

Annual Report

# Melexis

1999

Microelectronic Integrated Systems



- 1. Letter to the Shareholders
- 2. Key Figures
- 3. Overview of Activities
- 4. Melexis Products
- 5. Melexis' Strategy
- 6. Selected Summary Financial Data
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#### \$ in billions



#### Worldwide Semiconductor Market between 1986 and 2002

source: World Semiconductor Trade Statistics and BancBoston Robertson Stephens estimates



	Worldwide (\$ in billions)		Melex	is (EURO)
1995	144,4	100%	10.133.373	100%
1996	132,0	91%	13.873.915	137%
1997	137,2	95%	19.751.187	195%
1998	125,6	87%	31.645.580	312%
	144,1	100%	53.076.307	524%

### 1. Letter to the shareholders

Melexis is one of the very few semiconductor companies outperforming the average revenue growth in the semiconductor industry in general, and even in the automotive semiconductor industry with 68% growth compared to 1998.

Profits over 1999 were 14 million EUR, 70% up as compared to 1998.

This is due to the fact that Melexis is operating with better than average performance in the steadily growing market of automotive semiconductors. With a product range of sensor ICs and integrated systems, Melexis is strongly represented in the

upcoming automotive markets. The constant drive towards better fuel economy, green cars and towards more safety and comfort can only be achieved by increased usage of electronics. Most mechanical and electromechanical systems in modern cars can be improved by adding electronic control. Electronic control consists of sensors, signal conditioning, signal processing and actuators and it is in this area that Melexis is specialized.

The lead-times from entering a development contract to delivering production volumes are typically 2 to 3 years in the automotive arena. This allows Melexis to have a good visibility on its future growth.



RUDI DE WINTER

The aggressive sales efforts via its subsidiary Melexis Inc. in the us, started in 1998, resulted in several design-ins in the same year and further design-ins in 1999. First results will show in the 2000 revenues.

In 1999, Melexis started sales activities in Japan via a large distributor with a dedicated team allocated to the Melexis product portfolio. There is a very strong demand for sensor ICs in Japan on which the Japanese semiconductor companies are not focused. Melexis could announce a major commercial success in the Japanese automotive market, where first important projects have been booked.

With the acquisition of Thesys, the development team headcount has almost doubled. This is a very important asset for the future to allow sustained growth. With this acquisition Melexis acquired additional knowledge in the area of RF (radio frequent applications) and Bus-systems (signalling and communication in cars). New Business Units have been created in the subsidiary Thesys to market these products. As a result, R&D expenditures have increased over the year to an average of 10.3% with a peak of 13% in the 4th quarter. With the expected further growth of the company, R&D expenditure is planned to resume to just under 10% within the next two years.

For some years now, Melexis NV has had difficulties to attract engineers because Melexis NV is established in Ieper. Melexis NV has to deal in Ieper with the presence of another technological company, which mainly with the help of the government, was able to expand its business and at the same time recruit a great number of engineers. This sharpens the difficulty to find engineers, especially because there is an acute shortage already. As the capacity of Melexis NV (in particular because of a

#### 1986 26,4 1987 32,5 1988 45,0 1989 48,8 1990 50,5 1991 54,6 1992 59,9 1993 77,3 1994 101,9 1995 144,4 1996 132,0 1997 137,2 1998 125,6 1999 144,1 E 2000 174,1 E 2001 209,3 E 2002 233,6

Worldwide Semiconductor Market versus Melexis

source: World Semiconductor Trade Statistics and BancBoston Robertson Stephens estimates lack of human resources in Ieper) is restricted and in view of the growing necessity of creating a holding function within the group (the international expansion), the company transfered in the course of 1999 the business units Hall Sensors, Pressure Sensors and Consumer Applications, to the newly incorporated Belgian company Melexis Tessenderlo NV. Tessenderlo is located favourably with Leuven, Antwerp, Liege, Brussels, Aachen and Eindhoven within its geographical neighbourhood. Furthermore, due to the high number of well trained engineers at the subsidiary Thesys Mikroelektronik Produkte GmbH, Melexis NV moved the business unit microcontrollers to Thesys.

Melexis achieved in 1999 the highest automotive quality standards 0s9000 (us) and VDA6.1 (Germany). These certifications will allow Melexis to further penetrate the largest automotive equipment manufacturers. Melexis will further invest in keeping the highest quality standards to keep pace with automotive requirements.

Melexis also received double honors in the Electronics Industry Yearbook 2000, published by Cahners Electronics Group. Melexis had two separate Hall Sensor products listed in the top 10 power products of 1999.

The board of Directors proposes to appropriate the profit of the year as recorded in the accompanying financial statements.

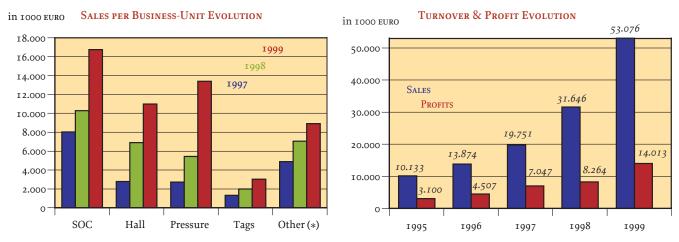
Yours Sincerely, Ieper, February 7th, 2000.

Roland Duchâtelet

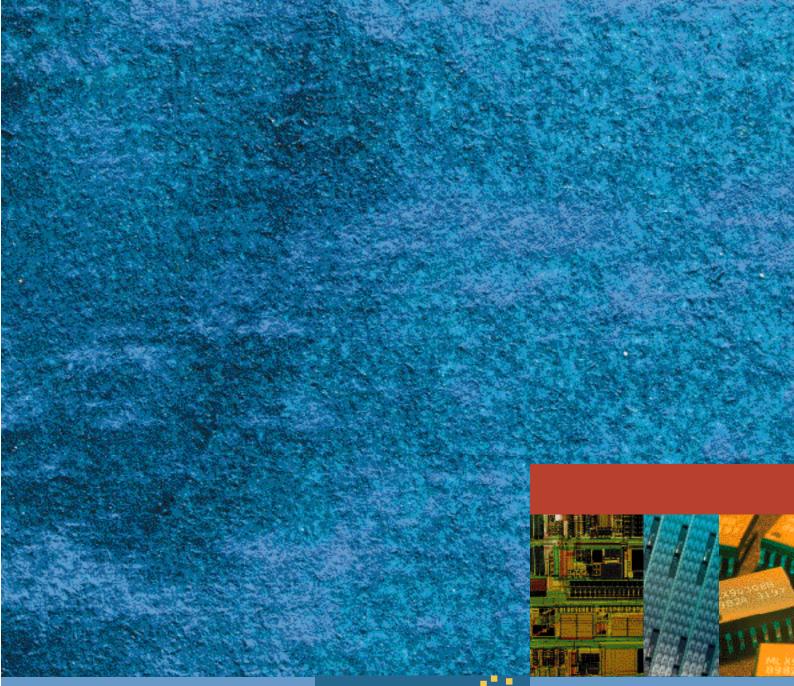
Rudi De Winter

Chairman

CEO



(\*): 'Other' in 1999 includes Bus (1.295 EURO) and BiCMOS (476 EURO)



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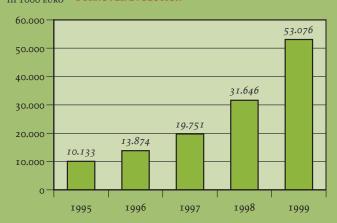
Melexis

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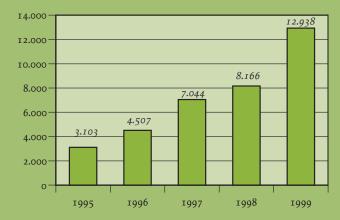
Microelectronic Integrated Systems

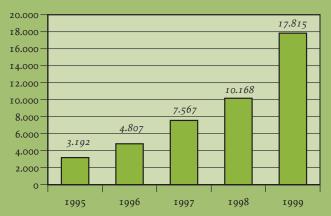
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in 1000 EURO TURNOVER EVOLUTION



in 1000 EURO EBIT EVOLUTION





# 2. Key Figures (in 1000 EURO)

OPERATING RESULTS	1995	1996	1997	1998	1999
Turnover	10.113	13.874	19.751	31.646	53.076
EBIT	3.103	4.507	7.044	8.166	12.938
EBITDA	3.194	4.807	7.564	10.070	16.739

