Melexis
Microelectronic Integrated Systems

SMALL THINGS MAKE A BIG DIFFERENCE

INTRODUCTION

Small Things Make a Big Difference

Melexis Microelectronic Integrated Systems N.V. designs, develops, tests and markets advanced integrated semiconductor devices. Our core experience is derived from more than fifteen years supplying ICs to the automotive electronics market. This experience sustains the expansion into Application Specific Standard Products for industrial and consumer product applications. Melexis enthusiastically pursues its chosen role as a component supplier whose innovations, while physically small, are the essential element in nearly each and every one of its customers' extraordinary systems. At Melexis we believe that "small things make a big difference".

The Difference According To Melexis

For over fifteen years, our customers in the automotive electronics market have inspired us to create, manufacture and deliver advanced Mixed Signal semiconductors, sensor ICs, and programmable sensor IC systems. Through the stringent quality expectations, hostile operating conditions and aggressive economic targets demanded by our automotive customers, Melexis has developed the capability to produce world class, value driven, innovative products. Industry leading innovation in for example programmable sensors, sensor interface devices and systems-on-a-chip provide our customers with competitive advantage in system cost, capability and flexibility. Please comply with these requirements:

CORPORATE HISTORY

Staring business in 1989 currently Melexis is 200 mio € turnover company with offices over a 6 continents.

- 1989: Foundation
- 1995: T/O hits > 10 mio €
- 1997: IPO European Nasdaq (Easdaq)
- 1997: Acquisition of US MicroChips, now Melexis Inc.
- 1999: Acquisition of Thesys, now Melexis GmbH
- 2000: Founded Melexis Bevaix, Sofia and Ukraine
- 2001: T/O hits > 100 mio €
- 2002: SPO Euronext (>50 % public)
- 2004: Acquisition of Sentron
- 2005: Founded Melexis Philippines
- 2006: T/O hits > 200 mio €

- 2007: Founded Melexis Hong Kong BO and KK Melexis Japan Research Center

MELEXIS TODAY

Manufacturing Facilities:
- Ieper - Belgium
- Erfurt - Germany
- Sofia - Bulgaria

Research & Development Facilities
- Tessenderlo - Belgium
- Erfurt - Germany
- Sofia - Bulgaria
- Bevaix – Switzerland
- Zug - Switzerland
- Paris - France
- Kiev – Ukraine
- Manila - Philippines

Sales & Applications Facilities
- Concord – USA
- Detroit – USA
- Los Angeles - USA
- Tessenderlo - Belgium
- Erfurt - Germany
- Paris - France
- Sofia – Bulgaria
- Hong Kong – China
- Tokyo - Japan

