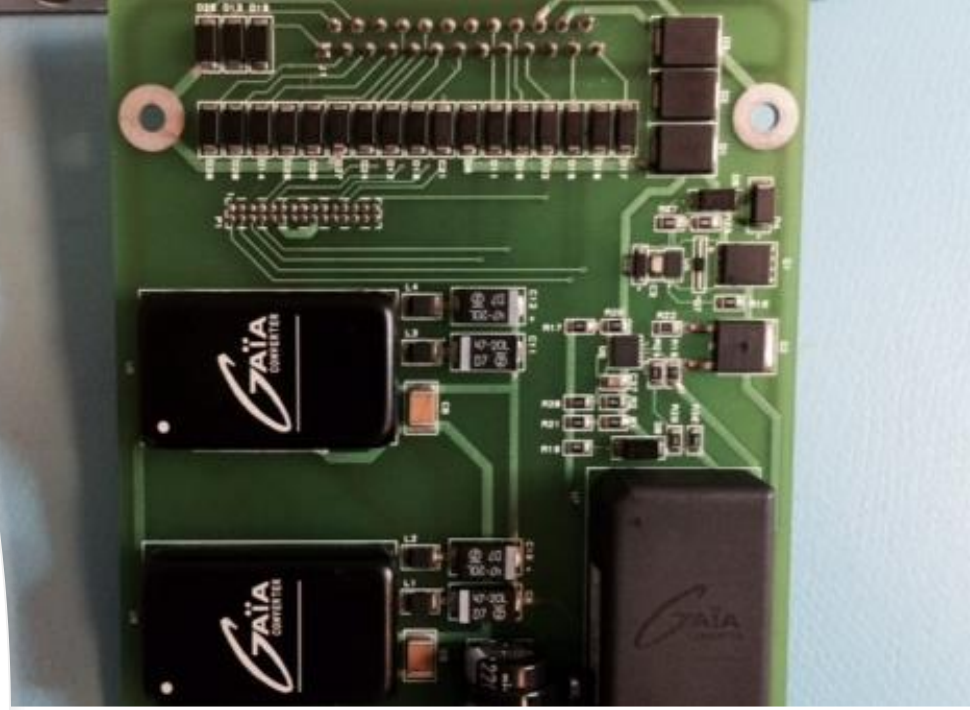
Company Profile

BACKGROUND

In 1972 LEAT (Electronic Laboratory for Technical Assistance) started its activity in overhaul, maintenance and upgrade of communication equipment, instrumentation and audio recorders for military avionics applications.

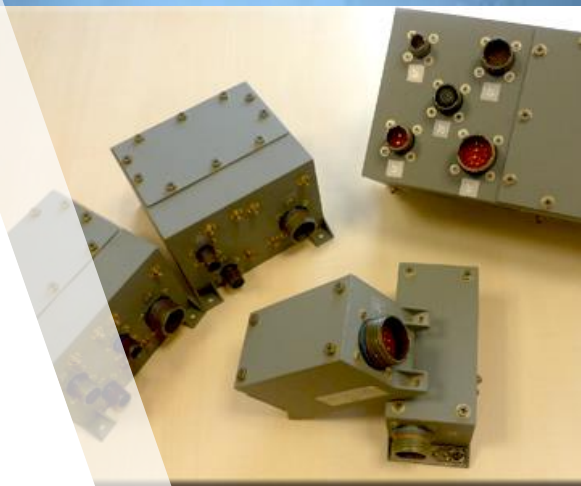
Since the beginning, LEAT core business was focused on **maintenance, repair and overhaul of avionics** components and navigation systems in compliance with Aviation Regulations, today EASA Part 145 for civil aircrafts and EMAR 145 for military aircrafts.

Keeping a strong focus on its original activity, LEAT current business is represented by **design, qualification and manufacturing of avionics equipment and/or systems**, new product technology insertion, upgrading or replacement of obsolete equipment, product enhancement, logistics.



MAIN LINES OF BUSINESS

- ***R&D and Engineering***
- Design, Development, Qualification and Manufacturing of avionic equipment and/or systems
- ***Production of Avionic Components***
- Production of Proprietary Components or on “build to print” base by Third Parties
- ***MRO***
- Maintenance, repair and overhaul of avionics components and navigation systems in compliance with EASA Part 145, EMAR 145 and AERQ-2120
- ***Logistics, Products Distribution & Representation***
- New product technology insertion
- Upgrading or replacement of obsolete equipment
- Dealer of the major Companies in the Avionic Market
- Dealing with all the tasks related to the logistics of Aeronautical parts



LEAT

LEAT FACILITY

- Via di Saponara 614 – 00125 Rome Italy
- Plant of 3000 sqm totally owned by the Company
- Dedicated areas for
  - Offices
  - Laboratories
  - Mechanical and painting shops
  - Test equipment
  - Warehouse with dedicated space to stock sensible material (TULPS ex art. 28)