BALANCE STRUCTURE	1995	1996	1997	1998	1999
Shareholders' equity	3.632	8.139	45.080	53.613	53.884
Net indebtedness (*)	542	(1.555)	(32.127)	(27.297)	(15.269)
Working capital	3.586	7.014	39.384	41.504	28.673

<sup>(\*):</sup> bankdebts and overdrafts - cash and cash equivalents

CASH FLOW AND CAPITAL EXPENDITURE	1995	1996	1997	1998	1999
Cash flow (*)	3.192	4.807	7.567	10.168	17.815
Depreciation + amortization	92	301	520	1.904	3.801
Capital expenditure	294	1.125	3.660	7.727	7.567

<sup>(\*):</sup> cash flow = net profit + depreciation and amortization

RATIO'S	1995	1996	1997	1998	1999
ROE	85%	55%	16%	15%	26%
Liquidity	4,5	5,9	14,9	6,9	2,2
Solvency	66%	80%	93%	88%	69%

<sup>(\*):</sup> liquidity = current assets / current liabilities



### 3. Overview of Activities

Melexis designs and markets advanced integrated semiconductor devices for use in the automotive industry. The Company's products are sold principally to European and North-American Original Equipment Manufacturers (OEMs).

These OEMs, such as Delphi, Bosch, TRW, Brose, Magneti Marelli, AB Elektronik, Nedap, SKF, Temic, Texas Instruments and vDO incorporate the Company's products into automotive equipment they supply to vehicle manufacturers (VMs) around the world. Melexis claims that almost every major vehicle manufacturer worldwide has one or more models in production or development containing Melexis integrated circuits.

The automotive semiconductor market is a steadily growing market (about 18% / year). Melexis is positioned with its product range in the innovative steadily growing segments of sensors within the overall automotive market.

The drive to improve fuel economy, for example, has created a demand for more sensors and more electronics to help optimise the efficiency of the motor. This goes hand in hand with the regulations to build 'green' cars. On the other hand, there is increasing pressure for more active and passive safety functions.

Systems like ABS are standard on most cars and newer systems like ESP are getting more and more popular. Most cars have 2 airbags as standard, and VMs are gradually moving towards 4 or more. Electric windows with electronic protection have become mostly standard as well as regulated air-conditioning.

Melexis's main products are Hall Effect Devices (for magnetic sensors), Pressure and Acceleration Sensor Elements and Interfaces, Automotive Systems-On-a-Chip and Contactless Identification Systems (Tags). In each case the devices are principally for automotive applications.

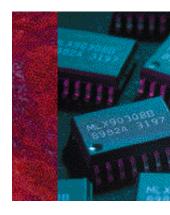
Melexis is a technological leader in the design and development of Hall Effect Devices. The Company offers a wide range of magnetic sensor elements for applications such as position sensing, cam and crankshaft sensing, electric motor speed regulation and anti-lock braking system (ABS).

The Company designs and develops integrated pressure sensor chips. Melexis integrated sensor chips combine the pressure sensing element and the peripheral electronics on one piece of silicon. Melexis integrated sensors concentrate all the separate elements on one chip, including logic and analogue circuitry, power devices, memories, microcontroller cores and power supply regulators. This approach allows the production of chips that operate with minimum external circuitry. These integrated devices are also able to confront extremes of temperature and voltage, commonplace in the automotive environment.

Integrated Pressure Sensors are an exciting new product in the automotive market and sales are expected to become significant as the product penetration grows.

With the acquisition of Thesys, 2 new product ranges have been added: RF products and Bus ICs.

Melexis is a multi-product company. It has 130 products in production and a further 30 in development or qualification. Melexis sells its products to a wide customer base of automotive equipment OEMs. The Company's top ten customers accounted for approximately 64 per cent of the Company's sales for the year ended 31st December 1999.



Melexis has always concentrated on the supply of silicon and, as part of this strategy, has chosen to work in partnership with Tier 1 and Tier 2 suppliers rather than competing with them. As a result, Melexis components are designed in by many of the leading automotive suppliers. Melexis has come of age and is now on the 'Approved Supplier' list with many equipment suppliers and its products can be found on over two hundred vehicle models with the majority of the world's major Automotive Equipment Manufacturers.

Melexis concentrates its engineering resources and semiconductor design strengths in development of IC applications addressing new opportunities in the automotive market.

Melexis has reviewed its engineering and development work and has identified a number of opportunities to patent original work.

Melexis currently has nine patent applications filed and a further six in preparation. They have been progressively filed throughout 1999 to strengthen Melexis's position as an innovative supplier and this effort will be continued in 2000. The patent opportunities cover all of the product areas in which Melexis operates.





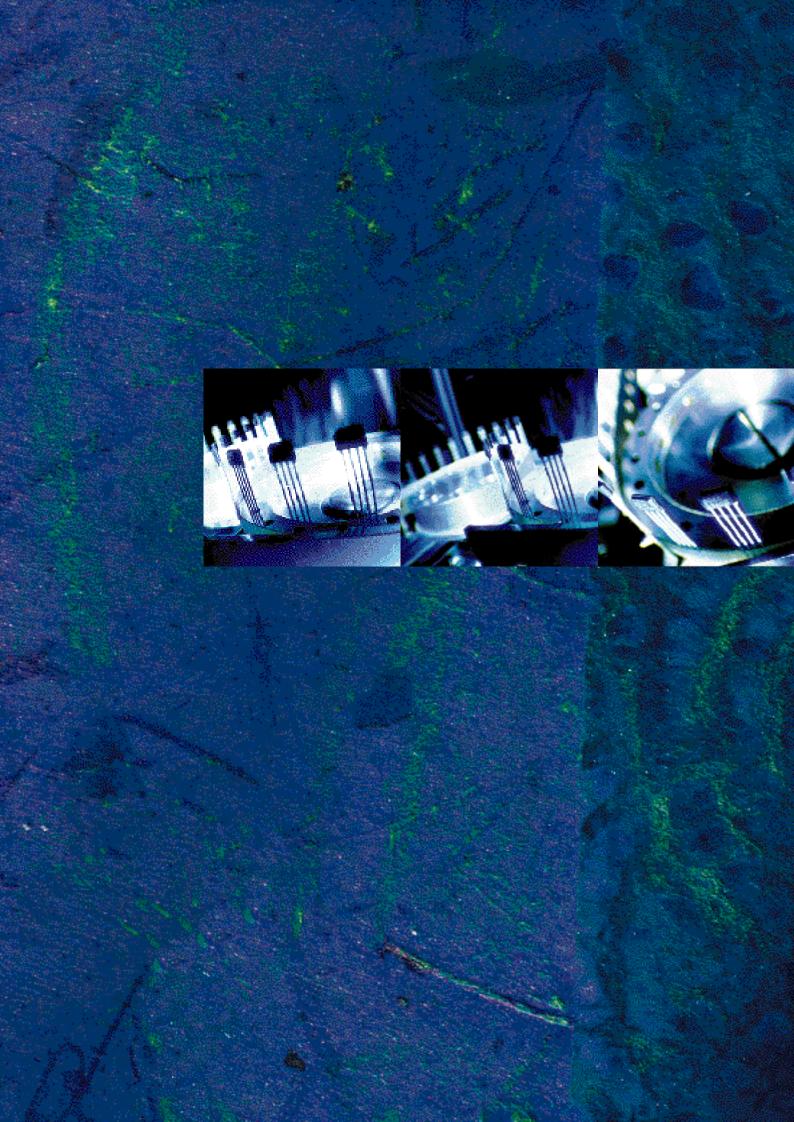
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### 4. Melexis Products

Melexis has been a supplier of semiconductors since 1989, initially in the field of Asics and 'chip on board' assembly and then increasingly supplying sensor chips and sensor interfaces. These activities have been expanding in volume but have also been specifically and successfully focused on the automotive electronics arena.