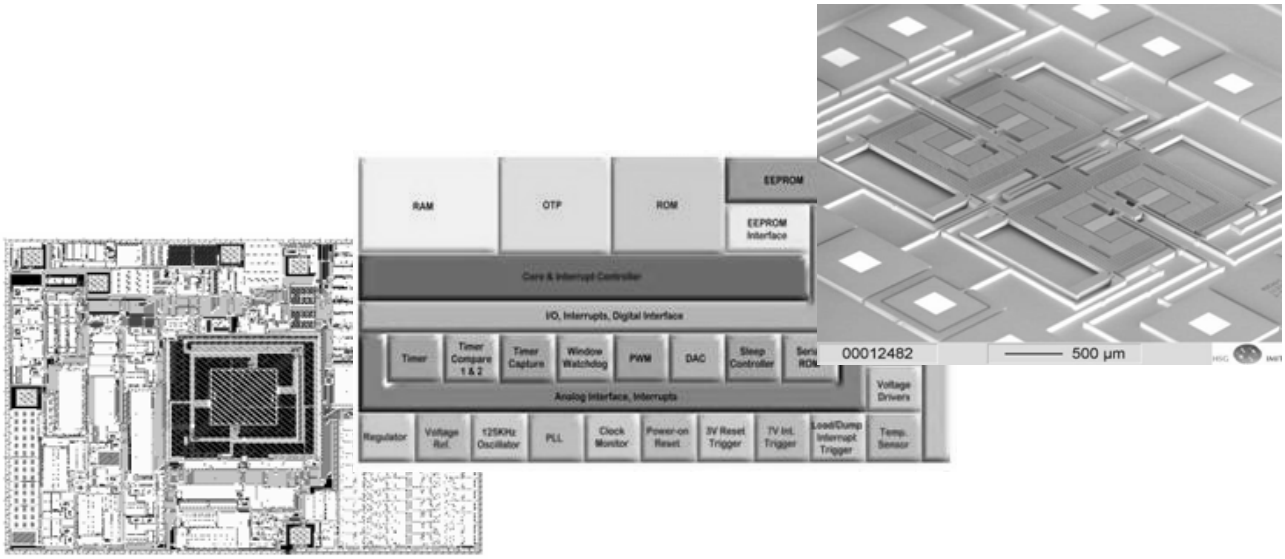
TECHNOLOGIES

Melexis is a research driven company in which Research and Development has been, and will remain, of paramount importance in the Company's strategy. Investments in R&D consist of both product development and advanced development in new technologies for the automotive market and beyond. The R&D is on one end driven by customer requests, but equally driven by Melexis market research identifying long term needs.

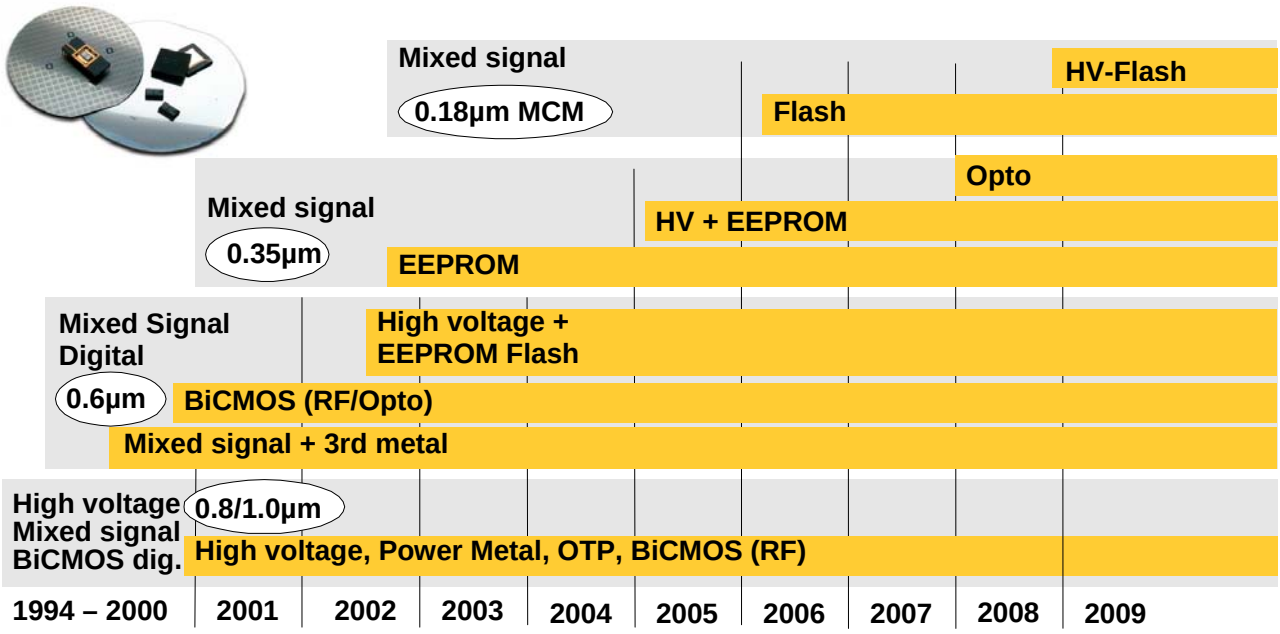
Our customers inspire us to create, develop and market advanced integrated circuits primarily used in automotive electronics systems. This strength enables the innovation and introduction of sophisticated ICs for the broader consumer, medical and industrial markets worldwide.