LEAT CERTIFICATIONS

EN 9110:2018

EASA PART 145

EN 9001:2015

EN 9100:2018

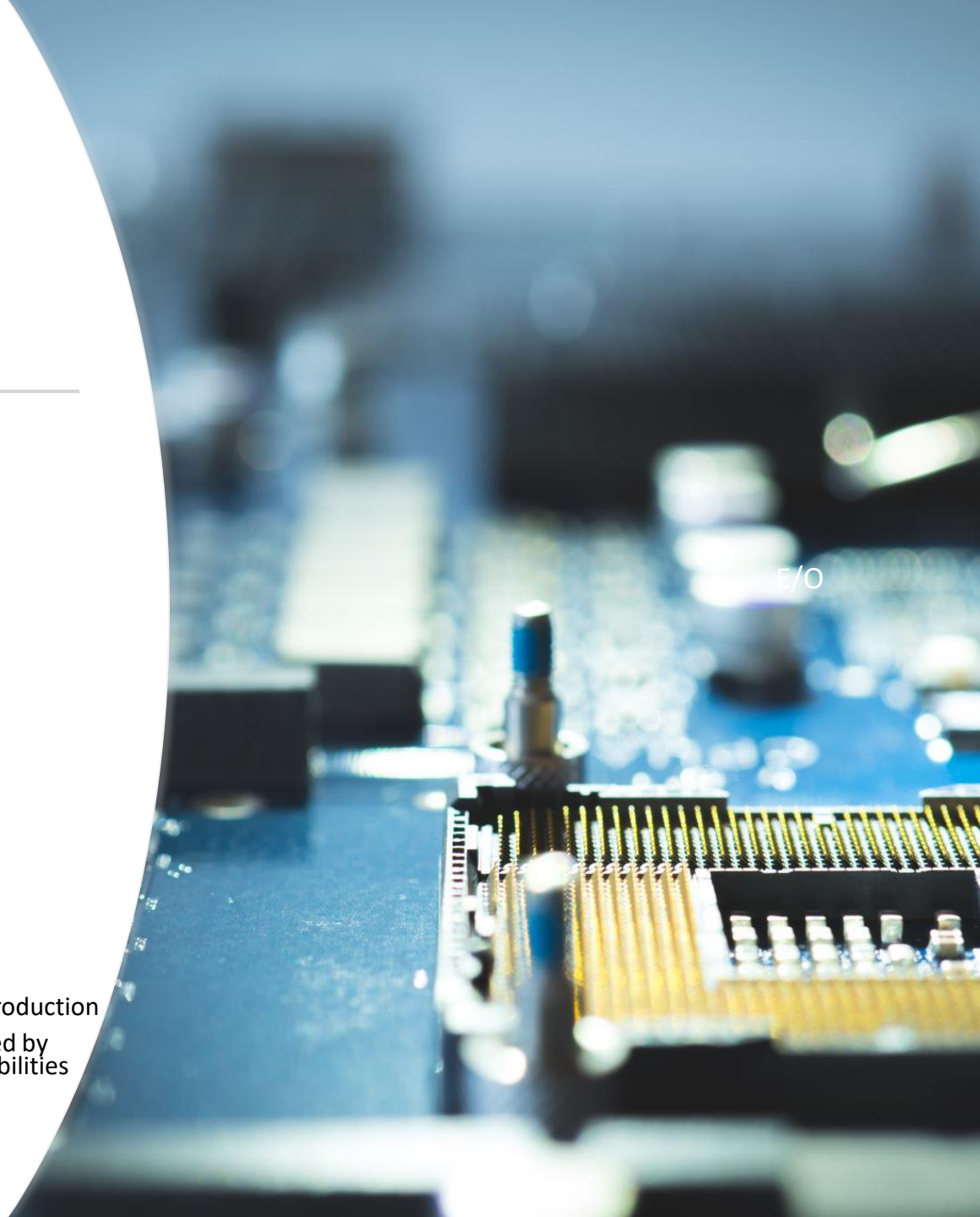
EN 9120:2018

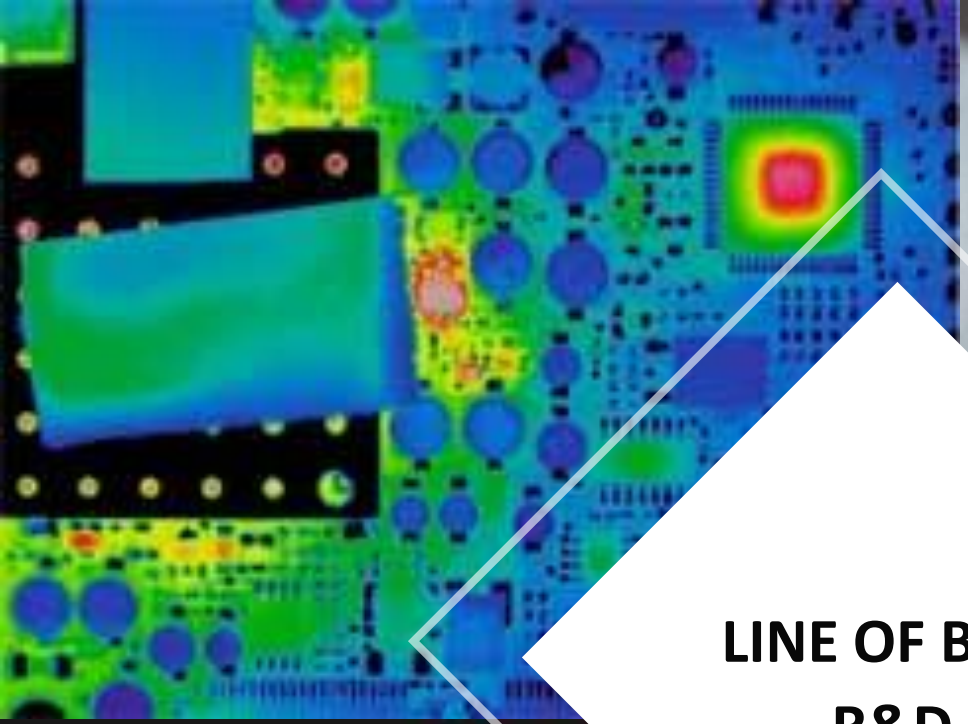
EMAR PART 145

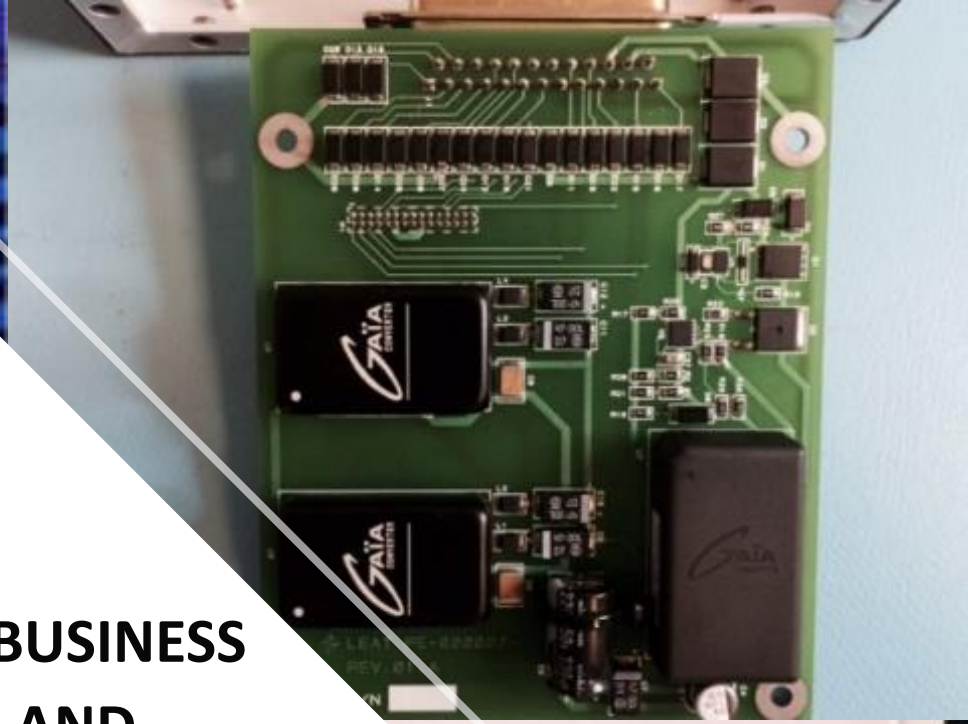
LEAT

Main Technical Skills

- Main Capabilities & Expertise of LEAT Personnel:
  - Mechanical, Electrical and Electronic Design
  - Integration of Avionic Systems
  - Test and Validation
  - Enviromental Qualification
  - Quality Assurance and Quality Control
  - Mechanical Assembly
  - Electrical and Electronic Assembly / Repair
  - Radio Frequency Applications
  - HF / VHF / UHF Radio Systems Repair
  - Radio Navigation Systems Repair
  - Navigation & Attitude Indicators Repair
  - Pneumatic Components Repair
  - Gyroscope Instruments Repair
  - Termo Cameras Repairs
  - Searchlights Repairs
  - Avionic Wirings Design, Test, Validation & Production
- All Engineers and Technicians are directly qualified by Aeronautical Authorities and/or OEMs for their capabilities

