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**2017 Free IC Fabrication mini@sic Program**

**For Brazilian universities**

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<http://www.europractice-ic.com/IMEC_Brazil_free_IC_fabrication_NEW>

Considering:

* Brazil has several incentive programs for the stimulation of ASIC design and has set up several design houses
* Design houses need experienced IC designers
* Through the IC-Brazil Program several hundred designers have been trained and employed by the design houses
* Before entering the IC-Brazil Program and/or job market it would be beneficial if students at Undergraduate, Master and PhD level could have the chance to design small ICs and have them fabricated and tested

Imec Brazil would like to contribute to the growth of the IC ecosystem in Brazil by offering some free IC fabrication to Brazilian universities on Europractice mini@sic runs (www.europractice-ic.com).

**In 2017 Imec Brazil offers 5 free seats on mini@asic (see concept at figure 1) MPW runs under next conditions and following successful experience since its launch in 2013. A total of 14 designs were supported until now.**



Fig 1 Mini@sic concept – one part of the total chip area

* Technology TSMC 0.18u MS/RF
* On scheduled mini@sic runs: March and September 2017
* Maximum design area of a seat: 1660 x 1660 microns
* Delivery: free samples (dies), maximum 40
* Packaging: free up to 500 euro

**Who can apply?**

* Professors at Brazilian universities
* For non-funded Master or PhD student designs
* More application can be submitted, but maximum 1 design per university can be approved for free fabrication

**How to apply?**

* There are two deadlines for proposal submissions: 1 December 2016 and 1 May 2017, for tape out in March and September 2017 respectively (more details at [www.europractice-ic.com](http://www.europractice-ic.com) and <http://www.europractice-ic.com/IMEC_Brazil_free_IC_fabrication_NEW>).
* Submit application form (available at site above) to jacobus.swart@imec.be
* Imec will inform about the selection within 3 weeks after the submission deadlines

**Design Selection Committee:**

* Name indicated by SBMicro: Frank Sill Torres
* Name indicated by IC-Brazil: Hamilton Klimach
* Imec Brazil: Jacobus Swart

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**List of fabricated\* mini@sic’s**

|  |  |  |
| --- | --- | --- |
| **Tittle** | **Institution** | **Year** |
| RF circuits: oscillator and *LC* tuner V1 | UFSC | 2014 |
| Design of a Passive RFID Tag for 13,56MHz  | UnB | 2014 |
| Digital read-out circuit (ROIC) for mid-infrared photodetectors  | IF-USP | 2014 |
| Study of the non-classical gate layouts for MOSFETs | FEI | 2015 |
| Simple SoC (SSoC) | PUC-RS | 2015 |
| Analog and RFID circuits  | EPUSP | 2015 |
| RF circuits: oscillator and *LC* tuner V2 | UFSC | 2015 |
| SoC HF-Microcontroller with cryptography  | PUC-RS | 2016 |
| Fully Integrated Class J Power Amplifier for IEEE 802.11g/n  | UFRGS | 2016 |
| A New Topology for Bio-potential Amplifiers with Unconventional Gate Geometries  | FEI | 2016 |
| Analog and RF IP Blocks  | EESC/USP | 2016\* |
| Bouncing Pixels for Lab-on-Chip and Infrared applications  | UFMG | 2016 |
| High performance operational amplifier (OpAmp) and High-speed digital buffers | ITA | 2016 |
| Sigma-Delta modulator, OPAMP and Bandgap reference | UNIPAMPA | 2016 |

\* 2nd semester