Intelligent Integration is increasingly important to provide efficient, effective solutions needed to simplify many complex systems. The compelling need for reducing installed costs of essential systems makes integrated sensing, intelligence and communications solutions essential. Melexis supplies unique sensor, communication and driver chips with analog and digital outputs and often with advanced on board micro-controllers or DSP capabilities based on the following development capabilities and technologies:

- Unique high voltage mixed-signal processes (Automotive load-dump proof)
- Block based architecture and software for fast and efficient design
- Single chip total integration
- Integrated Sensors
- MEMS

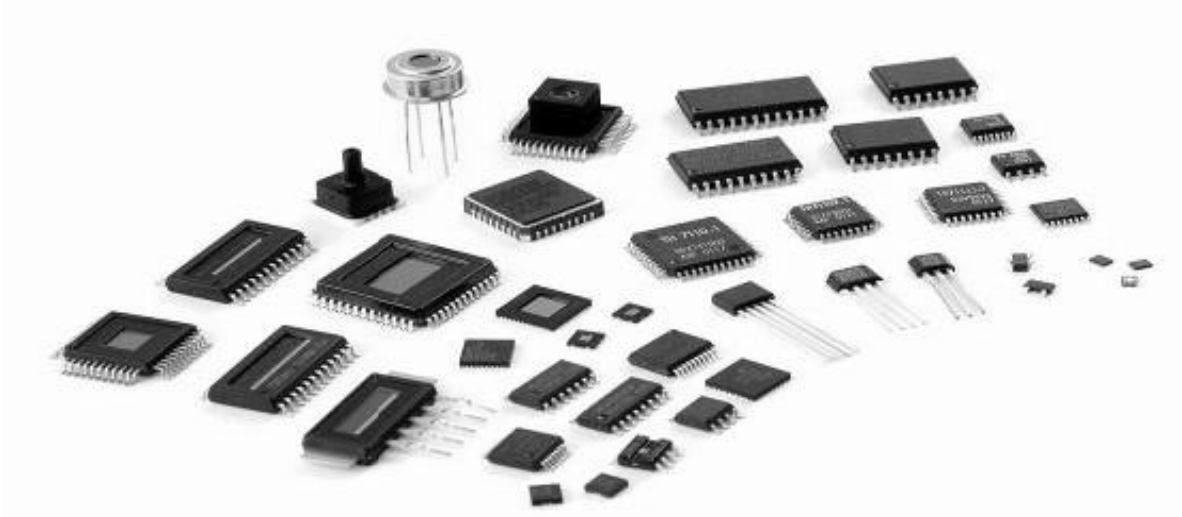


Advanced mixed-signal CMOS Technologies have been developed since the company foundation.



MELEXIS TECHNOLOGY AND KNOW-HOW HAS LED TO MARKET LEADING POSITIONS IN AUTOMOTIVE AND NON-AUTOMOTIVE ARENAS INCLUDING RF TRANSMITTERS, RECEIVERS AND TRANSCEIVERS, SINGLE CHIP COOLING FAN ICS, INFRARED REMOTE CONTROL ICS AND POWER SUPPLY CONTROL CHIPS FOR CELL PHONE CHARGERS. A CUSTOMER ORIENTED APPROACH AND AN INNOVATIVE DESIGN METHODOLOGY REQUIRE THE DEVELOPMENT OF WIDE RANGE OF PACKAGES:

- Plastic, ceramic and windowed
- Leaded, leadless and Ball-Grid- Array
- Shrink and small-shrink outlines
- Proprietary designs
- Custom designs



Melexis investment into systems and processes commensurate to automotive industry standards has resulted in customers trusting 100% of their IC requirements to Melexis. Product development cycles at such customers have provided evolutionary design wins for Melexis. This has given Melexis the responsible role of helping our customers steer their product strategy based on research and development progress at Melexis. Melexis ICs result in significant reworking and consolidation of traditional systems into a single modular solution. This progress enables the automotive industry to reduce overall costs, increase features and nearly as important, reduce vehicle weight and power consumption.

Melexis holds a broad patent portfolio. These patents serve our customers by providing effective and unique solutions in their highly competitive market segments.

PRODUCT PORTFOLIO

Melexis will continue to develop both ASICs (Application Specific ICs) and ASSPs (Application Specific Standard Products). The latter are Melexis solutions that are within every customer's reach.

The targeted goal is to offer widely accepted building blocks for numerous fields of application.

By integrating various existing components in an intelligent manner Melexis moreover is capable of creating chipsets for completely new applications, for entirely new markets.

Our ASIC partners continue to recognize the value of engaging Melexis for their proprietary, sole source mixed signal solutions. Melexis routinely delivers more than just a finished tested IC based on the customers block schematic, we take pride in being a fully active team member in the definition, design and delivery of the ASIC. Innovative, progressive solutions at the schematic level and throughout the program life make the difference.