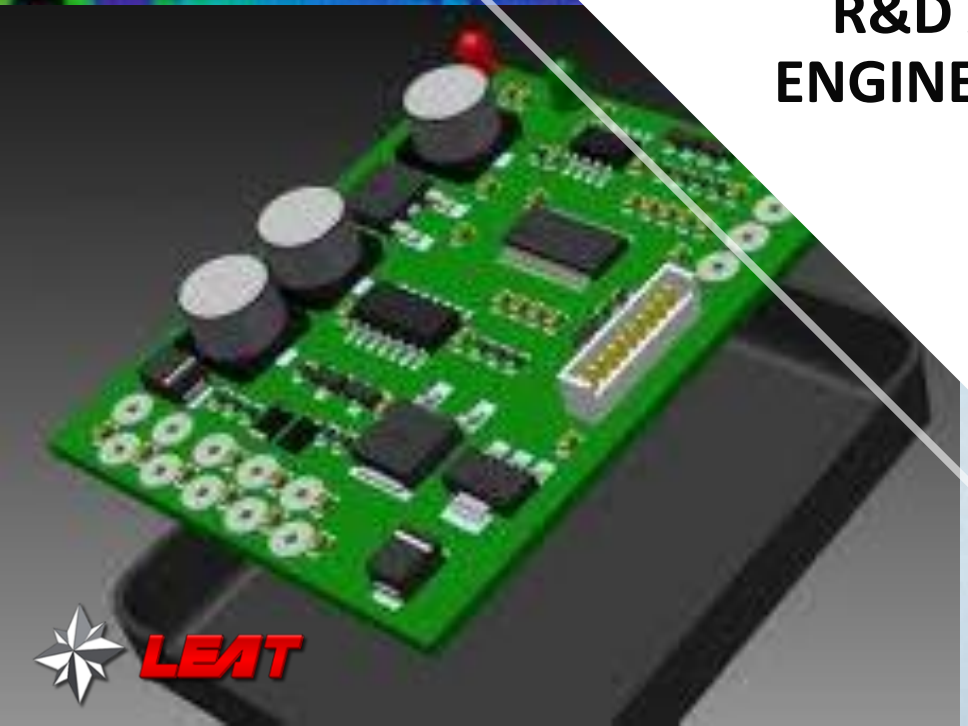


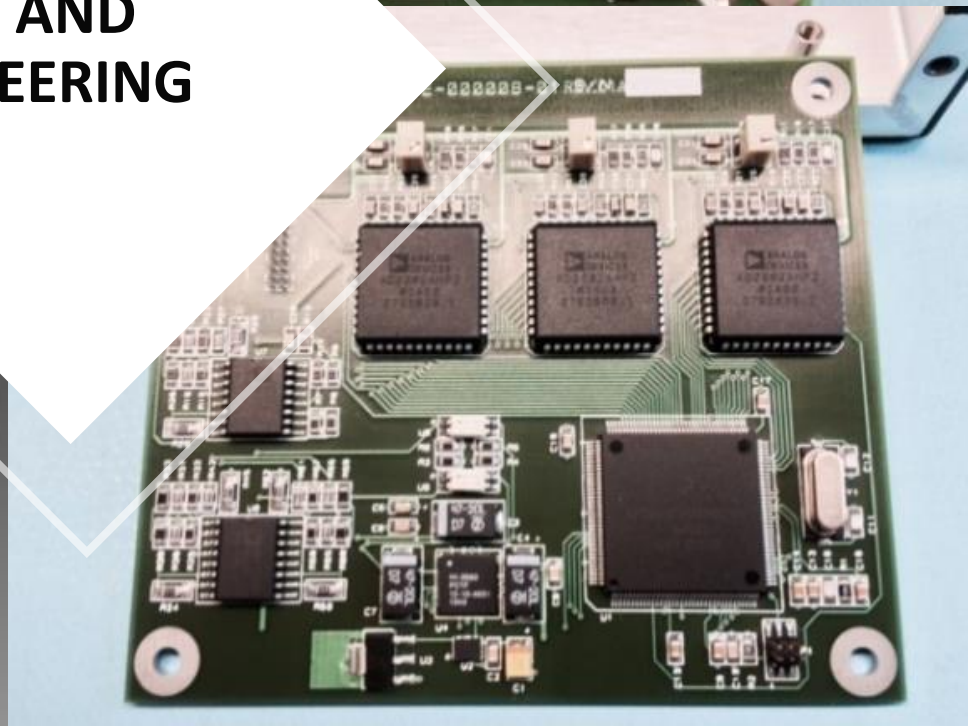




LINE OF BUSINESS

R&D AND ENGINEERING

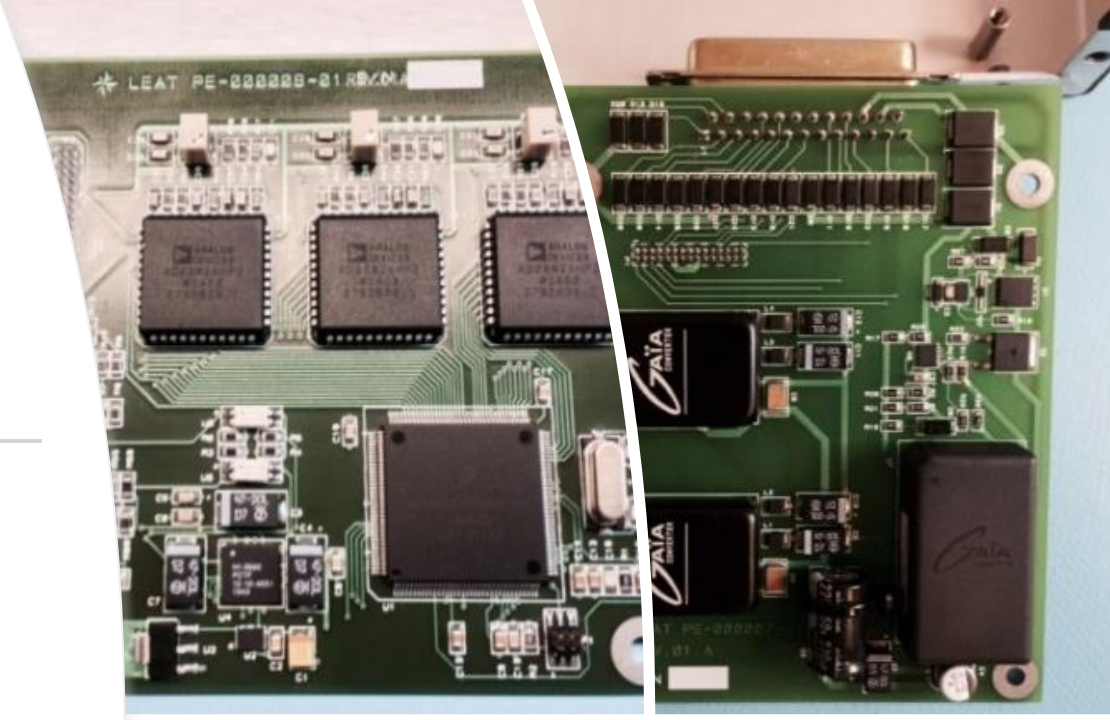


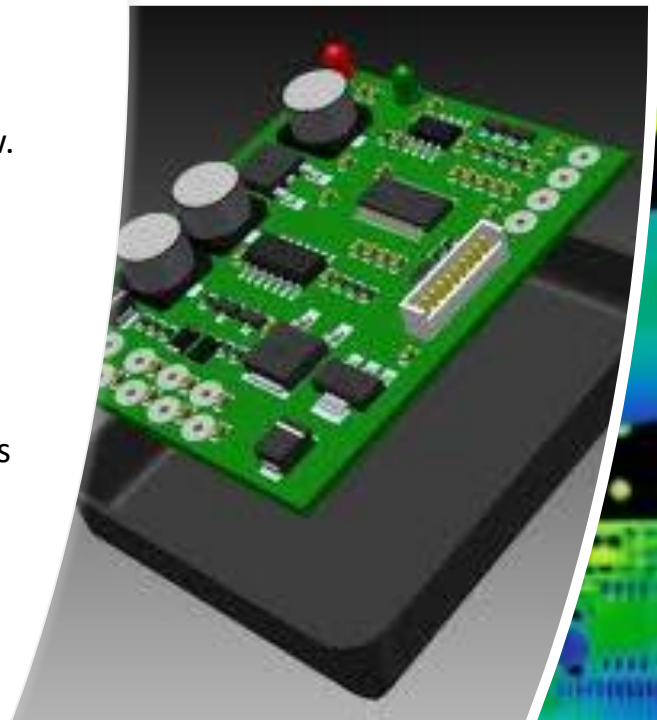


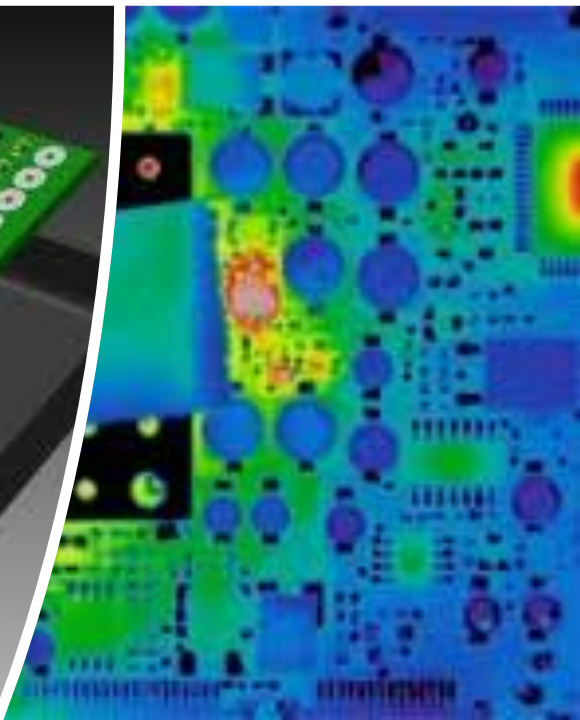
R&D AND ENGINEERING

- LEAT R&D and Engineering Team is able to perform the overall design activities starting from the Customer's requirements up to the equipment verification, qualification and certifications and to the in-series production release.

  - Mechanical Design (Solidworks)
  - Electronic Design (Altium)
  - SW/FW Design and Verifications i.a.w. DO178C and DO254 (Vectorcast)
  - Reliability and Safety
  - Configuration and Documents Management
  - Verification and testing activities