Sensors are increasingly important to the automotive industry where finer controls are needed for almost every aspect of the vehicle performance. They are essential for ensuring compliance with emissions legislation and also to the continually improving levels of safety, performance and reliability that customers demand. Melexis supplies sensor chips for position, movement detection, pressure and acceleration with both analogue and digital outputs and with optional on-board microcontrollers.

Embedded microcontrollers find a wider use in Melexis products. We find them today in Melexis Hall sensors, pressure sensors, acceleration sensors and sensor interfaces. This is a unique feature to the Melexis products that allows us to stay ahead of the competition because it gives a great level of flexibility to adopt the function to specific applications. Much of this success comes from the ability of these Melexis parts to operate in the automotive environment with a minimum of external components.

For each of the business areas in which Melexis operates, it offers products from its range of standard and semi-standard parts. If none of these are optimum or if a customer has a particular application and higher volumes, Melexis can supply a custom part to meet the need. These can be special versions of existing products or completely new designs.

It is Melexis's policy to make all general purpose Asics developments available as a

standard product after approval of the initial customer. This encourages faster growth with maximum utilisation of design resources.

#### 4.1 Hall Effect Devices

Hall Effect Devices detect magnetic fields and are used in both movement and position sensing. By integrating the sensing element onto the same silicon as its control logic and interface circuitry, Melexis has produced sensor chips with various degrees of 'intelligence' to suit most applications. Sensing the rotation of shafts or discs in engine and braking systems, monitoring movement in motors and actuators, sensing pedal position in throttle controls and in many safety applications, Melexis Hall Devices are a reliable, contactless method of movement and position detection.

Melexis is a technological leader for the design, development and testing of silicon based Hall Effect Devices compatible with a Complementary Metal Oxide Semiconductor (CMOS technology). Melexis Hall Effect Devices enable an optimal use of the smaller feature sizes of which semiconductor technology is capable today. Therefore, very sophisticated mixed analog-digital signal conditioning circuitry (such as Chopped Analogue String, Digital Signal Processing by means of DSP core) can be integrated. Most of the devices can be used in a wide voltage range from 2.4 and up to 30 volts.

Melexis Hall Effect based sensors have, on the basis of their performance, successfully replaced inductive speed sensors (VR), resistive



Field Programmable

The device's output voltage

#### Linear Hall IC

changes in proportion to magnetic flux density.

The reference and sensitivity are programmable within the end-user's application for maximum versatility and accuracy.

#### A fully integrated side impact sensor chip

permanently senses the side movements of the car and

triggers the side airbag inflation system if a side crash is detected.



position sensors (potentiometer), bipolar Hall sensors and magneto-resistive sensors (MR, GMR.) in various automotive applications.

The Melexis Hall effect sensors not only outperform these alternative sensors but also allow integration of more signal processing.

The Company offers a wide variety of Hall sensors for applications such as position sensor, speed sensor, engine management sensor, electric motor speed regulation and ABS.

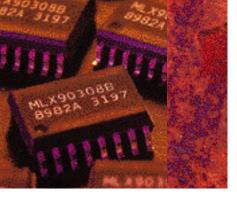
Melexis's Management expects a continuing growth of this business unit due to the potential

of the Hall sensors principally in the field of position sensing. Here, they are expected to replace the high-end potentiometers, a mechanical technology that is unlikely to meet future automotive reliability specifications.

For instance, two major German luxury car manufacturers have already replaced the conventional potentiometer by a Melexis Hall

sensor for the measurement of the position of the throttle pedal in their new models and further there are several design-ins with other car manufacturers. Several new applications like EGR (exhaust gas re-circulation) require contactless sensors to meet the harsh automotive requirements.

Management believes there is also considerable further potential for Hall sensors in applications such as ABS, position sensing for brushless motors and for electric windows, current sensing and electronic value control.



A sensor interface designer's dream

made true: the mlx90308

is a universal Wheatstone

bridge type sensor interface

with embedded

microcontroller.

# **4.2** Pressure and Acceleration Interface and Sensor chip

Pressure sensor chips and acceleration sensor chips are based on micro-machining technology, where the physical parameter being sensed causes a temporary and reversible deformation to a specifically designed mechanical structure etched into the solid silicon. Either stand-alone or integrated with its control and interface circuitry into a single die, these techniques produce sensors that are used in large numbers in modern automotive applications.

Sensor interface chips are needed to pre-process sensor output signals prior to feeding them to a higher system level. More specifically these interface chips process the output signals of a sensor external to the chip. The signal processing consists of amplification, linearization, calibration and buffering.

Typical applications for acceleration sensors are safety systems like airbags and vehicle dynamic systems. Pressure sensors are used in airconditioning systems, braking systems, motor and transmission oil pressure sensors and MAP sensors.

# 4.3 Automotive Systems-on-a-Chip & Microcontrollers

These product ranges focus on the integration of automotive electronic systems in general.

Peripheral ICs can be part of an ECU (Electronic Control Unit) in our customer's product to assist the main processor of the ECU with special functions like analog, high-voltage, actuators, regulators, communication interfacing, etc. Peripheral ICs that are not part of an ECU are used for remote functions and interface to e.g. electrical motor systems. Melexis also offers

standard ICs such as dashboard indicators, windscreen wipers, remote control door opening and audible warning systems.

Microcontrollers are one step further in the integration. A complete microcontroller is integrated together with peripheral electronics. For complex systems, the development of custom digital circuitry tends to become very challenging. In addition, late design changes in custom digital circuits may jeopardize a complete IC development programme. Thanks to the use of embedded microcontrollers instead of custom digital circuitry, enough flexibility is offered to provide working solutions in time and at a reasonable price.

Microcontrollers preferably target systems with an embedded CPU surrounded by periphery like ROM, RAM, EEPROM, EPROM OF FLASH and a lot of additional digital and analogue blocks. They are systems having their flexibility in a single ROM mask. Hence, a single chip having several ROM mask versions can cover several applications. The Melexis Microcontrollers are single chip solutions with a minimum of external components. Melexis supports all necessary development tools (Assembler, Linker, C-compiler, Emulators, Simulators) in order to help the customer to develop the necessary software efficiently and in a short period of time.

The Melexis systems come with on-chip power regulators with a 4 to 26 volts operating range, on-chip handling of load dumps up to 8oV, automotive compatible inputs, fully protected outputs, ROM, RAM, OTP and EEPROM memories, and the software support capabilities one expects from such kinds of systems.



#### 4.4 Contactless Identification ICs

Contactless Identification systems, or Tags, are used, as their name implies, to identify items without the need to make contact with them. This compares for example with bar code pens or plug-in systems. The tag itself is small enough to fit (invisibly, if required) inside an article and can be remotely read by a tag reader over a controllable range. The identification of the individual tag is by transmission of a code sequence. This sequence is either a fixed code unique to the tag or, for more secure systems, a

'rolling' code different for every successive interrogation. The code sequence is based on a mathematical pseudo-random code sequence generator in both the tag and the reader with millions of combinations.

Tags were first used to identify high value items, such as

cattle and horses, but are more likely nowadays to be known for their use in automotive security as either keyless entry (a chip integrated in the key transmits a code to an ECU, which opens the lock) or engine immobiliser systems.

Tags are also starting to be used for transmitting information from the wheels (tire pressure, temperature, rotational acceleration, speed) to the car body. For access control and car immobilisers, the demand for a higher level of security is increasing. As an answer to this demand, Melexis is developing a new generation of crypto transponders and readers.

The Company also has a non-automotive contactless identification ic business. Non-automotive applications for tags include people access control systems and animal and products traceability applications. Airport luggage handling is another typical application based on tags in labels or transport trays.

The main competitive advantages of Melexis tags are their low power consumption and their highly integrated design.

Tags are used to identify items without the need to make physical contact.



#### 4.5 Infrared, Opto & Gyro

Melexis successfully developed the first commercially available integrated infrared sensors. There is a growing interest in this new type of sensor in the automotive market for next generation air-con systems with better passenger comfort. The integrated IR sensor has on-chip signal conditioning and calibration. The output signals are 100 to 1000 times bigger for the Melexis integrated IR sensor as compared to the common known passive ir sensors. This makes the application of these sensors a lot easier and more precise.