Melexis main products continue to be Hall effect ICs (magnetic sensors), Pressure and Acceleration Sensors, Sensor Interface ICs, Automotive Systems-on-a-Chip, Embedded Microcontrollers, Wireless Communication ICs, Bus System Chips, Optical and Infrared sensors. In each case the products are primarily developed for automotive applications and designated lead customers with subsequent use in commercial and industrial applications.

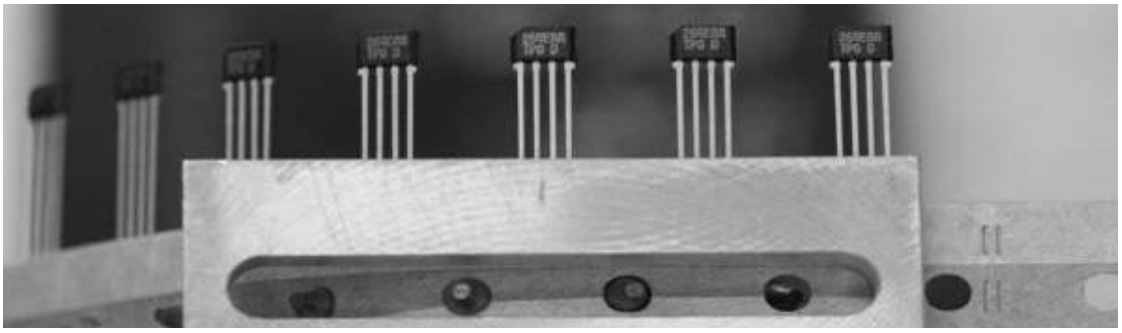
SENSOR DIVISION

Hall Effect

Hall Effect Devices detect magnetic field. Typical uses are for movement, position and speed sensing but also current sensing. Hall devices are immune to dust, dirt, humidity and vibration.

Melexis produced the first Hall IC with programmability: this breakthrough allowed simplification of our customer's modules. Sensing pedal, throttle and steering wheel position, sensing rotation of the cam- and crank-shafts in engines, monitoring movement in motors and actuators, are staple functions for millions of

Melexis Hall ICs in cars today. Other high volume applications for Hall ICs include mobile telephony, computing, personal portable devices and automation equipments.



Another 'world's first' from Melexis has been created in the dual redundant programmable linear Hall IC. This chip is targeted at drive by wire control systems. These unique solutions have achieved a significant nexus between total installed cost and fully redundant reliability.

Melexis markets a novel patented Hall technology under the brand 'Triaxis™'. This technology enables the realization of cutting-edge contactless magnetic position sensors. Triaxis™ ICs are designed in rotary, linear and 3D-joystick position sensors.

The final products are used to improve the fuel efficiency, reduce the engine emission, enhance the vehicle stability control and increase the steering or braking features. The Triaxis™ technology is also used for current sensors and solid-state electronic compasses.

Melexis' portfolio of Hall sensors offers solutions for robust switching, smart brushless DC motor controllers with integrated magnetic sensing. Melexis is the recognized innovator in these markets. One example is the wide range of specialized Hall sensors used in cooling fans for electronic equipments or in vibro-motor for cellular phones. Recent innovations include ICs that significantly reduce the acoustic switching noise of cooling fans; an important feature in consumer or office electronic devices. Another example is an ultra-low-power switch for battery-operated devices such as cellular phones, laptops.

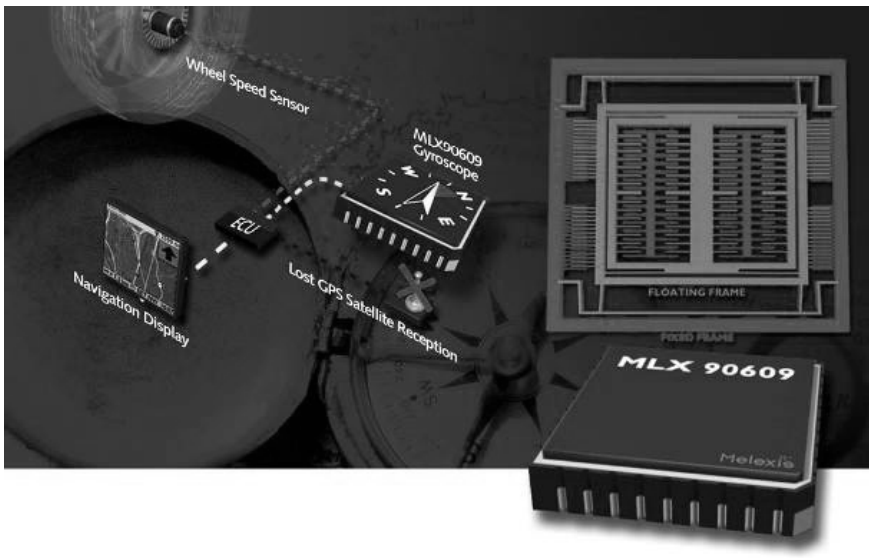
MEMS (Micromachined Electro-Mechanical Systems)

