





THE COMPANY

DMG has dealt with the design, production and development of IT and electronic systems since 2009. We specialize in the development of firmware for the railway sector, but we apply our technological solutions to all areas in which information technology and electronics improve products and enhance industrial processes. We are a small, dynamic and innovative company that was the product of the dream of three friends and the vision of three electronics professionals. In ten years of activity, collaborators and customers have shared our idea and helped us strengthen it day by day. **Today we are a group of focused and competent professionals: our mentality is practical and precise and our approach is always hands-on.**







KNOW HOW



Our consultancy business follows the entire life cycle of our customers' products. We intervene in the development phase of ideas and proceed with the identification of specifics, then move on to the actual design and to the implementation. We also provide support in the testing and certification phase. Our long experience in the railway sector it made us particularly expert in the realization of the documentation accompanying the projects,

to comply with the many existing regulations in the field. To this end we have developed expertise in the drafting of documents certifying the project design and verification tests (environmental and on the device), to meet the requirement for certification and approval of products, as well as accompanying manuals, where necessary.

A valuable know-how that we make available to our customers applying it in all sectors.



INDUSTRIAL



RAILWAY



NAVAL



BIOMEDICAL



MILESTONES

IN AUGURATION OF
PISTOIA HEADQUARTERS

2011

PANTOGRAPH PROJECT
ETR1000

2012

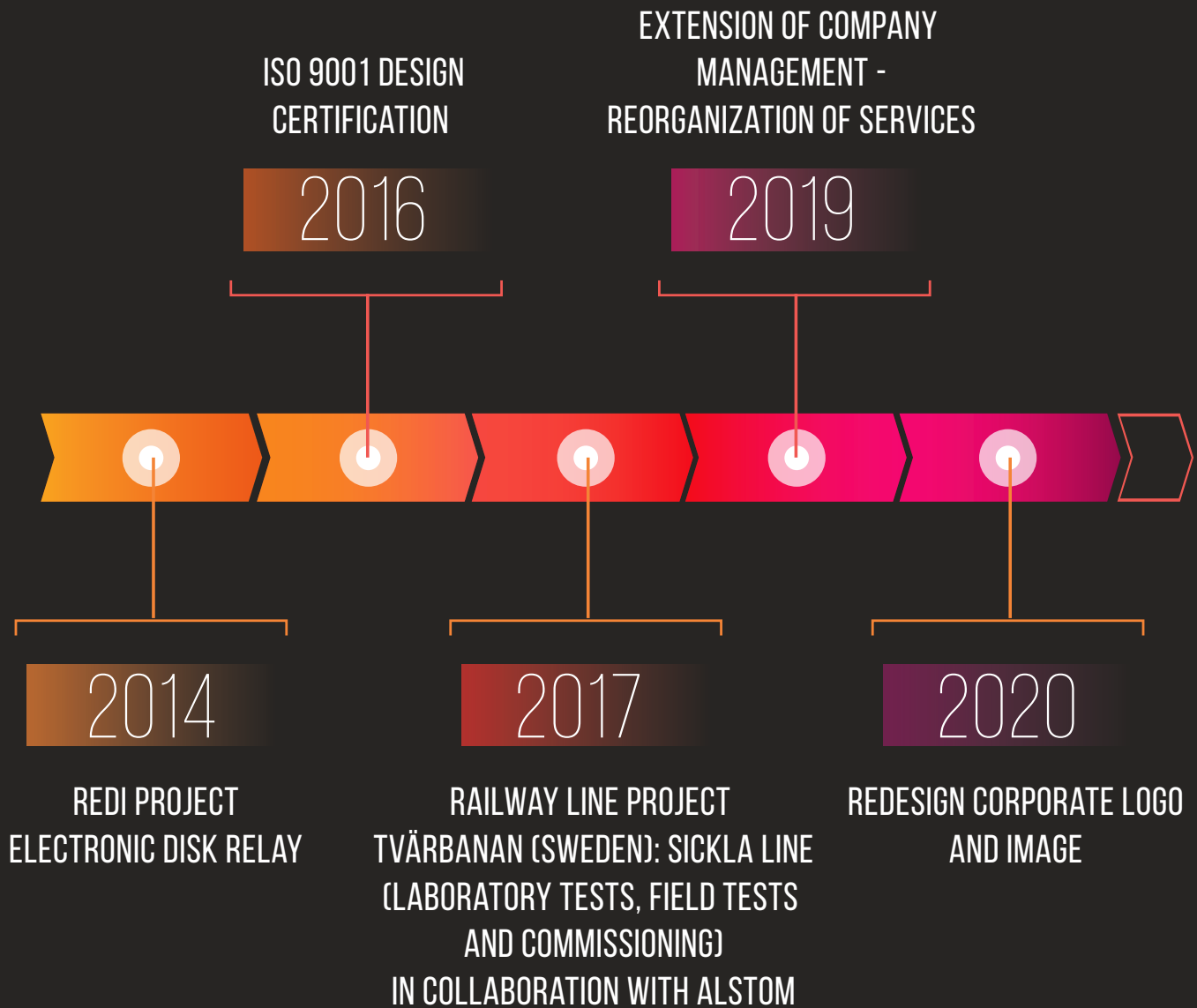


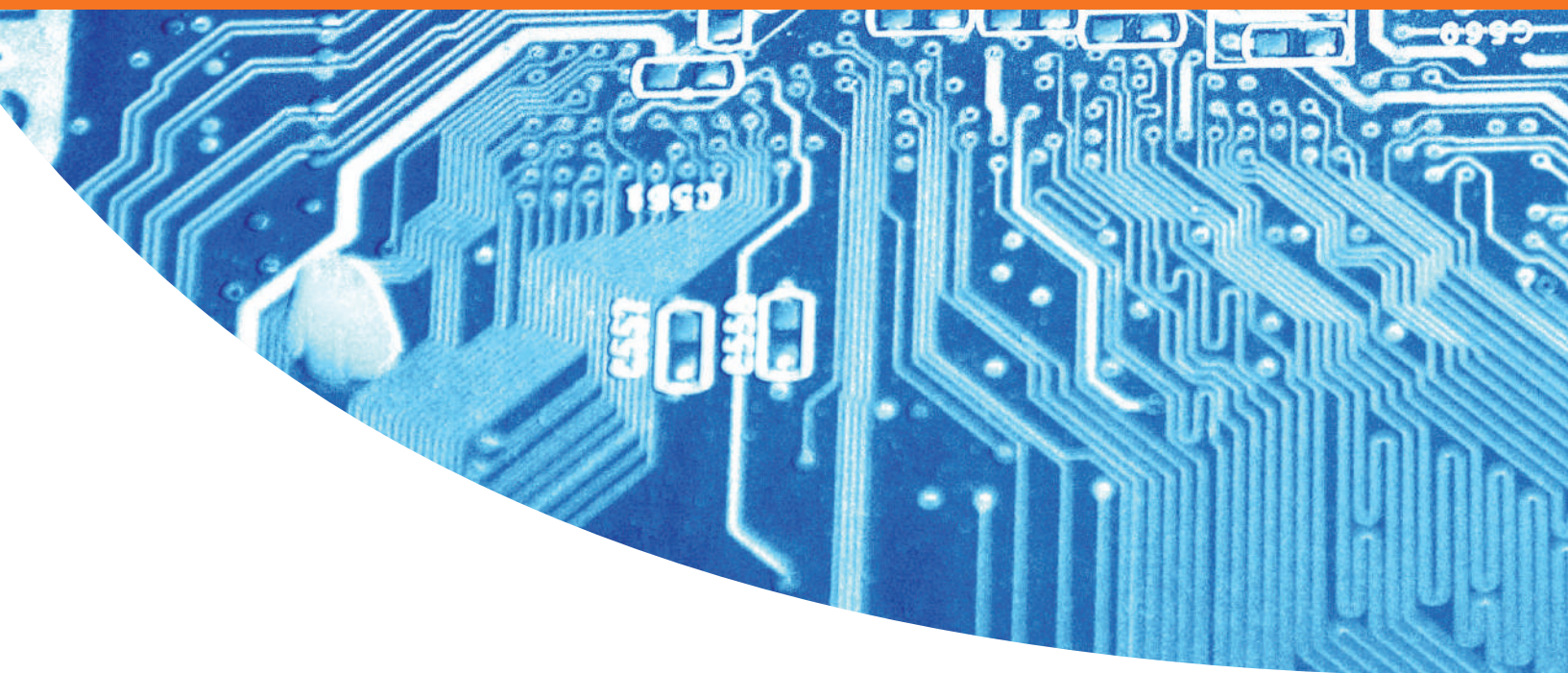
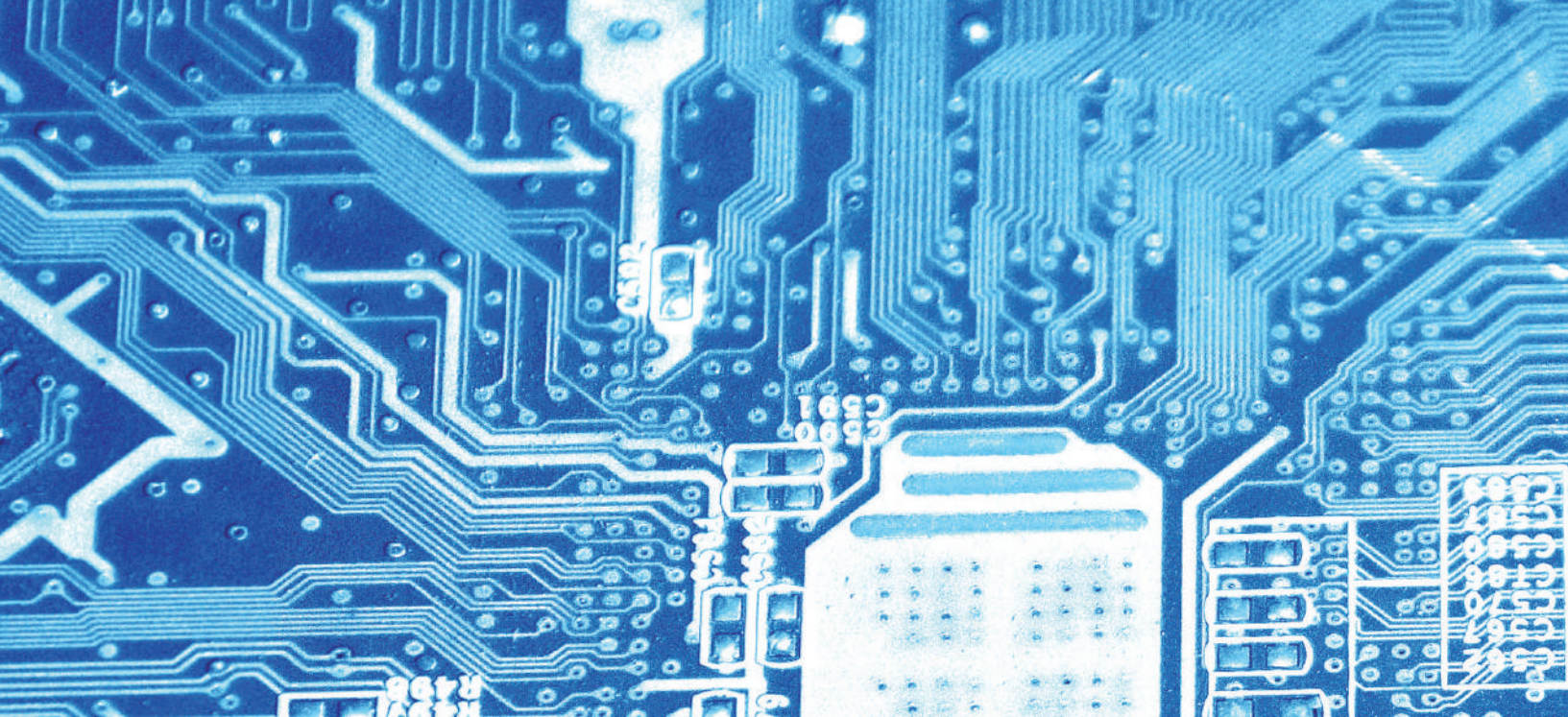
2009