Infrared sensors will capture energy which is radiated by every object, and as such, the absolute temperature of this object can be calculated. The major automotive application is climate control. For this purpose the IR sensor 'looks' at a person, and as such senses its 'comfort' temperature. This technique has a lot of advantages over the existing climate control systems with classical components:

• very fast reaction time (< 1 second)

The MLX90255 is an

Optical Chip consisting

of 132 photodiodes for

automotive temperature

range applications such

as position detection

with high resolution,

optical decoding, optical

character recognition

(OCR), angle detection,

- automatic compensation for sun radiation

the corresponding signal-conditioning IC in

Melexis's experience in design for wide temperature range operation as needed for automotive applications allowed entering the market of optical sensing. There are a lot of companies offering optical sensors but when it comes to 125degC operation and automotive quality, there is not a lot of competition. The first successful product in this area shows good

system using a Melexis sensor. EPAS systems are considered to replace the current hydraulic systems, because they will be cheaper and lighter and because they allow a better fuel economy.

For this application, a new unique package has been developed, which is the only plastic package in this field that can withstand automotive qualifications (temperature, humidity, etc.).

For gyroscopes, Melexis/Thesys is participating in 3 different research projects. These gyro's (also called Angular Rate Sensors) can be used in navigation systems and in stability systems (anti skid, etc.). Within 8 years from now, most cars are expected to have 1 to 4 gyroscopes built in.



- no wiring required (IR measurements can be
- done at a long distance)

For this application Melexis has developed a membrane infrared thermopile sensor and has development.

interest and will most probably generate further projects.

Melexis has developed a linear optical array for use, amongst others, in EPAS systems (Electric Power Assisted Steering). The rotation and the torque of the wheel are measured by an optical

### Infrared Thermopile,

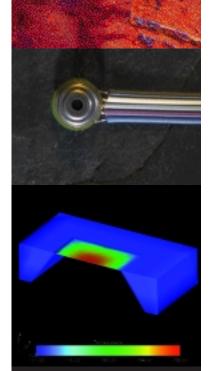
with dedicated interface asic

An infrared sensor measures

temperatures at distance.

Major automotive application

is climate control



Heat distribution indication under infrared radiation.

#### 4.6 Bus Systems

In order to reduce the amount of copper wire in a car (can be as long as 5 km), the VMs are switching more towards Bus systems: a power line loop and a signal line loop connect all devices in a car. The commands to drive up the actuators are transmitted via the signal bus.

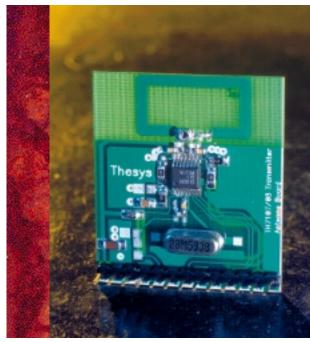
Bus Systems contain specific physical interfaces for automotive busses like K-Bus, low-speed CAN transceivers, high-speed CAN transceivers. With these physical interfaces the communication on main busses as well as on sub-busses in automotive systems can be realized. Additionally, these physical interfaces may be inserted as embedded blocks in more complex integrated circuits, such as peripheral ICs and microcontroller products.

Melexis/Thesys is a specialist for mixed signal ICs used in applications for automotive bus systems and high voltage peripherals up to 5oV. The products can be supplied by board battery directly in vehicles and are robust against typical automotive environmental influences. All of the integrated circuits contain analogue and digital parts. The mixed-signal devices serve as the connection between sensors and actuators and the highly intelligent signal-conditioning in the electronic control unit of our customers.

#### 4.7 BiCMOS Products

This product line is focused on applications with special requirements on speed, precision and low noise. The Bu BicMos develops standard products (ASSPs) and customer-specific circuits (ASICs) for applications mainly based in the fields of Industrial Scientific Medical (433 MHz / 868 MHz ISM), Short Range Devices (SRDs), general radio frequency (RF) data transmission, RF signal generation and processing as well as infrared (IR) signal detection for remote control.

The technologies used for the products span from 0.6 over 1.2 micron BicMos to several CMOS processes.

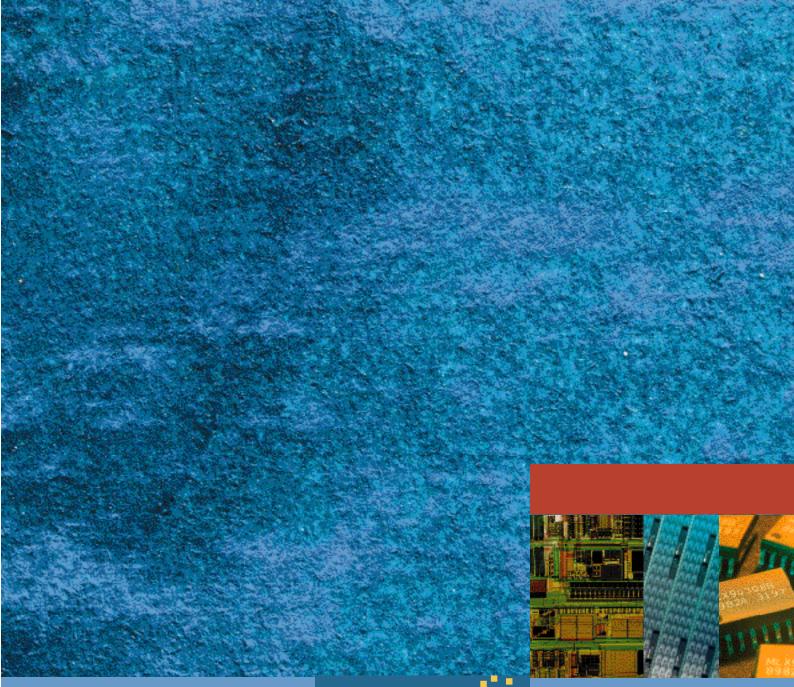


Demonstration board

with Radio Frequency

Transmitter Chip

for car remote entry.



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## 5. Melexis Strategy

Melexis's strategy has proven to be successful and Management feels there is no need for correction: The main objective of the Company was and is to become a leading international provider of automotive semiconductor products. To reach this goal, the key elements of the Company's strategy are:

#### focus on automotive business

Management believes that the market for automotive semiconductors offers high growth opportunities and consequently will focus on Melexis's core business, advanced integrated semiconductor devices for automotive applications.

This will allow the Company to benefit from its experience, engineering excellence and competitive advantage in the design, development and testing of highly integrated analogue-digital semiconductor devices for the automotive sector.

#### focus on standard products

The Company will concentrate on standard products in order to leverage its design and development efforts on larger numbers of each product and thus enhance profitability.

#### preferred partner of automotive OEMs

The Company has developed close working relationships with several automotive equipment manufacturers and seeks to maintain such close collaborative relationships with its customers, in particular in the areas of development, engineering and technical support. By working with customers throughout the entire product cycle, Melexis is able to gain insights into its customers' future plans and needs, identify emerging industry trends and consequently deliver high-performance and cost effective products.

#### technological leadership for design of automotive semiconductors

Melexis has gathered a team of engineers with considerable expertise in product definition, design, development and testing of highly integrated analogue-digital semiconductor devices for the automotive industry. The Company has committed and will continue to commit substantial resources to research and development to extend its technological excellence in these fields.

#### strengthen marketing to enlarge its customer base

The Company seeks to increase its customer base and is committed to increasing its marketing effort in order to achieve this goal. The acquisition of Thesys was another important step to fulfil this strategy. Thanks to the co-operation of their engineering force and their contacts, Melexis is getting closer to its main objective: to become the leading international provider of automotive semiconductor products.







Melexis has demonstrated a quality management system complying with the stringent requirements of 150 9000, QS 9000, VDA 6.1 and ISO 14001:

In December 1999, Thesys Mikroelektronik Produkte GmbH passed the supervisory audit VDA6.1 and QS 9000 including ISO 9001 as well as the re-certification audit ISO 14001.

During the same month Melexis n.v. passed the certification audits VDA 6.1, QS 9000 including ISO 9001 and ISO 14001 at its sites in Ieper, Tessenderlo and Bevaix.

