Integrated circuits manufacturing

Main data in 2014
Main data concerning the circuits fabricated in 2014 are the following:

- 174 circuits for Research (118), Education (19) and Industry (37)
- 13 technologies in CMOS, BiCMOS, SiGe BiCMOS, SOI, High Voltage CMOS, MEMS
- 85 participating Institutions from 28 countries
- 37 circuits fabricated for industrial purposes for 17 Institutions in prototyping or low volume.

The circuits’ list and the list of participants (Appendix 1) are available on the Website.

Analysis of the participation
Distribution of circuits per technology and evolution
In 2014 the part of CMOS (with SOI and High Voltage) is 78.7% of the total. CMOS plus BiCMOS represent 99.4% of the total, MEMS 0.6%.

Distribution of circuits per technology in 2014

HV CMOS projects remain stable in volume years after years showing the interest of such technologies for power electronics and power amplification applications.
SiGe technology remains very attractive for RF applications despite the introduction of very attractive CMOS technologies optimized for RF.
The introduction of 28nm FDSOI signs up the come back of SOI technologies, nevertheless, in 2014, there was not as much projects in 28nm as it was the case in 2013, most probably due to design cycles.

Evolution of circuits per technology from 2011 to 2014
Distribution of circuits per foundry

In 2014, CMP faced a general decrease in the number of circuits submitted in regular runs, but CMP received a large number of requests to re-manufacture circuits which were already fabricated through CMP.

Distribution of circuits per country and geographical area and per utilization

**Circuits for research**
Circuits for research represent 118 circuits (68%) coming from 20 countries.

**Circuits for industrial purpose**
37 industrial purpose circuits, 32 from France and 5 from foreign countries, were fabricated for 17 industrial companies (see the list in Appendix 2 on the CMP website). This level of industrial participation represents 21% of the total number of circuits. Among industrial projects: 18 low volume productions circuits for 14 Institutions, from thirty pieces to thousands of pieces have been fabricated. See in Appendix 3 the list of low volume circuits on the CMP website.

**New Institutions**
17 Institutions (out of 85 all in all) participated for the first time. All the Institutions having submitted circuits from 1981 are listed in Appendix 4, appendices are available on the CMP website.

**CMP13S141T3 – Courtesy of Indian Institute of Technology Bombay, India: Equalizer for a 100Gbps DP-QPSK Receiver for Coherent Optical Links.**