YEAR OF FOUNDATION
OF DMG ENGINEERING

2011

RAILWAY LINE PROJECT
TVÄRBANAN (SWEDEN): SOLNA LINE
(LABORATORY TESTS, FIELD TESTS
AND COMMISSIONING) IN
COLLABORATION WITH ALSTOM







People forget how fast you did a job but they remember
perfectly how well you did it - *Howard W. Newton*



SKILLVIEW



AVERAGE AGE

40



KILOMETRES TRAVELLED

11,5 MILLION

**10
01**

CODE LINES

A FEW GIGA



HOURS OF TESTING

THOUSANDS



HOURS OF DEBUGGING

ZERO

SERVICES

COMPUTER DESIGN

DMG designs and manufactures firmware for microcontrollers and micro-processors. We develop dedicated and generic drivers, drivers for communication between devices, communication protocols for different types of fieldbus.

LINUX EMBEDDED APPLICATION DESIGN AND DEVELOPMENT

DMG has developed many projects with the aid of the Yocto Project system for the generation of applications on the ARM platform and Linux operating system: applications for the management of I/O, communication ports, data acquisition and remote control, remote actuations, centralized data collection and calculation systems, human-machine interfaces with the help of displays, monitors, TouchScreens, video surveillance or monitoring.





APPLICATION SOFTWARE DESIGN AND DEVELOPMENT ON PC PLATFORM

We design and build application software in Windows and Linux environments, such as software for system management or assistance, configuration and maintenance of the machine.