Melexis reached an overall VDA6.1 rating of 94% which shows outstanding quality performance of the whole Melexis Group.

Certification body was the leading German certifier DQS, member of the EQNeT.

Certified by DQS according to:

DIN en ISO2001 Reg.Nr. 70754-01/609

QS9000 Reg.Nr. 70754-01/609

VDA6.1 Reg.Nr. 70754-01/609

DIN en ISO14001 Reg.Nr. 70754-02



#### licensing of certain products

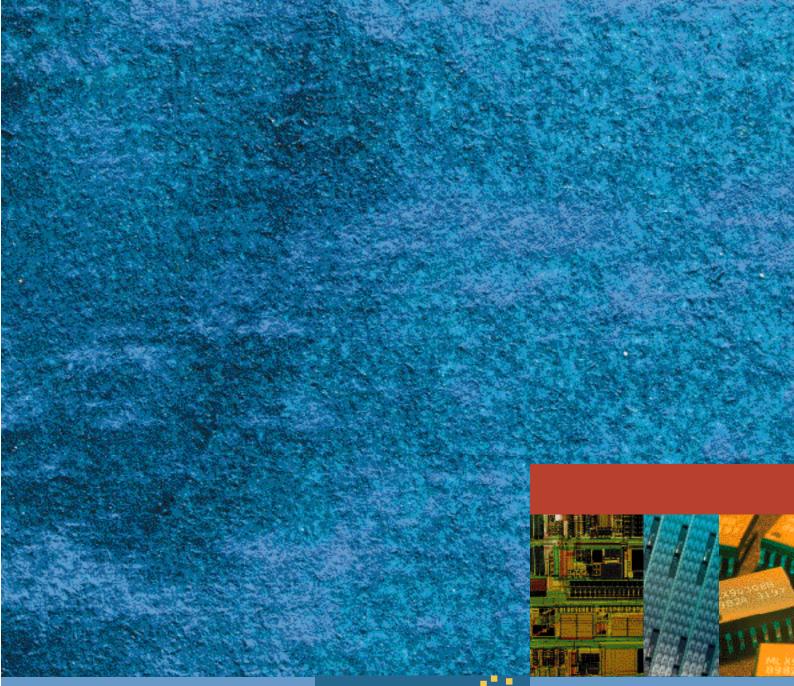
As and when an appropriate opportunity arises, the Company intends to grant licences over certain advanced products to specified customers in order to allow those customers to purchase those advanced products. This will enable the Company to concentrate its engineers on specific projects.

#### targeting of new regions

The Company plans to continue concentrating special marketing efforts towards Japan, the us and South America, as it sees these are areas for large potential growth in its sales. With some new contracts Melexis strengthens its penetration in Japan and the us. Melexis ICs are currently under active consideration by several Japanese manufacturers for important automotive and industrial programs.

#### review of opportunities for acquisitions

The automotive integrated circuit market is a relatively fast moving sector. Although no specific opportunities are currently under consideration, Management will keep the market under close review to enable it to take advantage of any acquisition opportunities if and when they arise. Management does not, however, currently envisage the Company diversifying outside the automotive integrated circuit market.



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## 6. Selected summary financial data

#### 6.1 Introduction

The selected financial data presented below have been extracted and derived from the IAS consolidated financial statements of Melexis NV for the three years ended at 31 December, 1999 and have been audited by Arthur Andersen Bedrijfsrevisoren.

CONSOLIDATED INCOME STATEMENTS	Years ended 31 st December		
	1999	1998	1997
	EUR	EUR	EUR
Total sales	50.608.763	30.186.379	19.153.728
Revenues from Research and Development	2.467.544	1.459.201	597.459
Cost of sales	(31.687.048)	(20.486.648)	(11.855.742)
Gross margin	21.389.259	11.158.932	7.895.445
Research and Development expenses	(5.453.291)	(2.258.668)	(921.227)
General and Administrative expenses	(2.471.681)	(1.587.841)	(614.374)
Selling expenses	(1.948.272)	(674.990)	(38.857)
Income from operations	11.516.015	6.637.433	6.320.987
Financial results (net)	1.421.512	1.542.190	821.816
Other (net)	-	(13.771)	(98.745)
Profit before taxes	12.937.527	8.165.852	7.044.058
Income taxes	1.075.748	98.127	2.652
Minority interest	(1)		
Net income	14.013.274	8.263.979	7.046.710
CONDENSED CONSOLIDATED BALANCE SHEETS		31st December	
	1999	1998	1997
	EUR	EUR	EUR
Cash and cash equivalents (See 6.5.3.)	22.342.546	32.566.408	32.767.751
Total assets	77.768.577	60.794.784	48.262.779
Total current liabilities	23.292.431	7.063.610	2.829.597
Longterm debt	591.864	117.749	353.248
Shareholders' equity	53.883.662	53.613.425	45.079.779

#### **6.2 Exchange Rates**

Since the introduction of the Euro on January 1st 1999, and in accordance with Belgian law, Melexis NV keeps its books and prepares its consolidated financial statements in Euro. The functional currency of Melexis NV and of its subsidiaries Melexis Tessenderlo NV and Thesys Mikroelektronik Produkte GmbH is the Euro. The functional currency for Melexis AG is the Swiss franc (CHF) and for Melexis Inc. the United States Dollar (USD).

Assets and liabilities of Melexis AG and Melexis Inc. are translated at exchange rates in effect at the end of the reporting period, and revenues and expenses are translated at the average exchange rate during the period. Equity components have been translated at historical exchange rates. Gains or losses resulting from this translation are reflected in the component 'cumulative translation adjustment' in the balance sheet.

All discussions in this chapter are based on comparisons of Euro amounts.

# 6.3 Management's Discussion and Analysis of Financial Condition and Results of operations

The following Management's discussion and analysis of financial condition and results of operations should be read in conjunction with the Company's financial statements for the years ended 31 December, 1999, 1998 and 1997.

#### 6.3.1. Overview

Mr. Fred Bulcke, an electronics engineer who had accumulated experience with integrated circuits and assembly technology in Germany, incorporated the company at the end of 1988. The company invested significantly in product development tools and production equipment. Towards the end of 1993, activities relied on a limited number of customers and one major contract for a telecommunication company.

In April 1994, Mr. Bulcke sold his company to private shareholders. At that occasion, the company was renamed into Elex Sensors to reflect the desire of the new owners that integrated circuits for sensors should become the core business of the company. In the same year, the company developed its first Hall Sensors and acquired a license to produce and sell silicon pressure sensors chips.

The private shareholders sold their shares to ELEX NV, the current majority shareholder of Melexis NV, in the spring of 1996.

In October 1997, Melexis NV and its parent company, Elex NV, launched an Initial Public Offering (IPO) on the EASDAQ stock exchange market. At this IPO, 4,000,000 new shares were issued and 3,300,000 existing shares were sold by the selling shareholder.

In the last quarter of 1997, the company acquired US MikroChips Inc. (now Melexis USA, Inc.), based in Webster, Massachusetts.

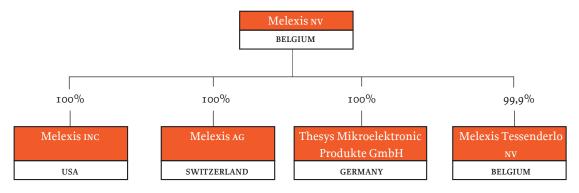
US MikroChips has become a wholly owned subsidiary of Melexis serving as the marketing, sales and management group of Melexis' Hall Sensor business unit. Its corporate name has been changed into Melexis USA.

Melexis currently buys its wafers from the x-fab-group of companies, which is a related group. The purchase prices are based on market prices for processed wafers. x-fab sells an important part of its production to other IC-vendors than Melexis NV at similar prices.

Melexis buys services from related companies, mainly development work of engineers who work in other locations. These services are invoiced at a cost plus basis whereby the margin is based on market rates, which is in many cases less than 10%.

On October 1,1999 Melexis acquired Thesys Mikroelektronik Produkte GmbH. With this acquisition of Thesys, the development team headcount has almost doubled and we acquired the knowledge in the area of RF (radio frequency applications) and Bus-systems (signaling and communication in cars).