  - Engineering for Manufacturing
  - EMI and Environmental Qualifications i.a.w. DO160
  - Automatic Test Equipment Design, Validation and Production







LEAT PRODUCTS

- **Universal Adapter**
- NTSC/PAL – Digital Video SMPTE 292M/424M
- Arinc 407- Arinc 429
- AC/DC Voltage – Arinc 429
- RS232/485 – Arinc 429
- NMEA(0183) RS232 – Arinc 419
- Technical specifications and physical dimensions can be customized depending on Customer's needs.

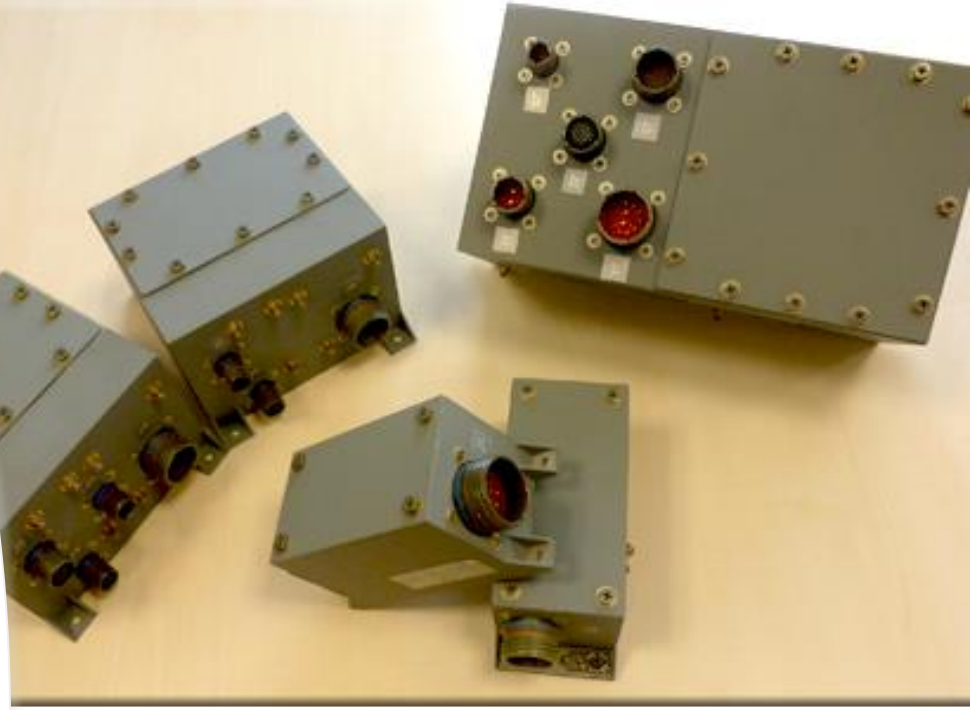
- **Data and Video Signal Converters**
- Synchro to ARINC419 Converter for AW109/119
- ARINC 429 to Analog Converter

LEAT

LEAT PRODUCTS

- **Nacelle DownStop Sensor (NDSS)** for the **AW609 Tiltrotor**
- (2 NDSSs per A/C) measurement of mechanical stress on the AW609 Nacelles.

