMI_h_Layout nmos layout (8)
    SIUE_AMI_h_Layout ptap layout (2)
    SIUE_AMI_h_Layout ntap layout (2)
    Lib M2_M1 layout (22)
    Lib POLY_M1 layout (6)
    Lib krish_inv_widl layout (5)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
    Lib M2_M1 layout (69)
    Lib krish_inv_widl layout (1)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    Lib M2_M1 layout (5)
    SIUE_AMI_h_Layout ptap layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    Lib POLY_M1 layout (1)
    Lib M2_M1 layout (59)
    Lib POLY_M1 layout (4)
    Lib M2_M1 layout (91)
    Lib bjt_common layout (1)
    amis500cxatxx vpb20u layout (3)
    Lib M2_M1 layout (52)
    Lib mult_buf layout (1)
    SIUE_AMI_h_Layout pmos layout (2)
    Lib POLY_M1 layout (2)
    Lib M2_M1 layout (66)
    SIUE_AMI_h_Layout ntap layout (18)
    Lib buffer layout (4)
    SIUE_AMI_h_Layout nmos layout (1)
    SIUE_AMI_h_Layout hy layout (4)
    Lib POLY_M1 layout (1)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib M2_M1 layout (49)
    Lib inv_min layout (1)
    SIUE_AMI_h_Layout nmos_SKILL layout (1)
    SIUE_AMI_h_Layout pmos_SKILL layout (1)
    amis500cxatxx enmesq symbol (1)
    Lib POLY_M1 layout (1)
    SIUE_AMI_h_Layout ntap layout (1)
    SIUE_AMI_h_Layout ptap layout (1)
    Lib M2_M1 layout (5)
    Lib buffer_opamp layout (2)
    SIUE_AMI_h_Layout cap layout (2)
    SIUE_AMI_h_Layout nmos layout (37)
    SIUE_AMI_h_Layout pmos layout (31)
    Lib QuadMUX layout (1)
    SIUE_AMI_h_Layout nmos layout (9)
    SIUE_AMI_h_Layout pmos layout (9)
    Lib POLY_M1 layout (9)
    SIUE_AMI_h_Layout ntap layout (4)
    SIUE_AMI_h_Layout ptap layout (8)
    Lib M2_M1 layout (110)
    Lib POLY_M1 layout (33)
```

```
    SIUE_AMI_h_Layout ntap layout (22)
    Lib M2_M1 layout (435)
    SIUE_AMI_h_Layout ptap layout (40)
Lib full_bias layout (1)
    Lib bias layout (1)
    SIUE_AMI_h_Layout nmos layout (25)
    SIUE_AMI_h_Layout pmos layout (27)
    Lib bjt_junaid layout (1)
        amis500cxatxx vpb20u layout (36)
    Lib gle_hy_res0_59k layout (1)
    Lib gle_hy_res9x0_59k layout (1)
    Lib gle_hy_res17k layout (1)
    Lib gle_hy_res5k layout (2)
    Lib via layout (2)
    Lib M3_M2 layout (28)
    Lib POLY_M1 layout (20)
    SIUE_AMI_h_Layout ntap layout (68)
    SIUE_AMI_h_Layout ptap layout (53)
    Lib M2_M1 layout (476)
Lib constant_current layout (1)
    SIUE_AMI_h_Layout nmos layout (6)
    SIUE_AMI_h_Layout pmos layout (11)
    SIUE_AMI_h_Layout cap layout (2)
    Lib hy_res_72k layout (1)
        Lib unit_const_current_12k layout (6)
            amis500cxatxx hipor layout (1)
    Lib ny_res85k layout (1)
        amis500cxatxx po2r layout (26)
    Lib POLY_M1 layout (10)
    SIUE_AMI_h_Layout ntap layout (12)
    SIUE_AMI_h_Layout ptap layout (29)
    Lib M2_M1 layout (171)
    Lib vref_buffer layout (1)
        SIUE_AMI_h_Layout nmos layout (7)
        SIUE_AMI_h_Layout pmos layout (12)
        Lib POLY_M1 layout (9)
        SIUE_AMI_h_Layout ntap layout (18)
        SIUE_AMI_h_Layout ptap layout (13)
        Lib M2_M1 layout (97)
Lib M3_M2 layout (26331)
Lib M2_M1 layout (999)
```