At the end of 1999, Melexis Tessenderlo NV was incorporated as a subsidiary of Melexis NV This newly created entity will be active in the domaines of Hall Sensors, Pressure Sensors and Household Applications.



#### 6.3.2. Results of operations

REVENUES For 1999, total revenues increased by 68 % as compared to 1998. The major relative increase can be found in the pressure and acceleration interfaces.

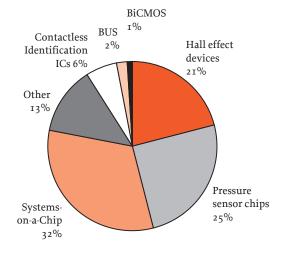
The biggest business unit is Systems on a Chip (32 %), as this business includes both microprocessors and ASICS activities. Due to its strong growth in turnover, the pressure and accelleration sensor product line has become the second major business unit within the company, realizing 25 % of the total turnover of the company. The Hall sensor product line (21 %) is another business unit realizing more than 10% of the total turnover of the company.

The following table shows a break down of total net product sales by business area:

Specific research and development activities are included in the sales per business unit. These specific R&D activities are performed under contract for customers. In 1999, the company invoiced EUR 2.467.544 research and development costs to its customers, compared to EUR 1.459.201 in 1998 and EUR 597.459 in 1997. This increase is below the relative increase in research and development costs of the company as the company significantly increased its internal R&D efforts.

······	
	Years ended 31st December

	1999	1998	1997
	EUR	EUR	EUR
System-On-a-Chip	16.744.154	10.282.342	8.039.002
Hall Sensors IC	10.975.676	6.884.764	2.779.521
Pressure Sensors IC	13.403.368	5.426.057	2.738.169
Contactless ID IC	3.034.147	1.991.153	1.318.822
BUS	1.295.051	-	-
BiCMOS	475.757	-	-
Other-miscellaneous	7.148.154	7.061.264	4.875.673
Total	53.076.307	31.645.580	19.751.187



COSTS OF SALES Costs of sales consist of materials (raw material and semi-finished parts), subcontracting, labor, depreciation and other production expenses. They increased from EUR 11.855.742 in 1997, EUR 20.486.648 in 1998 up to EUR 31.687.048 in 1999.

Expressed as a percentage of total revenues, the cost of sales decreased from 64.7 % in 1998 to 59,70 % in 1999. The relative decrease of the cost of sales can be attributed partly to some unique costs in 1998 related with the launch of some new products and partly to some price erosion for the 'older' products.

GROSS MARGIN The gross margin, as a percentage of sales, increased from 35.3 % in 1998 to 40,30 % in 1999 due to the decrease of the cost of sales.

RESEARCH AND DEVELOPMENT EXPENSES Research and development expenses amounted to EUR 5.453.291 in 1999, representing 10.27 % of total revenues. This 141 % increase over 1998 is a result of increased research and development efforts. Through the acquisition of Thesys Mikroelektronik Produkte GmbH, the number of research and development engineers more than doubled in 1999. The research and development activities keep concentrating on the further development of Hall Sensors, Integrated pressure sensors, 16 bit microcontrollers, infrared applications and opto sensors. Through the acquisition of Thesys Mikroelektronik Produkte GmbH, two new research teams for specific research in the area of Bus systems and Bicmos technology were added.

In fact, more than 30 products are at their development-stage.

#### GENERAL, ADMINISTRATIVE AND SELLING EXPENSES

General, administrative and selling expenses consist mainly of salaries and salary related expenses, office equipment and related expenses, travel and entertainment expenses and further increased over 1999. This increase is basically a result of the increased selling efforts, due to the globalization of the activities of the company and the increased development of standard products. Melexis Inc., acquired at the end of 1997, further increased the sales activities, mainly in the USA and Japan, while the acquisition of Thesys Mikroelektronik Produkte GmbH in 1999, further increased the marketing and sales efforts in Europe.

FINANCIAL RESULTS The net financial results (gains) slightly decreased over 1999, as interest income decreased, due to the decrease in cash and cash equivalents. The net exchange gains (both realized and unrealized) declined at approximately EUR 110.928.

NET INCOME The company recorded a net income for 1999 of EUR 14.013.274. This represents a 70 % increase over 1998. This large improvement compared with the net increase of 17 % over 1997 was a combination of the increased turnover combined with relative stable cost levels in 1999 (cost of goods sold and non-operating cost), while during 1998, cost levels increased substantially, relative to the increase in sales.

#### 6.3.3. Liquidity, working capital and capital resources

For the years 1995 and 1996, the Company satisfied its liquidity requirements mainly through cash flow generated from operations.

In 1997, the cash and working capital position increased considerably by the IPO-cash-revenues.

During 1998, the cash position remained relatively stable compared to 1997.

Cash and cash deposits and current investments amounted to EUR 23.091.046 as of 31 December, 1999 in comparison to EUR 32.566.408 as of 31 December 1998, which means a decrease of EUR 9.475.362.

In 1999, cash flow from operating activities amounted to EUR 16.754.126. The company realized a net profit of EUR 14.013.274. This was mainly used to finance increased trade receivables and inventories while the cash flow generated by increased payables to affiliated companies amounted to EUR 4.280.118. The cash flow from investing activities was negative for EUR 14.291.745 as a result of the acquisition of Thesys Mikroelektronik Produkte GmbH for an amount of EUR 6.724.797 (net of cash acquired) and the investments in fixed assets to realize

the growth in turnover. The cash flow from financing activities was negative for EUR 11.874.706, mainly as a result of the payment of an interim dividend of EUR 13.680.000.

#### 6.4. Detailed Consolidated Financial Statements

#### 6.4.1. Independent Auditor's report

To the Board of Directors and Shareholders of Melexis NV.

We have audited the accompanying consolidated balance sheets of Melexis NV (a Belgian corporation) and subsidiaries as of 31st December 1999, 1998 and 1997, and the related consolidated statements of income and cash flows for the years then ended, expressed in Euro. These consolidated financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements as of 31st December 1999 of certain subsidiaries, which statements reflect assets and annual revenues respectively of 29 and 21 percent of the related cosolidated totals. Those statements were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for those entities, is based solely on the report of the other auditors.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the reports of other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audits and the reports of other auditors the financial statements referred to above present fairly, in all material respects, the financial position of Melexis NV and subsidiaries as of 31st December 1999, 1998 and 1997 and the results of their operations and their cash flows for the years then ended in accordance with the accounting standards issued by the International Accounting Standards Committee.

Arthur Andersen Bedriifsrevisoren

Ludo De Keulenaer

8th February, 2000

6.4.2. Detailed Consolidated Financial statements

CONSOLIDATED BALANCE SHEETS	31 st December		
Melexis nv	1999	1998	1997
	EUR	EUR	EUR
Assets			
Current assets:			
Cash, and cash equivalents (note a)	22.342.546	32.566.408	32.767.751
Current investments	748.500		
Accounts receivable –trade (note b)	8.719.540	6.495.790	4.189.391
Accounts receivable – Affiliated companies (note p)	8.265.794	2.444.641	967.498
Other current assets	1.740.781	969.325	924.500
Inventories (note c)	10.148.180	6.090.950	3.364.857
Total current assets	51.965.341	48.567.114	42.213.997
Intangible fixed assets (note e)	319.878	-	-
Property, plant and equipment (note f)	20.110.448	11.059.357	4.973.873
Financial fixed assets	-	155.495	-
Accounts receivable – directors	-	1.953	-
Other non-current assets	-	9.428	-
Deferred taxes (note j)	1.089.684	-	-
Goodwill (note d)	4.283.226	1.001.437	1.074.909
TOTAL ASSETS	77.768.577	60.794.784	48.262.779
Liabilities and shareholders' equity			
Current liabilities:			
Bank loans and overdrafts (note h)	6.332.284	4.916.459	52.189
Current portion of long-term debt (note i)	148.900	235.499	235.499
Accounts payable – trade	3.857.241	1.482.035	1.069.872
Accounts payable – affiliated companies (note p)	9.738.865	-	770.060
Accounts payable - due to directors	-	-	14.994
Accrued expenses, payroll and related taxes (note g)	981.130	374.360	638.977
Other current liabilities	444.685	55.257	48.006
Deferred income	1.789.326	-	155
Total current liabilities	23.292.431	7.063.610	2.829.752
Long-term debt less current portion (note i)	591.864	117.749	353.248
Shareholders' capital	565.197	565.197	565.197
Share premium	30.135.419	30.135.419	29.844.658
Legal reserve	56.520	56.520	56.520
Retained earnings	22.877.383	14.613.404	7.571.651
Current year's profit	14.013.274	8.263.979	7.041.753
Dividend paid	(13.680.000)	-	-
Cumulative translation adjustment	(84.131)	(21.094)	
Total shareholders' equity (note k)	53.883.662	53.613.425	45.079.779
Minority interests	620	-	-
TOTAL LIABILITIES, SHAREHOLDERS' EQUITY AND MINORITY INTERESTS	77.768.577	60.794.784	48.262.779

