

Specialized portfolio in compliance with the aviation industry requirements

DESIGN Organization 210

Customer Specific Development

- Hardware
- Software
- SoC (System- on-Chip)
- Mechanics
- Layout
- System solution

Logistics

- Individual customized logistic concepts
- CoC for components
- Procurement according to EN 9100
- EOL/PCN management

DEVELOPMENT WITH CERTIFICATIONS

Development according to Aviation Standards:

General aviation standards:

- RTCA – DO178
- RTCA – DO160
- RTCA – DO254
- Development of fully automated tests for the production in series (Acceptance Test Procedures, ATP) and function error detection

Airbus-specific standards:

- ABD 0100
- ABD 0031
- 2520M11001700
- 2520M1F001200

Boeing-specific standards:

- D6-36440
- D6-44588
- D6-51377

Product Qualification and Documentation

- Thermal tests & Climatic tests
- Vibration and shock resistance
- Leakage tests, chemical resistance
- Reliability and life cycle tests (HALT, HASS)
- EMV consulting, analysis, optimization, simulation
- RoHS, WEEE, EUP, BattG
- FMEA (system, design, process)
- Customer-specific documentation

PRODUCTION Organization 21G

- Assembly SMD/THT
- Testings: AOI/in Circuit/Functional
- Assembly System
- ATP Acceptance Test
- Conformal Coating – Coating of the components with all materials commonly used in the aviation industry as well as special coatings – upon request
- Qualified staff/specific processes (IPC-A-610 Class 3, EN 9100, Part 21G (POA))
- Permanent traceability: automatic recording and traceability of product, quality, material and process data

- Implementation of specific component function tests during the entire development process (ARINC, simulation of airplane remote station)
- Document storage and safety in accordance with the aviation industrial standards
- Automatic optical inspection
- Modern production system according to lean manufacturing methods
- Individual integrated production cells for highly efficient production processes according to product and volume

MAINTENANCE Organization Part 145

- Repair of devices and components which have already been built into the airplane or which broke down

during production, within a specific – customized – area „Subcontracted Repair Station“ for Airbus/EN9110

