

“Space-born payload equipment: current trends and perspectives”, pp.174-180

Jean-Christophe Cayrou, Paul Maynadier, Christine Miquel, Frantz Bodereau, Jean-Louis Cazaux

Abstract – Active microwave products – low noise amplifiers, frequency converters, receivers, channel amplifiers, solid state power amplifiers – are always required to be increasingly light and consequently cheap, as a strong relationship between these two parameters has been demonstrated for a long time. The trend is that both mass and cost are cut by a factor close to two every ten years. This law obviously implies great and deep changes of the microwave products: not only change of technologies and techniques used but also change of product's definition. Most of these changes can be defined by analysing the current generation of microwave products. This exercise has been done from the last developments achieved at Alcatel Alenia Space. It highlights some axis of development.