- **Wiring Integration Assemblies for AW609 Tiltrotor**
- 11 WIAs per A/C to concentrate relays, diodes, fuses, busses, etc. required for the Electrical and Avionic systems installation, simplifying the A/C harness and its modification and maintenance.

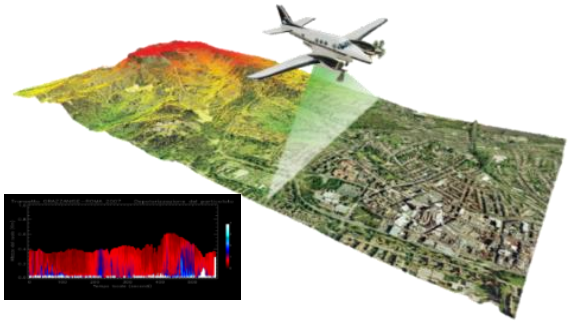


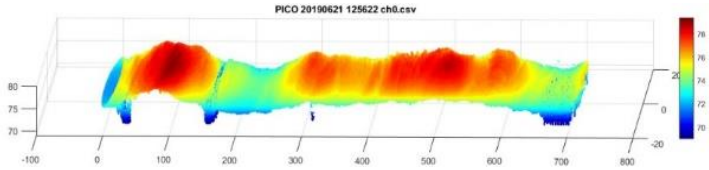
LEAT PRODUCTS

Avionic Computer
- Core i7 processor
- Dedicated frame grabber for video processing
- Video input: 2 Analog RGsB input (FULLHD), 2 x PAL/NTSC Composite input (576i@50Hz) 1 x HD-SDI input (FULLHD)
- Video output: 2 VGA@1080p, 2DVI@1080p, DVR H.264,
- SSD (Fast Erase / Encripted)
- ARINC: 4TX and 4RX
- 4 RS232/422/485 Ports, Ethernet ports, 4 Discrete IN/OUT, Audio line Out, USB and PS/2
- DO-160 Compliant
- Operating System: Windows or Linux

Video Management Unit
- Integrated system, managed by A429 commands.
- High video 2D performance for real time video processing.
- H264/5 algorithms for video coding for high quality image Video recording in HD and data storage.
- ARINC 818 Video Output
- Software for unit configuration, mission preparation and debriefing.

LEAT PRODUCTS



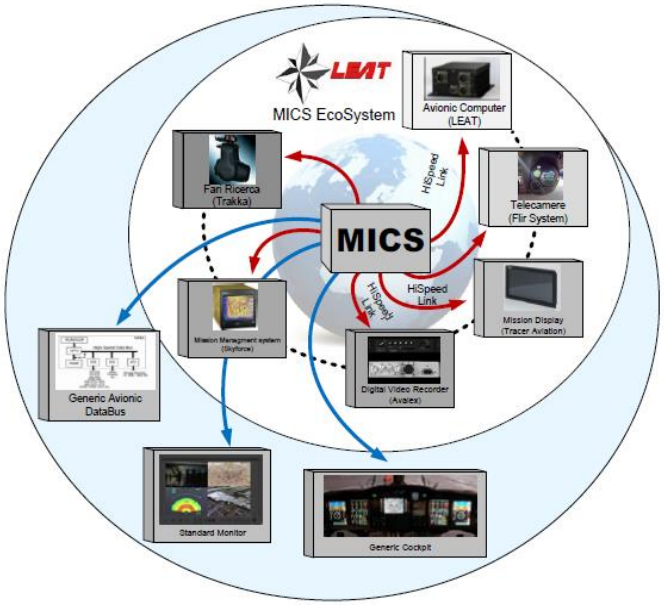


MIL-DAR sensor for IED (Improvised Explosive Devices)

- Detection using different sensors as Optical Radar (i.e. LIDAR), infrared and visible cameras.
- high definition 3D Mapping and an induced fluorescent emission analysis.

MISSION COMPUTER

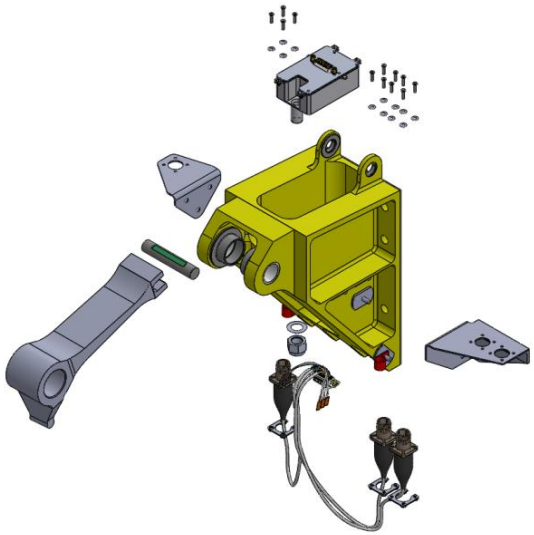
Dedicated to Search & Rescue Missions, capable to perform advanced and powerful image processing (as alpha blending, image overlap, etc.) of input video from FLIR, Weather Radar, Map Generator, etc. displaying them on output terminals as Monitors, MFD, etc...

