

PRESS RELEASE

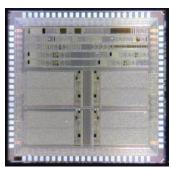
ARQUIMEA MICROCHIPS ARE ALREADY IN SPACE

The launch of the HISPASAT 36W-1 Satellite on January 28 is a milestone for ARQUIMEA Ingeniería, as it is flying more than six hundred units of the first microchips developed by the company for a space application.

One of the novel elements of this satellite is the antenna ELSA (ELectronically Steerable Antenna), the first active antenna for a commercial communications satellite, developed by Airbus Defense and Space System Spain. The contribution of ARQUIMEA in this development is a set of analog and digital microchips (ASICs)

developed specifically for this application. These components are integrated into a hybrid circuit that gives the antenna the ability to generate four independent receiving beams that can be redirected from ground.

The responsibility of ARQUIMEA in the project includes the design and qualification of the micro-circuits according to ESA ESCC 9000 requirements. The set of microchips (ASIC set) integrated in the DRA-ELSA antenna control hybrid consists of twenty four devices per hybrid module: four ASIC fully analog (ARQ-RSA02), implemented in the I3T80 technology of 0.35µm of ON SEMICONDUCTOR, and twenty digital ASICS (ARQ-RSB01) implemented in



the 0.18 μ m technology from UMC and the DARE radiation-resistant digital libraries developed by IMEC (Belgium R & D center) for ESA. The DRA-ELSA antenna includes a total of 622 chips (102 analog and 520 digital). The use of such a large quantity of ASICs in a single mission is also a remarkable technological milestone.

The qualification and launching of the HISPASAT 36W-1 satellite consolidates ARQUIMEA as the first Spanish company with the capacity to develop full custom mixed-signal circuits for space. In addition, this is the first



flight mission of the DARE digital libraries. With this, ARQUIMEA stands out as a European provider of analog, digital and mixed signal ASICs for future space programs.

ARQUIMEA Ingeniería designs and develops hi-rel components and electronic systems, including microelectronics and mechanisms using disruptive technologies. The technologies that ARQUIMEA produces and qualifies for space are subsequently transferred to terrestrial applications in the form of innovative products for industrial, automotive, agricultural or medical sectors.

More information at www.arquimea.com