

VII – DEVELOPMENTS IN 2011

A – Development of the collaboration CMC – CMP – MOSIS

This collaboration will continue to be intensified. It is specially required for very deep sub-micron processes, because of the high costs, and for specialized processes because of the low demand. Presently shared processes are IBM CMOS and SiGe BiCMOS .25 μ and .50 μ (MOSIS), austriamicrosystems .35 μ SiGe BiCMOS, CMOS-Opto (CMP), MEMSCAP MUMPS (CMP), Post processing CMOS (CMC).

CMP has also started a cooperation with IDEC in 2008. It is hoped that the cooperation can be extended to other services like CIC, and VDEC. These services met on July 28, 2006 in San Francisco to discuss how to increase R&D capacity, how to stimulate new academic and industrial opportunities, and how to gain competitive advantage in the global economy. A “communiqué” has been published, see Appendix 13. These services met again in Taipei in 2009.

B – Cooperation with STMicroelectronics

In 2006 the first fabrications in the advanced technology 65nm CMOS took place. Such Advanced processes from STMicroelectronics will continue to be introduced as early as possible. Several processes have been introduced late 2007/early 2008: 45 nm CMOS, 65 nm SOI CMOS, 130 nm SOI CMOS. The 40 nm CMOS has been introduced in 2009.

C – IP exploitation

- RAMs and DP-RAMs are available for the processes offered at austriamicrosystems and STMicroelectronics.
- Risc processor: in 2003 CMP signed an agreement with STMicroelectronics and ARM to make available the integration of ARM cores in 0.12 CMOS, for circuit prototypes of Universities and Research Laboratories. Several projects took place. The agreement has been extended to 65nm CMOS.
- Access to other IPs blocks will be developed in 2011.

D – MEMS processes

CMP will extend in 2011 its MEMS portfolio to new technologies and foundries to take the most of the new capabilities in MEMS fabrication.

E – 3D

CMP has participated to a 3D process run in 2009. Such a process has been introduced to all CMP customers in 2010. It is expected that another 3D process will be introduced in 2011.

F – GaAs

It is expected that a GaAs process will be introduced in 2011.