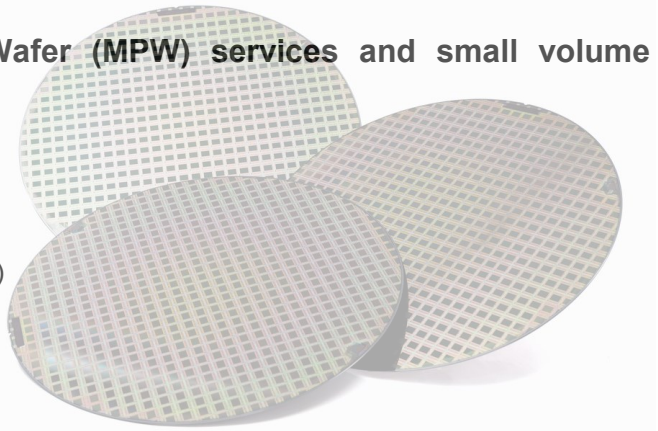
NEW
XH035
XR013

EUROPRACTICE
IC SERVICE

X-FAB 0.35, 0.18, 0.13µ
MPW & SMALL VOLUME

EUROPRACTICE IC Service offers Multi-Project-Wafer (MPW) services and small volume production of X-FAB in Europe.



Features and Benefits

- Small minimum area pricing for academic customers (mini@sic)
- Regularly scheduled MPW runs
- Flexible access to silicon capacity for small volumes
- Module based

XH035: Modular Mixed Signal Technology with High Voltage Extensions

Main target applications are standard cell, semi-custom and full custom designs for industrial, automotive and telecommunication products. Based on a single poly triple metal 0.35 µm drawn gate length process for digital applications, it features core and process modules such as low Vt, low leakage, embedded non-volatile memory and high voltage options, as well as standard or thick fourth layer of metal, double poly and MIM capacitors and high resistance polysilicon. MOS and bipolar transistors are also available. World class low noise p-mos and n-mos transistors make this technology the first choice for applications requiring very low noise and high signal-to-noise ratios.

DMOS transistors are available for multiple operating voltages up to 100V. The 45V DMOS transistors come with a 45 percent lower on-resistance which can reduce the chip area by up to 40 percent, resulting in significant cost savings.

The 3.3 V CMOS cores are compatible in design rules and transistor performance with state-of-the-art 0.35 µm CMOS processes.

XH018: Modular Mixed Signal HV CMOS Technology

Based upon the industrial standard single poly with up to six metal layers 0.18-micron drawn gate length Nwell process. It is the industry's first and only 0.18 micrometer technology to integrate high temperature (HT), high voltage (HV) and non-volatile memory (NVM) all in a single platform. It is ideal for SoC applications in the automotive market such as control devices inside combustion engine compartments or electric engine housings with temperature range up to 175ºC, as well as emdedded high-voltage applications in the communications, consumer and industrial market.

XT018: Modular High-voltage SOI CMOS Technology

It combines the benefit of SOI wafers with Deep Trench Isolation (DTI) and those of a state-of-the-art six metal layers 0.18 -micron process. High voltage support up to 200V combined with range of Non-Volatile-Memory options. The XT018 platform is specifically designed for a next generation automotive, industrial and medical applications operating in the temperature range of -40 to 175 °C.
Full PDK support for major EDA vendors, extensive device characterization and modeling, comprehensive analog, digital, and memory IPs.

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XS018: X-FAB's specialized process for fast image sensors

The optional available modules for 4 transistor cells, pinned photo diodes and the stitching capabilities make this technology ideal for large image sensor applications needing high frame rates as used for instance for medical and scientific X-ray cameras.
The 3.3V core module allows a low mask count designs. The industrial standard single poly with up to six metal layers 0.18-micron drawn gate length N-well process can also be used for low power SOC application in the automotive, industrial and medical markets.
Comprehensive design rules, precise SPICE models, analog and digital libraries, IPs and development kits support the process for major EDA vendors.

XP018: Modular CMOS Power Management Technology

Based upon the industrial standard single poly with up to six metal layers 0.18-micron drawn gate length N-well process, integrated with high voltage and Non-Volatile-Memory modules, the platform is engineered for applications needing an integrated solution and cost efficient process for high performance ICs. Targeted applications are switching applications, lightings, display,etc; operating in temperature range of -40 to 175 °C.

XR013

The XR013 technology is a RF SOI (CMOS) 0.13 µm generation designed to serve RF applications.

High-resistive 'trap-rich' SOI substrate (>3 kΩ-cm). Low Ron*Coff switch NMOS transistor with minimum L = 0.22 µm. Vertical parallel plate (VPP) capacitor and Metal-Insulator-Metal (MIM) capacitor.

Technology	MPW modules
XH035	MOS, MOS5A, ISOMOS, HVMOSMID, HRPOLY, MIM, METAL4
XH018	LPMOS, MET3, MET4, METMID, METTHK, MRPOLY, ISOMOS, LVT, DMOS, HVMOS, SCHOTTKY, MIM, NVM, FLASH, OTP3, PHOTODIO
XT018	LP5MOS, HVN, HVP, 1XN, 1XP, PSUB, DTI, DNC, DPC, NBUR, HRPOLY, MIMH, MET3, MET4, METMID, METTHK, HWC
XS018	MOS3LP, MOSLP, MET3, MET4, MET5, METMID, MRPOLY, ISOMOS, LVTN3D, BCH, MIM23, PPDB, 4TPIX, SFLATPV
XP018	LP5MOS, MET3, MET4, METMID, METTHK, MRPOLY, HRPOLY, ISOMOS, LVT, MIM, NVM
XR013	MET1, MET2, METTHK1, MIM, METRB, NOPIMIDE, 2V5DT, 1V2DT, LNG1, HRPOLY, CORE, DGOXA, METBQ, LNG2