 $The\ accompanying\ notes\ form\ an\ integral\ part\ of\ these\ balance\ sheets.$ 

#### CONSOLIDATED INCOME STATEMENTS

#### Years ended 31 st December

Melexis nv	1999	1998	1997
	EUR	EUR	EUR
Total sales	50.608.763	30.186.379	19.153.728
Revenues from Research and Development	2.467.544	1.459.201	597.459
Cost of sales	(31.687.048)	(20.486.648)	(11.855.742)
Gross margin	21.389.259	11.158.932	7.895.445
Research and development expenses	(5.453.291)	(2.258.668)	(921.227)
General and administrative expenses	(2.471.681)	(1.587.841)	(614.374)
Selling expenses	(1.948.272)	(674.990)	(38.857)
Income from operations	11.516.015	6.637.433	6.320.987
Financial income	3.046.551	2.329.154	921.350
Financial charges	(1.625.039)	(786.964)	(99.534)
Other expenses (net)		(13.771)	(98.745)
Income before taxes	12.937.527	8.165.852	7.044.058
Income taxes	1.075.748	98.127	2.652
Minority interest	(1)		
Net income of the period	14.013.274	8.263.979	7.046.710
Earnings per share (Note 6.5.2.)	0.31	0.18	0.17

 $\label{thm:companying} \textit{notes form an integral part of these income statements.}$ 

CONSOLIDATED 9	Statements of C	ASH FLOWS

Years ended 31 st December

Melexis nv	1999	1998	1997
Cash flows from operating activities:	EUR	EUR	EUR
Net income	14.012.274	8 262 070	7.046.710
Adjustments to reconcile net income to net cash	14.013.274	8.263.979	7.040./10
,			
provided by operating activities :  Deferred taxes	(7.090.694)		
	(1.089.684)	-	-
Capital grants	(527.419)	- ( 00	
Depreciation	3.378.433	1.641.388	520.295
Amortization Goodwill	422.807	262.750	
Loss (gain) on sale of property and equipment			
Changes in operating assets and liabilities			
Accounts receivable, net	(2.017.594)	(2.306.400)	(1.596.834)
Other current assets	469.125	(44.825)	(593.888)
Due to (from) affiliated companies	4.280.118	(2.247.203)	1.345
Accounts payable	321.905	412.163	463.769
Accrued expenses	(826.769)	(264.772)	140.779
Other current liabilities	389.434	7.251	2.185
Inventories	(2.060.124)	(2.726.093)	(475.152)
Net cash provided by operating activities	16.753.506	2.998.238	5.509.209
Cash flows used in investing activities:			
Acquisition of subsidiary, net of cash acquired	(6.724.797)	(155.495)	(1.163.688)
Additions to property plant and equipment and intangible assets	(7.566.948)	(7.726.872)	(3.659.785)
Goodwill	-	(189.277)	-
Net cash used in investing activities	(14.291.745)	(8.071.644)	(4.823.473)
Cash flows from financing activities:			
Repayments of bank loans and overdrafts	-	-	(305.769)
Proceeds from (repayments of) long-term debt	387.516	(244.927)	(235.499)
Proceeds from bank loans and overdrafts	1.415.825	4.864.270	-
Proceeds from (repayments of) accounts payable to directors	1.953	(16.947)	(8562)
Interim dividend payment	(13.680.000)	-	-
Proceeds from issuance of shares	-	-	29.894.236
Refund 170 cost	-	290.761	
Other	620	-	-
Net cash provided by (used in) in financing activities	(11.874.086)	4.893.157	29.344.406
Effect of exchange rate changes on cash and cash equivalents	(63.037)	(21.094)	-
Increase (decrease) in cash and cash equivalents	(9.475.362)	(201.343)	30.030.142
Cash and cash equivalents at beginning of period	32.566.408	32.767.751	2.737.609
Cash, cash equivalents, and current investments at end of period	23.091.046	32.566.408	32.767.751

 $\label{thm:company:c$ 

#### 6.5 Notes to the consolidated financial statements

#### 6.5.1. Nature of business

Melexis NV is a limited liability company incorporated under Belgian law. The company has been operating since 1989. The company designs, develops, tests and markets advanced integrated semiconductor devices for the automotive industry. The company sells its products to a wide customer base of Original Equipment Manufacturers (OEM'S) of automotive equipment in Europe, Asia and North America.

The Melexis group of companies employed 309 people per December 31,1999.

#### 6.5.2. Significant Accounting Policies

The accompanying consolidated financial statements are prepared under the historical cost convention and in accordance with International Accounting Standards ('IAS'). The Company's statutory accounts have been prepared using different valuation principles. These accompanying consolidated financial statements under IAS include certain adjustments made solely to comply with IAS. Certain accounting practices of Melexis NV used in preparing the accompanying financial statements conform with IAS, but may not conform with accounting principles generally accepted in the United States of America.

The preparation of consolidated financial statements requires management to make estimates and assumptions, typically concerning assets lives and other judgmental areas that affect the amounts reported in the financial statements and accompanying notes.

Such estimates may differ from actual results incurred.

CONSOLIDATION METHOD The consolidation scope includes Melexis NV, its subsidiaries Melexis AG, Melexis Tessenderlo NV (incorporated respectively in 1998 and 1999) and Melexis Inc. (formerly US Mikro-Chips Inc), which was acquired in the last quarter of 1997 and Thesys Mikroelektronik Produkte GmbH, which was acquired in June 1999. The goodwill on Thesys Mikroelektronik Produkte GmbH has been computed in compliance with IAS22 on the financial position effective on September 30, 1999, as the difference between the cost of acquisition and the fair value of the identifiable assets and liabilities of Thesys

Mikroelektronik Produkte GmbH. The fair value is not materially different from the book value at acquisition date.

Goodwill on this acquisition is amortized over five years starting in the fourth quarter of 1999.

REVENUE RECOGNITION The company recognizes revenue from sales of products upon shipment or delivery, depending on when title and risk of loss are transferred under the specific contractual terms of each sale, which may vary from customer to customer.

Revenue from research projects is recognized upon meeting all contractual conditions.

RESEARCH AND DEVELOPMENT COSTS Research and development costs are expensed as incurred and not capitalized, since they do not meet all conditions of International Accounting Standards Nr 9.

**CASH AND CASH EQUIVALENTS** The company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

Cash and cash equivalents consist mainly of deposits with commercial banks in Belgium and the United States of America.

In 1998, certain cash balances were classified as 'restricted cash'. The underlying restrictions are disclosed in note 6.5.3.

Inventories Inventories are comprised of material, labor and manufacturing overheads and are stated at the lower of cost (determined on FIFO basis) or net realizable value. Management performs periodic reviews of inventories and provides reserves for excess and obsolete inventory.

PROPERTY, PLANT AND EQUIPMENT Property, plant and equipment are stated at cost and are depreciated over the estimated useful lives of the assets as follows:

	Estimated useful lives
Buildings	33 years
Machinery, equipment	
and installations	5 years
Furniture and vehicles	5 years
Computer equipment	4 years

Depreciation is calculated using the straight-line method. The cost of maintenance and repairs is charged against income as incurred.

