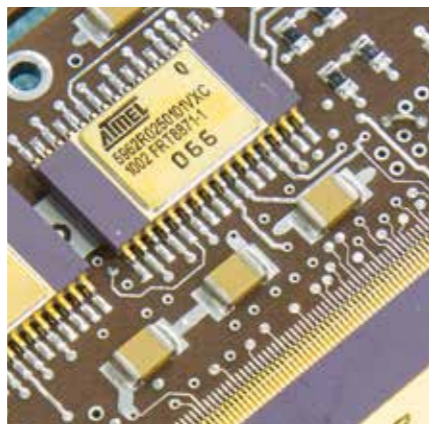
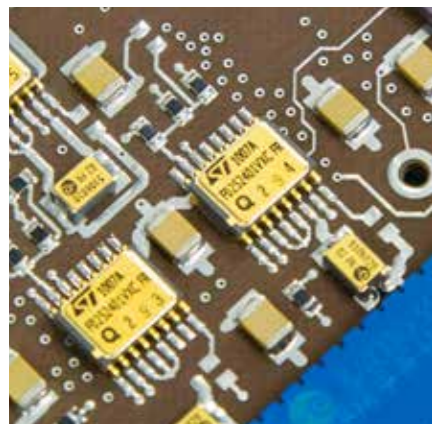


HERITAGE IN THE SPACE FIELD

MB Elettronica have already populated several boards with High Reliability parts for Space applications and in the frame of some Programs, even functional tests at PCB level have been performed.

We have the SMD process for PCBs population qualified in accordance with the ECSS for a number of electronic components packages and we are able to get the qualification of further packages, if needed by the Program.

The complete SMD qualification test campaign includes inspections, mechanical and thermal environmental tests, microsections and it is performed by an external independent company.



AUDITS

Audits on the board assembly processes for Space Applications have been successfully performed by several Customers.

Thanks to the confidence our Customers reached, several KIP/MIP on the PCBs are now delegated to MB Elettronica.



**SOLUTIONS AND SERVICES
FOR YOUR ELECTRONICS**

**SPACE BUSINESS
APPLICATIONS**

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CAPABILITIES IN THE SPACE FIELD

On the basis of the consolidated production technologies available and the heritage gained in more than 50 years activities, the company has invested and is investing to pursue the opportunities coming from the Space market.

Even if we was born as “built to print” manufacturer we are now more than 130 people and we have capabilities to manufacture according to specification.

It depends on the complexity of the equipment and the assessment is performed on case by case basis.



The development team is based on engineers that gained a great experience in electronics aimed at Industrial Sectors, Railway, Security and Broad-casting.

A Clean Room 100000 class is fully dedicated to the Board population and visual inspections for Space application. The configuration is controlled and the parts traceability is fully guaranteed in automatic way by a dedicated software at the Pick and Place level.

In the frame of the boards population activity both for Vapour Phase and Hand Soldering the persons involved are ESA certified by IIS. Seven persons as Operators (CAT. 3) and five persons as Inspectors (CAT. 2) in accordance with ECSS Q-ST-70-38 and ECSS Q-ST-70-08.

MAIN FACILITIES FOR BOARD POPULATION AND INSPECTION

Tools and Equipments	Manufacturer	Model
Clean Room		Class 100000 (ISO 8)
Printing Machine	MPM	Ultraprint 1500
Pick and Place	Philips	Assembleon Opal X2
Vapor Phase	IBL	BLC509
AOI	Saki	BF18D
Degolding	Cemev	MPGR
Pretinning	Cemev	MPGR
Preforming *	Fancort	Flex FA 6197
Preforming *	Fancort	FA 6195, FA6194, FA6224
Baking	Binder	FED 52
Microscope **	NIKON	SMZ 1270
Microscope **	NIKON	SMZ 1000



* Jigs and Tools for bending the electronic components including a Flex machine able to cover several packages and dedicated tools for FPs including QFP 352 and QFP 256.



** Nikon microscopes to perform visual inspection and bench settled up to perform KIP/MIP with the Customer.

TESTING OF THE SPACE BOARDS



Y. Cougar SMT facility, manufactured by Fein Focus to perform X-RAY inspection both at component and assembly level.



Leading equipment for all kinds of tests e.g. Flying Probe, Boundary Scan, Functional Test.

Development and realization of custom HW and SW for Functional Tests.



Dedicated area for customer combined with the skills of our qualified technicians guarantees the maximum reliability in every step as required by the Space Business.