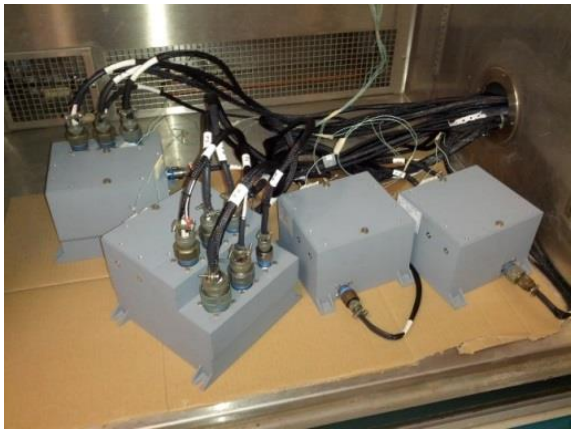


LEAT

LINE OF BUSINESS

PRODUCTION OF AVIONIC COMPONENTS





LEAT

PRODUCTION LINE

LEAT is certified EN 9100:2018 for design, production & maintenance of avionic components.

LEAT is already fully qualified and produces its own products.

- Dedicated spaces for production, equipped with tools and instruments
- Skilled technicians
- Dedicated production warehouse
- Company Qualified by customers to produce components in line with specific airworthiness regulations/standards (e.g. FAA regulation)
- Capability to follow all the production process from design, qualification, series production and post production activities (customization, design change, maintenance, training, customer support)
- Dedicated ERP to manage configuration management, incoming of parts, design changes, material requirement planning, production planning, etc.
- Capability to produce components on behalf of third party specification (build to print)

CERTIFICATE

Kiwa UNAVIAcert S.r.l.
Via Cadriano, 23
40057 Granarolo dell'Emilia (BO)
Tel. 0514593110
Fax 0517683382
E-mail info@unaviacert.it
www.unaviacert.it

UNAVIAcert

kiwa

Reg. Numero / *Reg. Number*	00133- N	**Inizio validità** / *Issue date*	2021-03-26
Prima emissione / *First issue date*	2009-03-27	**Ultima modifica** / *Reissue date*	2020-12-09
Prossimo rinnovo / *Expiry date*	2024-03-25	**Settore IAF** / *IAF Sector*	21, 17, 18, 19

Certificato di Approvazione
Certificate of Approval

Si dichiara che il Sistema di Gestione per la Qualità dell'Organizzazione:
We certify that Quality Management System of the Organization:

LEAT S.p.A.

È stato valutato in accordo ai requisiti della EN 9104-001:2013 e del Regolamento Tecnico Accredia RT 18 / *Has been audited in accordance with EN 9104-001:2013 requirements and Accredia RT 18*

Ed è conforme ai requisiti delle seguenti Norme per la gestione dei Sistemi Qualità / *and It is in accordance to the following Quality Management System Standards*

EN 9100:2018, AS9100D, JISQ 9100:2016
ISO 9001:2015

Scopo/*scope:*
Progettazione, Sviluppo, Produzione, Installazione e Manutenzione di Sistemi Avionici.
Design, Development, Production, Installation and Maintenance of Avionic systems

Chief Operating Officer
Giampiero Belcredi

Il mantenimento della certificazione è soggetto a sorveglianza annuale e subordinato al rispetto dei requisiti contrattuali di Kiwa UNAVIAcert / *The maintaining of the certification is subject to annual surveillance and dependent on the observance of Kiwa UNAVIAcert contractual requirements.*

Il presente certificato è costituito da 1 pagina.
This certificate is composed by 1 page.

LEAT S.p.A.
Sedi oggetto di certificazione / *Certified Sites*
- Via Fosso della Magliana, 34F 00148 ROMA Italia

IAF ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ N° 024A

LEAT

QUALIFICATION TESTs

- Capability to perform Qualification Tests in line with DO160 Regulations:
  - Temperature
  - Vibrations
  - Electrical Continuity
  - Isolation
  - Accelerations

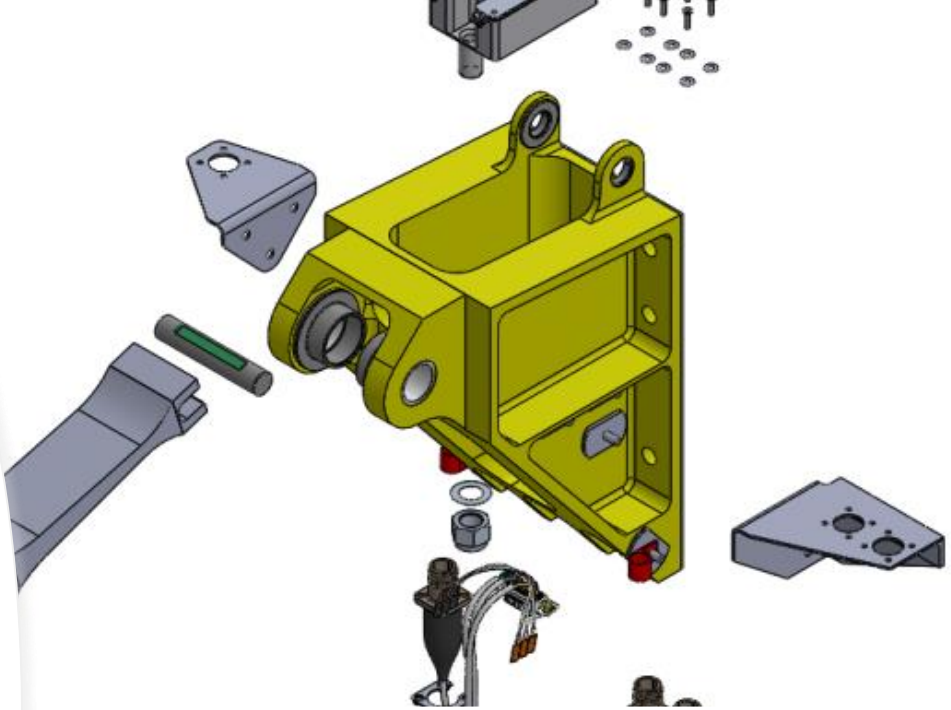
LEAT

LEAT PRODUCTS

Wiring Integration Assembly (Production on Behalf of Leonardo Helicopters Division)

