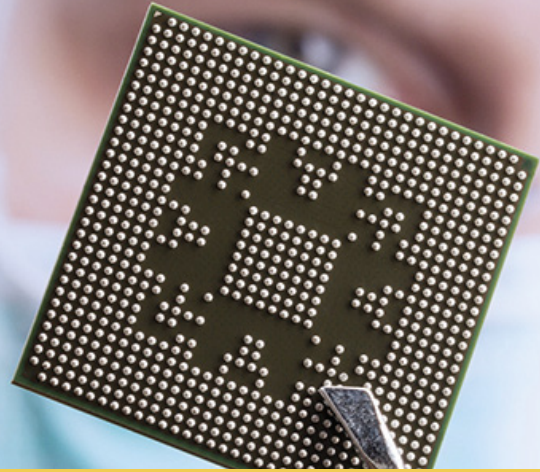




ON Semiconductor®



EUROPRACTICE
IC SERVICE



ON SEMICONDUCTOR 0.7, 0.5, 0.35 & 0.18 μm PROTOTYPING AND VOLUME PRODUCTION

Picture: <https://www.onsemi.com/site/images/job-area-Manufacturing.png>

EUROPRACTICE-IC provides access to ON Semiconductor CMOS and High Voltage Technologies for Multi-Project-Wafer Prototyping and Volume Production.

Why EUROPRACTICE?

- ▶ Affordable and easy access to Prototyping and Small Volume Production services for academia and industry.
- ▶ MPW (Multi-Project-Wafer) runs for various technologies, including ASICs, Photonics, MEMS and GaN.
- ▶ Advanced packaging, system integration solutions and test services.

Why ON Semiconductor?

- ▶ Leading supplier of semiconductor-based solutions for automotive, communications, computing, consumer, industrial, medical and aerospace/defense applications.
- ▶ Comprehensive portfolio of energy efficient connectivity, sensing, power management, analog, logic, timing, discrete and custom devices.
- ▶ Manufacturing sites throughout North America, Europe and Asia.

Technology Highlights

0.18 μm ONC18

The ONC18 process from ON Semiconductor is an industry compatible 0.18 μm CMOS technology. This full featured process includes 1.8V/3.3V dual gate I/Os, nominal and high value MIM capacitors, resistors and six levels of metal. A comprehensive design kit offers an expansive core, I/O and memory library. Specialty services including stitching, planarized passivation and shuttle prototyping are available. ONC18 also serves as a platform for highly integrated high voltage mixed-signal processes ideal for many automotive, industrial, medical and defense applications.

0.18 μm I4T 45/75

The I4T 45V/75V process is the only 180nm process available with deep trench isolation (DTI), which makes it uniquely suitable for high voltage automotive applications.

0.35 μm I3T 25/50/80

Providing the density of a 0.35 μm digital process, analog/mixed-signal capability and high voltage, this Intelligent Interface Technology process from ON Semiconductor is the answer to the need for increased digital content in a mixed-signal and/or high voltage environment. Featuring high voltage devices up to 18V, 40V or 80V as well as digital and analog operation at 3.3V and 12V, this process family features a wide range of capabilities in a single IC.

0.5 μm C5

Optimized for 5V mixed-signal applications, the C5 process family from ON Semiconductor offers a medium-density, high-performance mixed-signal technology capable of integrating complex analog functions, digital content and 20V capability. This process delivers the advantages of a dedicated mixed-signal 0.5μm process without the costs associated with the extra mask steps of a BCD process. Low voltage transistors are also available for the 0.5μm process making it well-suited for low power applications.

0.7 μm I2T100

The Intelligent Interface Technology (I2T100 100 V) process from ON Semiconductor offers 100V capability in a 0.7μm CMOS mixed-signal technology. A variety of devices and process options provide a high degree of flexibility in combining mixed analog/digital with low, medium and high voltage circuitry.

Technology Details

	0.7μm Logic A/D 2 to 3 Metal layers 3.3 or 5V IO High resistive poly Poly/Diff capacitor OTP	0.7μm I2T100 100V 2 to 3 Metal layers 3.3 or 5V IO 100V N-DMOS / P-DMOS HR poly Poly/Diff & poly/poly capacitor OTP	0.5μm C5 F/N 2 to 3 Metal layers 3.3/5V 12, 20V HR poly Poly/Poly capacitor EEPROM
0.35μm C3/D3 3 to 5 Metal layers 3.3V or 5V tolerant IO High resistive poly Poly/Poly capacitor EEPROM	0.35μm I3T25 25 V 3 to 5 Metal layers 3.3V IO 25V N/P DMOS HR poly MIM capacitor EEPROM	0.35μm I3T50 50 V 3 to 5 Metal layers DTI Isolation 50V N/P DMOS 3.3V IO HR poly MIM capacitor EEPROM	0.35μm I3T80 80 V 3 to 5 Metal layers 80V N/P DMOS 3.3V IO HR poly MIM capacitor
ONC18 1.8V/3.3V 4 to 6 Metal layers 1.8V and 3.3V core cells libraries 15V Vds transistor High VT (low-leakage) option Native VT option 5V tolerant I/Os 5V Zener Diodes Schottky Diodes Deep N-Well (Triple Well) Thick top metal 1.0 to 4.0 fF/μm ² MIM capacitor 1.8 and 3.3V memories OTP and EEPROM	ONC18 1.8V/5V 5V gate and 18, 24, 30Vds 4 to 6 Metal layers 1.8V, 5V I/Os High VT (low-leakage) option Native VT option 5V and HV Zener Diodes (HV) Schottky Diodes Thick top metal core cells libraries 1.0 to 4.0 fF/μm ² MIM capacitor 1.8V memories OTP and EEPROM	0.18 μm I4T 1.8V/3.3V DTI isolation 4 to 6 Metal layers 1.8V gate and 30, 45, 75 Vds DMOS 1.8V and 3.3V core cells libraries High VT (low-leakage) option Native VT option 5V tolerant I/Os 5V Zener Diodes Schottky Diodes Deep N-Well (Triple Well) Thick top metal 1.0 to 4.0 fF/μm ² MIM capacitor 1.8 and 3.3V memories OTP and EEPROM	ONC18 1.8V/5V/18V 18Vds with 18Vgs transistors 4 to 6 Metal layers 1.8V, 5V I/Os 1.8V core cells libraries 5V gate and 18, 24, 30Vds High VT (low-leakage) option Native VT option 5V and HV Zener Diodes (HV) Schottky Diodes Thick top metal 1.0 to 4.0 fF/μm ² MIM capacitor 1.8 memories OTP and EEPROM