A. Pressure Sensors, Acceleration Sensors, Gyroscopes

Airbag systems, vehicle stability systems, particle filters, filter monitoring and brake systems are examples of automotive applications that rely extensively on sensors. Melexis develops pressure sensors, acceleration sensors and gyroscopes based on silicon micro-machining technology, where the physical parameter being sensed causes a temporary and reversible deformation to a mechanical structure etched into IC.

Pressure is one of the most measured physical parameters in an automobile. Pressure is measured using standalone sensors, for which Melexis supplies industry leading signal conditioning interface ICs, or using completely integrated pressure sensors. Integrated pressure sensors incorporate both the sensing element, in the form of a silicon deformable membrane, and the conditioning electronics on the same chip. In 2007 Melexis has started the development of its next generation integrated pressure sensor.

Modern airbag systems use several acceleration sensors, manufactured in micromachining technology. These acceleration sensors measure the severity of an impact. This data is used by the airbag control unit to decide on airbag deployment. Melexis has been a key technology provider for many years due to its competencies in sensor technology, signal conditioning and IC packaging.



Gyroscopes, also called angular rate sensors, continue to be a strategic focus for Melexis. These sensors are used in vehicle stability systems, ACC (Adaptive Cruise Control) and rollover sensing. Next to their use in safety systems they also play a key role in navigation systems to implement the so-called dead reckoning function. Dead-reckoning allows for an accurate positioning of the vehicle even in the absence of the GPS signal.

B. Signal conditioning interface ICs

For many years Melexis is one of the world leaders in the automotive segment of this market. Interface ICs allow bridge type piezo and capacitive sensors to communicate intelligently with control systems in cars. Typical applications include pressure sensing in electronically controlled automatic transmissions, seat belt tension sensors in mandatory second generation airbag systems, fuel pressure sensors

in fuel economy enhancing injection systems, refrigerant liquid pressure in automotive airco systems. The challenges imposed on the car industry to make cars more fuel efficient and environmentally friendly can only be met by an extensive use of all types of sensors. Any type of sensor requires conditioning of the sensor signal in order to be used in any type of system.

ACTUATOR DIVISION

The Actuator division develops integrated circuits that are optimized for dedicated high volume power control applications both on customer request (ASICs) as well as on standard product ASSPs.

We offer peripheral ICs that are part of an ECU (Electronic Control Unit), like motor (pre)drivers, voltage regulators, LED drivers and LIN transceivers, as well as more integrated solutions combining the above with an embedded micro-controller to realize 'intelligent' power control solutions. Motor (pre)drivers range from dashboard gauge drivers all the way up to FET predrivers for powerfull EPAS (Electrically Assisted Power Steering) motor control. 2007 has been a breakthrough year for Melexis LEDdrivers with major design wins in and outside the automotive industry. Consequently Melexis is stepping up its focus in 2008 on this exciting new market.

As a result of our commitment to the automotive industry Melexis has grown in 2007 to become the market leader in GM LAN transceivers, and one of the major suppliers of LIN transceivers and SBC's (System Basis IC's) integrating the voltage regulator and other functions like watchdog monitoring.