WEB APPLICATION DEVELOPMENT

We develop applications on cloud architecture for applications in various fields, taking advantage of the most widespread cloud infrastructures on the market globally (eg Microsoft Azure).

APP DEVELOPMENT FOR ANDROID AND IOS

DMG designs, builds and publishes on the Android and IOS mobile app stores. These are applications that can be part of larger industrial projects (for example, apps for portable terminals for use by maintainers of complex systems) or autonomous tools, typically used as front ends of relational databases in the cloud.

DESIGN AND DEVELOPMENT OF APPLICATIONS WITH RELATIONAL DATABASES

Our team has high profile skills in the field of relational databases, with experience on the main platforms on the market, both open source and proprietary.

TESTING EQUIPMENT

We design test benches and equipment for testing electronic boards, complete systems or machines.

SUPPORT IN THE FINAL PHASE OF THE DESIGN

DMG supports customers during the type tests (climatic, EMC, vibration, etc.), for field tests and for the commissioning of the equipment and in general for the homologation and / or certification tests that the product requires.



ELECTRONIC DESIGN

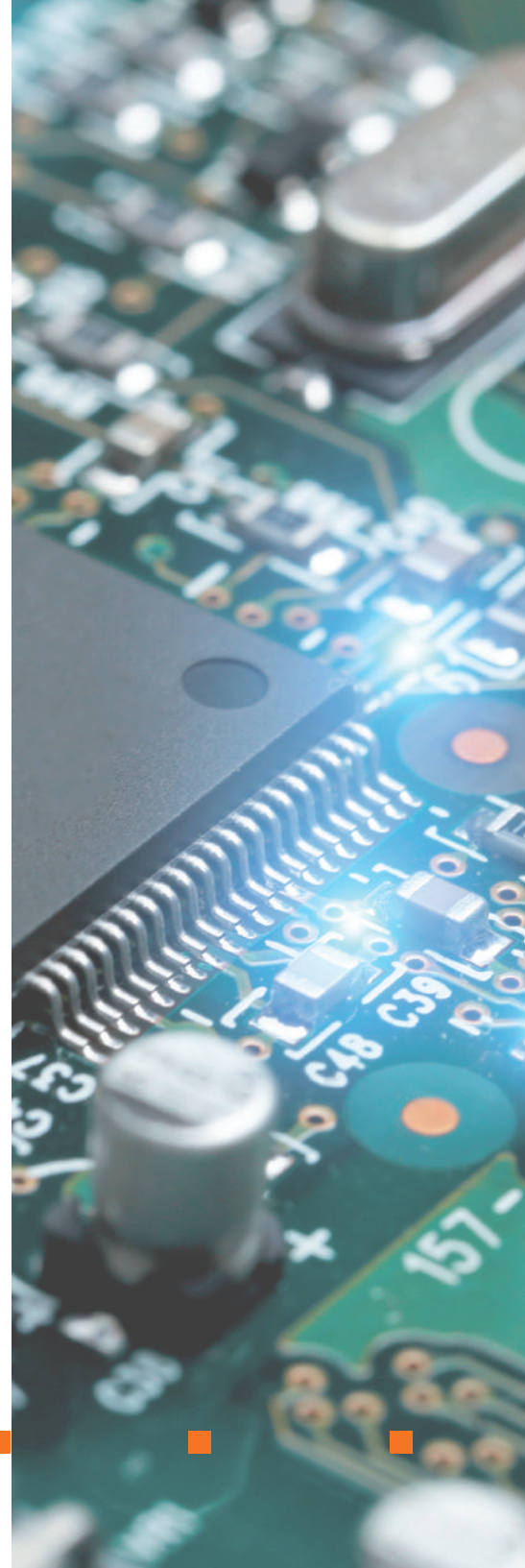
DMG DESIGNS

- cards with low energy consumption for battery applications
- cards with ARM architectures and Linux Embedded operating system
- systems with distributed architectures connected via fieldbus or wireless technologies (Radio, Bluetooth etc.).

We have decades of experience in the design of safety data sheets for the railway environment (EN 50155) which we apply to all other environments that require a high level of safety (biomedical, transport, industrial, etc.).

Schematic drafting with the aid of Electronic CAD and choice of components. Custom cards design based on customer specifications and choice of the best solutions on the market.

We perform hardware, software and system tests. Thanks to the know-how acquired over a ten-year activity, mainly in the railway sector, we are able to design and perform tests on electronic products and devices to verify compliance with the hardware and software requirements of the systems. DMG can perform Black Box tests, hw / sw integration tests and module tests (static and dynamic analysis) in its laboratories or in the place designated by the customer, using advanced tools such as CANTATA.