Synchro to ARINC429 Converter
ARINC 429 to Analog Converter
(LEAT Product)

LEAT PRODUCTS



Nacelle Downstop Sensor

(Production on Behalf of Leonardo Helicopters Division)

LEAT is certified by RAFAEL to Manufacture, Assemble and Test specific RAFAEL components

RAFAEL
ADVANCED DEFENSE SYSTEMS LTD.

LEAT

Line of Business
Maintenance, Repair & Overhaul (MRO)

MAINTENANCE, REPAIR AND OVERHAUL

- LEAT is certified to maintain and repair several avionic equipment for both civilian (**EASA Part 145**) and military (**AERQ-2120 & EMAR 145**) applications.
- The Capability List of LEAT's MRO encompasses hundreds of Part Numbers for different equipment typologies such as:
    - Communications and Navigations (cat. C3)
    - Electrical Powers and Lights (cat. C5)
    - Recording Systems (cat. C13)
    - Radar/Surveillance (cat. C52)

MRO – MAIN CATEGORIES

- ATC Transponders
- Automatic Direction Finder (ADF)
- VHF Omnidirectional Range (VOR)
- Distance Measuring Equipment (DME)
- Instrumental Landing Systems (ILS)
- Radars
- Radios & Intercomm Systems
- Flight Computers
- Control Panels
- Horizontal Situation Indicators (HSI)
- Attitude Director Indicators (ADI)
- Radio Magnetic Indicators (RMI)
- Accelerometers
- Altimeter
- Variometer
- Vertical/Attitude/Horizontal Gyros
- Compass Indicators
- Turn & Bank Indicators
- Inverters, DC Control Units
- Torque Indicators
- Anti collision Lights
- Searchlights
- FLIRs

MAIN CUSTOMERS

MRO – MAIN FIX WINGS PLATFORMS SUPPORTED

LEAT

MRO – MAIN ROTOR WINGS PLATFORMS SUPPORTED

LEAT

MRO – DEALER/REPAIR AGREEMENTS

CEF AEROSPACE SOLUTIONS

TELEDYNE FLIR
Everywhereyoulook™

BendixKing

Collins Aerospace

HOWELL
Howell Instruments, Inc.

TRAKKA SYSTEMS

Astronautics
Corporation of America

LEAT


Line of Business
Logistics, Products Distribution
& Representation

Main Concept

CERTIFICATE

kiwa

Reg. Numero / Reg. Number 00133c- N
Inizio validità / Issue date 2021-03-18
Prima emissione / First issue date 2018-03-18
Ultima modifica / Reissue date 2020-12-09
Prossimo rinnovo / Expiry date 2024-03-17
Settore IAF / IAF Sector 21, 17, 18, 19, 29

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Certificate of Approval

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Ed è conforme ai requisiti delle seguenti Norme per la gestione dei Sistemi Qualità / *and It is in accordance to the following Quality Management System Standards*

EN 9120: 2018, AS9120B
ISO 9001:2015

Scopo/*scope:*
Distribuzione e logistica di sistemi avionici e di missione.
Distribution and logistics of avionics and mission systems.

Chief Operating Officer
Giampiero Belcredi

Il mantenimento della certificazione è soggetto a sorveglianza annuale e subordinato al rispetto dei requisiti contrattuali di Kiwa UNAVIAcert / *The maintaining of the certification is subject to annual surveillance and dependent on the observance of Kiwa UNAVIAcert contractual requirements.*

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- Via Fosso della Magliana, 34F 00148 ROMA Italia

Kiwa UNAVIAcert S.r.l.
Via Cadriano, 23
40057 Granarolo dell'Emilia (BO)
Tel. 0514593110
Fax 0511603382
E-mail info@unaviacert.it
www.unaviacert.it

UNAVIAcert

IAF ACCREDIA

SGQ N° 024A

LEAT is certified **EN 9120:2018** for Distribution and Logistics of avionics and mission systems

In this frame LEAT can deal with all the logistics related to the management of aeronautical products, such as:

- Purchasing;
- Shipment Management / Delivery on site;
- Exchange;
- Dealing with Italian Regulation for import/export of sensitive material;
- Management of ITAR products;
- Stock monitoring and management;
- Storage;
- AOG.

LEAT

MAIN PARTNERS

CONCLUSIONS

With its capabilities LEAT can support the Customer with a complete set of services in terms of:

- Maintenance, Repair & Overhaul
- Design, Develop & Production of Specific Avionic Components
- Procurement of spare parts/components
- Logistic Management

CONCLUSIONS

LEAT is constantly committed to efficiency in design and production.

Whatever the project, we deliver and support innovative technologies and systems that enable air operations to be completed effectively and safely.

Thanks to a solid experience and perfect understanding of client's needs, LEAT can respond to the customers with tailored and timely solutions.

Our products and services contribute to give us prestige and recognition in Italy and abroad.

LEAT

Performing excellence to deliver best products and services