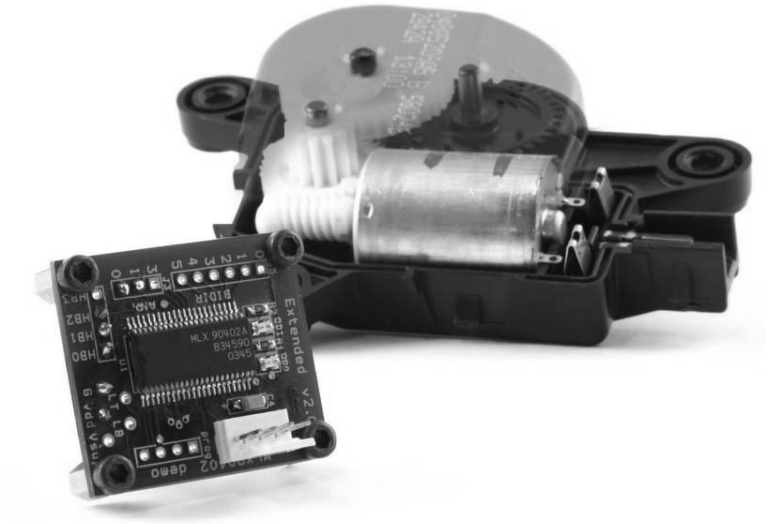
Melexis embedded microcontroller IC's are developed specifically for the automotive Market. The Program (ROM/OTP/Flash) and Data memories (EEPROM), and the packages are qualified to automotive standards, including High temperature Engine applications.

Software development, and more specific software testing and qualification is considered as one of the main challenges by the Automotive industry. Thanks to our combined approach of a dedicated LIN Dual Core microcontroller and Application specific peripherals, a major European VM was able to define its vehicle architecture such that only 1 software development was required, instead of 9 for all switch modules in a platform.

Since 2007 the car of the future has become greener than ever. Brushless DC (BLDC) motors offer significant fuel savings in combination with Stop-Go systems as part of water pumps, cooling fans and compressors.

Additionally they are replacing DC motors in order to reduce weight, and increase reliability. On the other hand, the number of DC motors in a car is still growing as well.

Melexis has responded to this high growth potential by launching its MelexCM family of fully integrated motor controllers. In the MelexCM the embedded dual core microcontroller is extended with dedicated motor control peripherals to control a whole range of DC and BLDC applications.

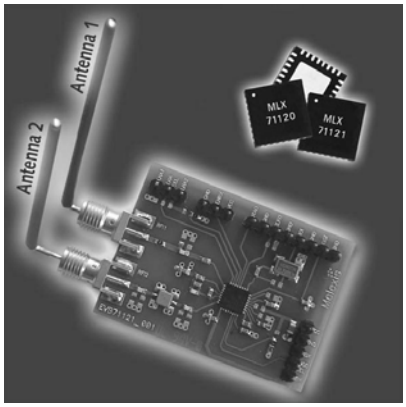


Several ASIC developments have been registered thanks to this MelexCM approach, notably in the field of LIN based small motor applications, like HVAC flaps and headlamp position control.

WIRELESS DIVISION

RF ICs

Melexis designs and develops Radio-Frequency ICs (RF ICs) that span the application frequency range of about 27 to 950 MHz. Our key products are standard transmitters, receivers, transceivers and custom specific ICs for the non-licensed industrial-scientific-medical (ISM) band applications from 315 to 434 MHz and 868 to 930 MHz. Typical applications include remote keyless entry (RKE), tire pressure monitoring systems (TPMS), garage door openers, home automation, alarm systems, personal identification and general short range communication.



In 2007, three new highly-integrated RF receivers and two transmitter ICs were added to the product portfolio. The key to serving this market lies in strong applications support as the RF engineering challenges are known to be quite specialized. Melexis has created strong internal RF application engineering centers in all major markets to ensure the best experience for our customers when they seek to upgrade their products to wireless operation.

RFID ICs

Melexis has been an early innovator in the RFID technology, thanks to its expertise in low power and analog IC design. Our key products are specialty sensor transponders,

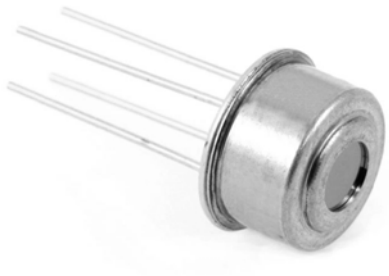
standard transceivers and custom specific ICs for the 125 kHz and 13.56 MHz frequencies. Typical applications for sensor transponder ICs include tire pressure monitoring systems (TPMS), cold chain monitoring, hazardous substance logistics and medical items identification. RFID transceivers target asset tracking, door lock, transportation, contact-less payment, e-passport and e-document reading applications. Melexis' RFID ICs enable customers to achieve high reading range, low power consumption at the right cost. Melexis expertise in RFID will be considered for the newly emerging challenges in Near Field Communication (NFC).

