



中国科学院高能物理研究所
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Chinese Academy of Sciences

Recent progress

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EDA and Design kit

- IC617

- MMSIM151

- INCISIV132

```
=====
Kit Process Variant environment variables:
=====
RDS_ROOT = "/home/www/CEPC/TJ_kits/HOTCODE"
RDS_CDSLIBS = "/home/www/CEPC/TJ_kits/HOTCODE/amslibs/cds_default/cdslibs"
RDS_CDS_TECH = "ts18s1"
RDS_CDS_VERIFY_TECH = "ts18is_6M1L"
TSP_FLOW_FILE = "/home/www/CEPC/TJ_kits/HOTCODE/techs/flowDB/flows.data"
TSP_FLOW = "T18I6INSLM"

=====
Kit Version information files:
=====
Version information file: '/home/www/CEPC/TJ_kits/HOTCODE/.jazz_amskit_version'
ts18s1_20180228_5.45
Version information file: '/home/www/CEPC/TJ_kits/HOTCODE/.rev_num'
ts18s1 rev 5.45
Version information file: '/home/www/CEPC/TJ_kits/HOTCODE/.jazz_amskit_version_metal'
ts18is_20170913_5.3
Version information file: '/home/www/CEPC/TJ_kits/HOTCODE/.directory'
```

- Hotcode_patch包未装

- General目录下的两个tar包未安装

- Triple-well or quadruple-well process ?

Power saving

1.1 Absolute Maximum Ratings

Symbol	Parameter	Min	Max	Unit
V_{DD}	DC Supply Voltage	-0.5	2.2	V
V_{IN}	Input Voltage	-0.5	2.2	V
T_{STO}	Storage Temperature	-65	150	°C

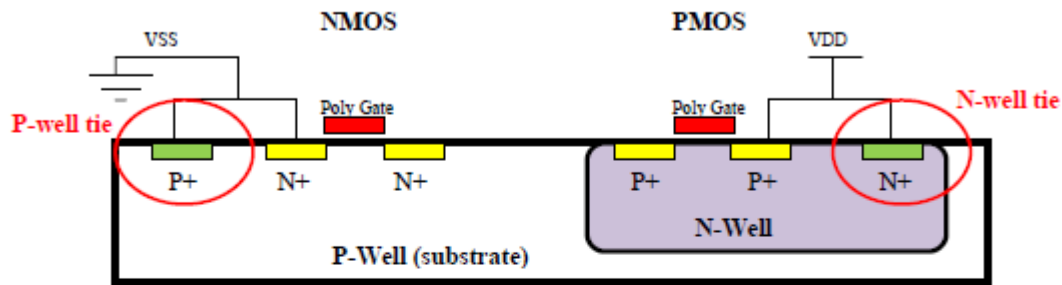
1.2 Recommended Operating Conditions

Symbol	Parameter	Min	Max	Unit
V_{DD}	DC Supply Voltage	1.08	1.98	V
V_{IN}	Input Voltage	0	V_{DD}	V
V_{OUT}	Output voltage outputs active	0	V_{DD}	V
T_J	Junction Temperature	-40	125	°C

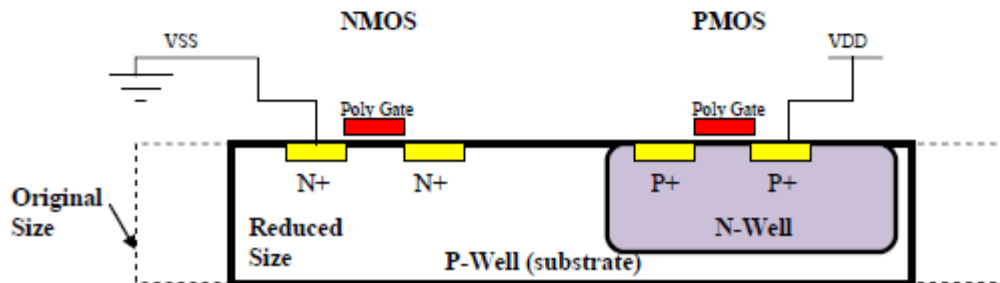
- **Standard cell lib tsl18fs120**
- **Independent supply for digital with lower voltage**

Area saving

Structure of Cmos device inside regular std-cell library:



Structure of Cmos device inside tapless std-cell library:



- Tapless std-cell library
ts18fs190svt
 - Should be more compact
 - Any limitation ?
 - More details on Digital Design User Guide

Plan for cell integration sim

- **Very little time left for simulation according to the schedule**
- **Main simulation goals**
 - **Psrr**
 - **Noise**
 - **Corner**
- **Any suggestions?**