



EUROPRACTICE IC SERVICE

TSMC 0.18 μ , 0.13 μ - 90nm, 65nm, 40nm & 28nm CMOS

IMEC and TSMC agree to offer Multi Project Wafer Services and small volume production in deep submicron CMOS technologies through the EUROPRACTICE IC Service

Features and Benefits

- Cost reduction on prototypes
- Monthly or regular MPW runs
- Flexible access to silicon capacity for small volumes at TSMC
- Deep Submicron RTL-to-Layout Service
- Available in 0.18 μ , 0.13 μ , 90nm, 65nm, 40nm & 28nm CMOS logic and mixed signal processes (MS/RF)

| 0.18 μ G MS/RF | 0.13 μ G MS/RF | 90nm LP and G | 65nm LP and G MS/RF | 40nm LP and G MS/ | 28nm CMOS RF HPC/HPC+ (1) | 28nm CMOS RF HPL (1) |
|--|---|---|--|---|--|---|
| Nominal, Medium, Native VT Hipo resistor MiM Capacitor 3M—6M Al (1.8/3.3V) Triple well Ultra thick metal | SVT, HVT, LVT, native Hipo resistor MiM Capacitor 3M—8M Cu (1.2V) (2.5 or 3.3V IO) Triple Well Ultra thick metal | SVT, HVT, LVT, ULVT, native MiM Capacitor + MoM 3M—9M Cu Triple Well Ultra thick metal LP (1.2V) (2.5 or 3.3V IO) G (1.0V) (1.8 or 2.5V or 3.3V IO) | HVT, SVT, LVT, Native, m-low VT Unsilicided PO resistors MiM Capacitor 3M-9M Cu Triple well Ultra thick metal LP 1.2V (2.5, 3.3) IO G 1.0 (2.5, 3.3) IO | HVT, SVT, LVT, native NWELL, OD, Poly resistor MoM Capacitor 3M-10M ELK Cu Triple well Ultra thick metal LP 1.1V (IO 1.8V, 2.5V) G 0.9V (IO 1.8V, 2.5V) | 10 metals DNW 0.9V core 1.8V I/O 2.5V I/O NW resistor OD resistor unsilicided High-R resistor Ultra Low Vt Low Vt Std Vt High Vt Std Vt High Vt Ultra High Vt Extreme high Vt MOM capacitor UTM No Poly fuse | 10 metals DNW 1.0V core 1.8V I/O 2.5V I/O Extreme Low Vt Ultra low Vt Low Vt Std Vt High Vt NW resistor OD resistor High-R resistor UTM MoM capacitor No Poly fuse |

(1) Upon approval of TSMC

| MPW runs in 2019 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--|-----|-------|------|-------|-----|----------|-----|------|-----|------|------|-----|
| TSMC 0.18 CMOS Logic or Mixed-Signal/RF, General Purpose | 30 | 20 | 6,27 | 17,24 | 8 | 5,12, 26 | 31 | 28 | | 2,23 | 27 | |
| TSMC 0.18 CMOS High Voltage BCD Gen II | 9 | 20,27 | 28 | 17 | 1 | 5,12 | 3 | 7 | 4 | 2,30 | | 4 |
| TSMC 0.13 CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (8-inch) | | | 13 | | | 5 | | 28 | | | | 4 |
| TSMC 0.13 CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (12-inch) | 9 | 13 | | 10 | 15 | | 10 | 14 | | 9 | 13 | |
| TSMC 90nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power | 2 | | | 17 | | | 10 | | | 2 | | |
| TSMC 65nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (reserve 4 months in advance) | 30 | 20 | 27 | 24 | 22 | 26 | 24 | 28 | 25 | 23 | 27 | |
| TSMC 40nm CMOS Logic or Mixed-Signal/RF, General Purpose or Low Power (no triple gate oxide) | 2 | 6 | 6 | 10 | 1 | 5 | 3 | 7 | 4 | 9 | 6 | 4 |
| TSMC 28nm CMOS Logic HPL/HPC/HPC+, RF HPL/HPC/HPC+ (reserve 4 months in advance) | | 6,27 | | | 3 | 1,29 | | 3,31 | 28 | | 2,30 | 4 |

Data in RED color are preliminary scheduled

All documentation & design kits available on:
For more information: mpc@imec.be

www.europactice-ic.com