OPTO DIVISION

IR Sensors

In 2007, Melexis introduced the first versions of the IR thermometers with integrated signal conditioning ASIC. Due to this high level of integration, Melexis was able to standardize and streamline the production of this component and to reduce cost.

These easy to use, miniature, factory calibrated temperature sensors proved to be very popular with a diverse range of customers in fields like automotive air conditioning, building heating, fever measurement, personal monitoring devices, home appliances, industrial process control and agriculture. The sensor can easily be installed by an OEM on his own PCB, eliminating the need for expensive passive components and connectors, giving a cost effective measurement solution not available previously.



Specifically for the medical market of body temperature measurement, Melexis released a special version of the integrated thermometer with high temperature accuracy. Melexis continues to develop the infrared thermometer product line with new versions of the integrated sensor for greater ease of use and new applications.

Thanks to its innovative design, this integrated thermometer was awarded the famous French Electron d'Or trophy in the category "Sensors with Signal conditioning". Furthermore, the sensor was also nominated by the readers of the EE Times periodical as finalist for the CMP Technology's Annual Creativity in Electronics (ACE) Awards in the "Analog IC" category.

Optical Sensors

In 2007, Melexis has continued in expanding further its position in optical sensors.

With a launch of a new generation linear optical array for steering applications, we have added a new optoproduct and a new OEM to our existing portfolio.

As the market for optical sensors continues to grow, Melexis has used its large and growing opto-sensor IP to broaden its product portfolio significantly in 2007. Several new opto-products will be released for the mass market by mid 2008. As our position becomes increasingly stronger in the field of optical sensors, we are

looking into several new major opportunities to further broaden our portfolio and position in the market, both for automotive as well as non-automotive applications.

The combination of our strong opto-sensor IP, packaging and application know-how and efficient integration of a full optical sensor with a good user interface into 1 single chip is highly appreciated by our growing customer base.

INTERNATIONAL LOCATIONS

BELGIUM
Melexis NV
Rozendaalstraat 12
8900 IEPER
Tel: +32 57 22 61 31
Fax: +32 57 21 80 89
Melexis Tessenderlo NV
Transportstraat 1
3980 TESSENDERLO
Tel: +32 13 67 07 80
Fax: +32 13 67 21 34

BULGARIA
Melexis Bulgaria Ltd.
2, 'Samokovsko shaussee' blvd
Gorubliane 1138 SOFIA
Tel: +359 2 9174 740
Fax: +359 2 9525 792

FRANCE
Melexis NV/BO Paris
Tour Arago - 5 Rue Bellini
92806 PUTEAUX LA DÉFENSE
Tel: +33 1 47 78 11 34
Fax: +33 1 47 78 06 35

HONG KONG
Melexis
Unit 19, Core Building 2, No. 1
Science Park East Avenue, Hong
Kong Science & Technology Park,
Shatin, Hong Kong
Tel: (852) 2210 2020
Fax: (852) 2210 2023

SWITZERLAND
Melexis Technologies SA
Chemin de Buchaux 38
2022 BEVAIX
Tel: +41 32 847 06 60
Fax: +41 32 847 06 99
Sentron AG
Baarerstrasse 73
3600 ZUG
Tel: +41 41 711 21 70
Fax: +41 41 711 21 88

GERMANY
Melexis GmbH
Haarbergstrasse 67
99097 ERFURT
Tel: +49 361 427 7700
Fax: +49 361 427 7614

JAPAN
Melexis
Yokohama Aioicho-building 10 F
6-104 Aioicho, Naka-Ku
Yokohama-Shi
2310012 Kanagawa Japan

UKRAINE
Melexis Ukraine
4, Kotelnikova Street
03115 KIEV
Tel: +38 44 459 0700
Fax: +38 44 459 0701

USA
Melexis Inc.
41 Locke Road
NH 03301 CONCORD
Tel: +1 603 223 2362
Fax: +1 603 223 9614
Melexis Detroit
37899 West Twelve Mile Road, Suite 320
MI 48331 FARMINGTON HILLS
Tel: +1 248 306 5400
Fax: +1 248 306 0330

info@melexis.com
www.melexis.com