CERTIFIED QUALITY



Quality management system
aerospace industry



Certified environmental
management system



Quality management system
medical industry



Certified quality management
system



Alternative Design Organization
Approval



Production Organisation Approval
Maintenance MOA EASA Part 145



UL recognized mark



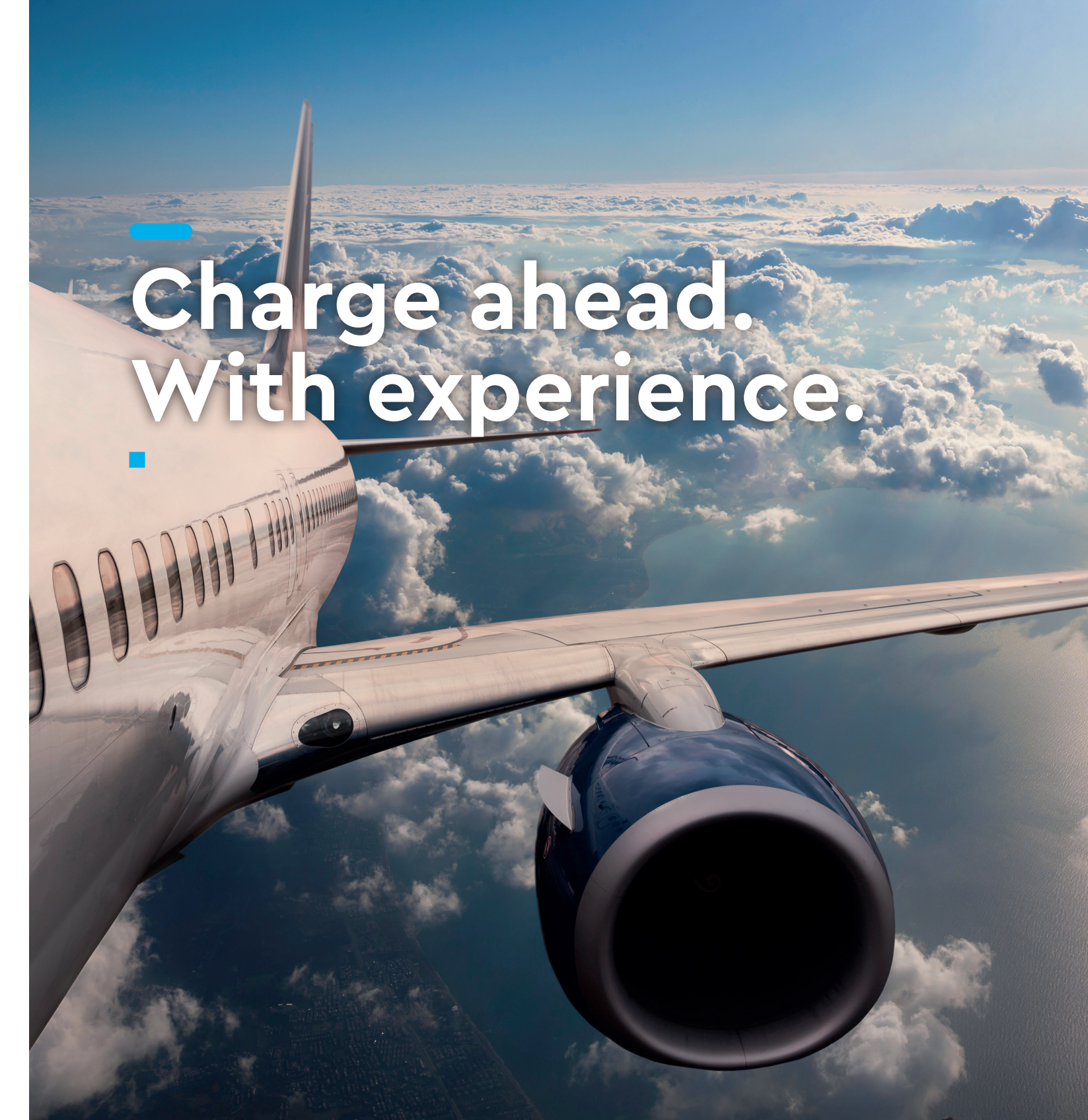
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We give you the decisive edge in your
industry – with our experience and certified
solutions for aviation.

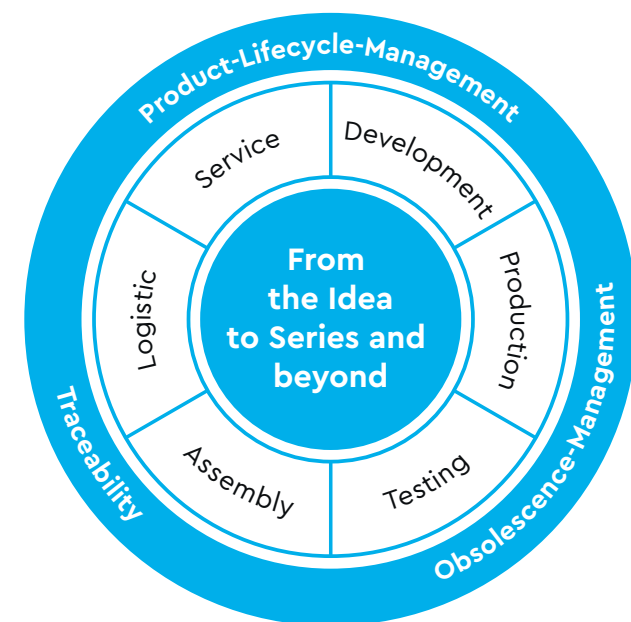


TQ-Aviation: Dedicated to creating the products of the future with you.