DOCUMENTATION

Increasingly new systems must comply with regulations for the issue of certifications and approvals that require increasing detail in the documentation to be presented with the system. For this reason DMG supports its customers by taking care of producing all the project documentation:

- specifications of the system and hardware requirements and architecture software;
- hardware and software detail specifications;
- system and integration test specifications.



INDUSTRY 4.0

In Industry 4.0 we carry out appraisals for obtaining financing and a hardware and software consultancy and development service for enabling technologies.



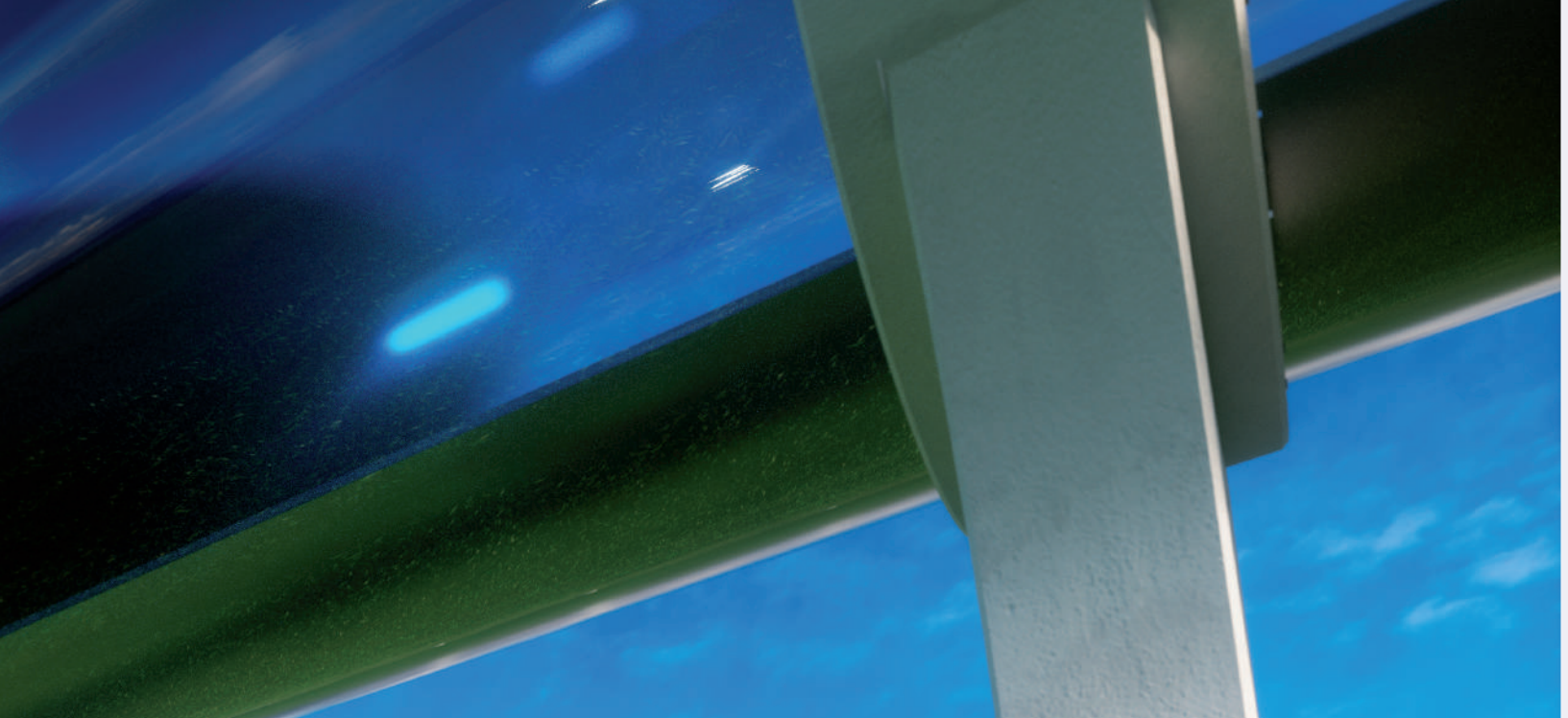
CERTIFICATION

DMG engineering is an ISO 9001 certified company for the design of electrical and electronic equipment. We offer our consultancy as an accredited external laboratory for the certification of completed products.

Our long experience in the railway sector enables us to offer our customers high level skills and services.







Only those who will risk going too far can possibly find out
how far one can go - *Thomas Stearns Eliot*





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