

# INTEGRATION OF HIGH-PERFORMANCE V-BAND GAN MMIC HPA FOR THE QV-LIFT PROJECT

Alejandro Rodríguez<sup>1</sup>, Jaime Cagigas<sup>1</sup>, Noelia Santos <sup>1\*</sup>, Joël Moron<sup>2</sup>, Fabio Vitobello,

Giorgia Parca<sup>3</sup>, Giuseppe Valente<sup>3</sup>, Giuseppe Codispoti <sup>3</sup>

<sup>1</sup> ERZIA Technologies, Josefina de la Maza 4, 39012, Santander, Spain

<sup>2</sup> OMMIC sas, 2 chemin du Moulin - 94453 Limeil Cedex, France

<sup>3</sup> Agenzia Spaziale Italiana, Via del Politecnico snc, 00133, Rome, Italy

[\\*noelia.santos@erzia.com](mailto:noelia.santos@erzia.com)

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## Abstract

In the framework of the Horizon 2020 project QV-LIFT, funded by the European Commission, a V-band high power amplifier based on Gallium Nitride (GaN) Monolithic Microwave Integrated Circuits (MMIC) technology was designed and developed. Design manufacturing and on-wafer pulsed measurements of two runs of MMIC fabrication were performed and the best chipsets demonstrated peak output power of about 5W in pulsed mode. Waveguide modules were integrated and tested and are able to provide up to 2 W at 48 GHz in Continuous Wave (CW).