TQ has longstanding experience in the aviation industry. Our comprehensive specialist knowledge is always present in our customer support. Aviation places high demands on electronics. Our specifically trained aviation team is aware of such requirements and provides our customers with excellent support in every stage of the value chain. TQ accompanies you from the design and procurement to the production and delivery. You are also in the best hands for hardware and software development with us at TQ. We and our customers have already successfully implemented many projects. So start up and take off – with us at TQ!

We offer you:

- Certification according to EN9100
- State-of-the-art production process
- Permanent traceability in the development and production
- First Article Inspection Report (FAI), Final Acceptance Test (FAT)
- Global procurement network of aviation-certified suppliers
- Transparent configuration management with long-term storage
- Product Change Notification and End Of Life-Service
- Obsolescence management



Aviation Authority Approvals

- Design Organization Approval Part 21O (ADOA)
- Production Organization Approval Part 21G (POA)
- Maintenance Organization Approval Part 145 (MOA) (in preparation)

TQ Electronics is everywhere on board



CABIN

- Cabin interiors
- Water management
- Galleys



CREW

- Control panels
- Crew Interface (HMI)



CARGO

- Freight loading system & monitoring



PAX

- IFE
- Seat control unit
- Seat actuation/power supply
- Passenger service unit



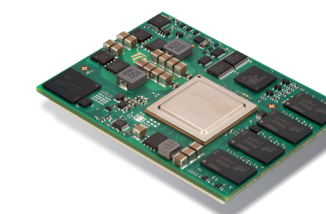
SECURITY

- Electronic engine control
- Cockpitdoor electronics



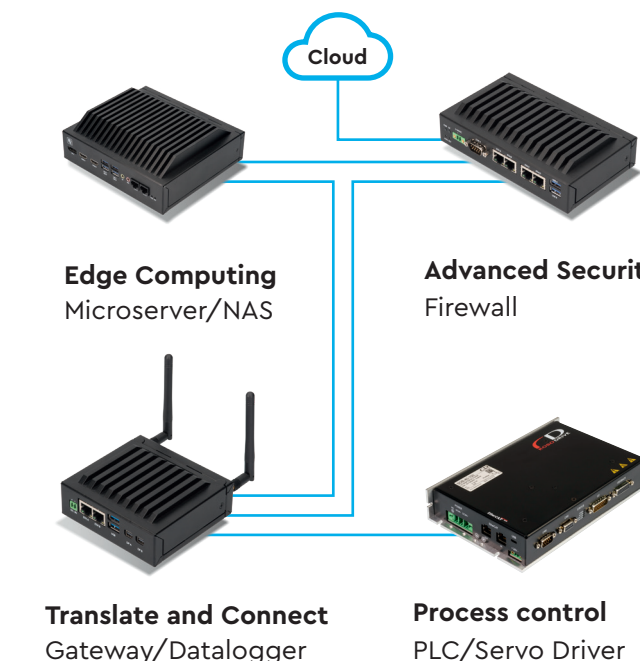
Cost reduction and short time-to-market? Certified products from TQ

Embedded modules – Building blocks for your application



- Extended temperature range for many years of reliable operation
- All processor functions available, (SoC) based on the innovative ARM® or Power Architecture™ technology
- Minimum sizes, ready-made processor modules
- High reliability, even under difficult conditions
- Optimal operation safety due to the robust design and the deployment of on-board memory with ECC and NOR Flash
- Long-term availability of the module and all key components

Industrial IoT – The future is here



Avionic devices – Prepared for NextGen Avionics

All avionic products from TQ are ETSO, TSO, FCC certified and made in Germany.



TQ KRT2 Radio Transceiver

- 8.33 kHz generation
- Integrated intercom
- Large TFT color display
- Dual watch mode
- 100 clear text memory slots
- Reliable Quality
- Lowest weight of its class



TQ KTX2 Transponder

- Mode S, Class 1
- Intuitive handling
- Large TFT color display
- Lowest power consumption
- Maximum altitude 35,000 ft.
- Compact dimensions
- Lowest weight of its class