FOREIGN CURRENCY TRANSLATION Since the introduction of the EURO on January 1st 1999, and in accordance with Belgian law, Melexis NV keeps its books and prepares its consolidated financial statements in EURO. The functional currency of Melexis NV and of its subsidiaries Melexis Tessenderlo NV and Thesys Mikroelektronik Produkte GmbH is the EURO. The functional currency for Melexis AG is the Swiss franc (CHF) and for Melexis Inc. the United States Dollar (USD).

Assets and liabilities of Melexis ag and Melexis Inc. are translated at exchange rates in effect at the end of the reporting period, and revenues and expenses are translated at the average exchange rate during the period. Equity components have been translated at historical exchange rates. Gains or losses resulting from this translation are reflected in the component 'cumulative translation adjustment' in the balance sheet.

EARNINGS PER SHARE The earnings per share data for all periods mentioned are calculated by dividing the net profit for the period by the weighted average number of shares outstanding during the period. Stock splits were considered as if the split had occurred at the beginning of the earliest period reported.

#### 6.5.3. Notes

#### A | CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of the following:

		31 st Decembe	er
	1999	1998	1997
	EUR	EUR	EUR
Cash at bank and in hand	1.805.214	817.412	444.419
Short term deposits	20.537.332	31.748.996	32.323.332
Total	22.342.546	32.566.408	32.767.751

The short-term deposits at December 31, 1997 consisted of USD 1.000.000 and BEF 1.267.000.000, while the short term deposits at December 31, 1998 consisted of DEM 2.800.000 and BEF 1.223.000.000. The short term deposits at December 31, 1999 consisted of EUR 20.228.772, GBP 95.000 and CHF 250.000.

A part of the Company's cash balance as of December 31,1998 served as guarantee for loans taken up by its parent company and was subject to a compensating balance agreement with a commercial bank. These loans amounted as of December 31,1998 to EUR 22,9 million.

A part of the company's cash balance as of December 31, 1999 served as a guarantee for straight loans taken up by the company at a commercial bank. The restricted cash balance amounts to approximately EUR 707.500.

#### B) TRADE ACCOUNTS RECEIVABLE

Trade accounts receivable consist of the following:

		31 st Decembe	r
	1999	1998	1997
	EUR	EUR	EUR
Trade accoun receivable Allowance for doubtful	ts 8.853.235	6.545.369	4.238.970
accounts	(133.695)	(49.579)	(49.579)
Total	8.719.540	6.495.790	4.189.391

C) INVENTORIES September 30

Inventories consist of the following:

		31 st Decemb	ber
	1999	1998	1997
	EUR	EUR	EUR
Raw material and supplies	s 1.690.706	1.106.908	1.233.855
Work in progress	6.187.842	2.298.995	1.718.410
Finished goods	2.344.000	2.759.415	486.960
Reserve for obsolete stock	(74.368)	<u>(74.368)</u>	(74.368)
Net	10.148.180	6.090.950	3.364.857

#### D) GOODWILL

The goodwill relates to the acquisition of the wholly owned subsidiaries Melexis Inc. and Thesys Mikro-elektronik Produkte GmbH, and is determined as the difference between the cost of acquisition and the fair value of the identifiable assets and liabilities as of December 31, 1997 for Melexis Inc. and as of September 30, 1999 for Thesys Mikroelektronik Produkte GmbH. There were no material differences between the fair values of the assets and liabilities and their book values at those respective dates.

The book value of the goodwill at December 31, 1999 was as follows:

Goodwill accounted for at 31December 1998:	1.001.437
Additional goodwill, due to acquistion	
Thesys Mikroelektronik Produkte GmbH:	3.704.596
Less: amortization of goodwill of Melexis Inc.:	(250.359)
Less: amortization of goodwill of	
Thesys Mikroelektronik Produkte GmbH:	(172.448)
Net goodwill at 31 December 1999:	4.283.226

The amount of cash and cash equivalents at Thesys Mikroelektronik Produkte GmbH per September 30, 1999 was EUR 575.203.

The condensed balance sheet of Thesys Mikroelektronik Produkte GmbH per September 30, 1999 is as follows:

	September 30,1999
	EUR
Non current assets	5.182.454
Current assets	4.408.870
Total assets	9.591.324
Shareholders equity	3.595.404
Non current liabilities	-
Current liabilities	5.995.920
Total liabilities and shareholders' e	quity 9.591.324

#### E) INTANGIBLE FIXED ASSETS

	Licenses	Other	Total
	EUR	EUR	EUR
Acquisition value			
Balance end of previous period		-	
Additions of the period	9.235	82.062	91.297
Acquired from 3rd parties	289.292	174.760	464.052
End of the period	298.527	256.822	555-349
Amortization			
Balance end of previous period			-
Additions of the period	7.211	-	7.211
Acquired from 3rd parties	228.260	-	228.260
End of			
the period	235.471		235.471
Net book value - 31st December, 1999	63.056	256.822	319.878

#### F | PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consist of the following:

	Land	Machinery	Furniture	Fixed assets	Total
	and	and	and	under	
	buildings	equipment	vehicles	construction	
Year ended 31st December, 1999	EUR	EUR	EUR	EUR	EUR
Cost:					
Beginning of the period	2.466.433	11.542.739	322.381	-	14.331.553
Additions of the year	1.551.938	6.765.065	245.723	299.141	8.861.867
Acquired from 3rd parties	-	11.216.707	1.245.445	885.548	13.347.700
Retirements	(75.949)	(2.114.771)	(87.247)	-	(2.277.967)
Transfers	-	855.548	-	(885.548)	-
Cumulative Translation Adjustment	10.552	58.833	8.438	-	77.823
End of the period	3.952.974	28.354.121	1.734.740	299.141	34.340.976
Accumulated depreciation:					
Beginning of the period	270.013	2.871.676	130.507	-	3.272.196
Additions of the period	206.255	3.018.604	131.333	15.030	3.371.222
Acquired from 3rd parties	-	7.623.483	777.249	-	8.400.732
Retirements	(75.950)	(710.141)	(75.462)	-	(861.553)
Transfers		(921)	921		0
Cumulative Translation Adjustment	6.982	37.782	3.167	-	47.931
End of the period	407.300	12.840.483	967.715	15.030	14.230.528
Net book value - 31st December, 1999	3.545.674	<u>15.513.638</u>	767.025	<u>284.111</u>	20.110.448
	Land	Machinery	Furniture		Total
	and	and	and		
W 11 (D 1 0	buildings	equipment	vehicles		
Year ended 31st December, 1998 Cost:	EUR	EUR	EUR		EUR
Beginning of the period	527.233	5.894.140	208.629		6.630.002
Additions of the year	1.939.200	5.648.599	113.752		7.701.551
End of the period	2.466.433	11.542.739	322.381		14.331.553
Accumulated depreciation:					
Beginning of the period	160.732	1.414.655	80.742		1.656.129
Depreciation for the period	110.360	1.480.931	50.097		1.641.388
End of the period	271.092	2.895.586	130.839		3.297.517
Net Cumulative Translation		_			
Adjustment movement	1.079	23.910	332		25.321
Net book value - 31st December, 1998	2.196.420	8.671.063	191.874		11.059.357

#### G | ACCRUED EXPENSES, PAYROLL AND RELATED TAXES

Accrued expenses, payroll and related taxes consist of the following:

	31 st December			
	1999	1998	1997	
	EUR	EUR	EUR	
Vacation pay accruals	298.412	174.117	111.974	
Social security	156.996	-	-	
Commissions	-	-	328.688	
Servicing costs	328.503	198.315	198.315	
Taxes	177.262	1.928	-	
Other	19.957			
Total	981.130	374.360	638.977	

#### H | BANK LOANS AND OVERDRAFTS

Bank loans and overdrafts consist of the following:

		31 st Decemb	ver
	1999	1998	1997
	EUR	EUR	EUR
Bank loans	6.324.525	4.853.147	-
Bank overdra	fts 7.759	63.312	52.189
Total	6.332.284	4.916.459	<u>52.189</u>

Melexis Ag has a 1-year loan of CHF 900.000 with a Swiss commercial bank. The loan is secured by a guarantee of CHF 1.650.000 given by Melexis NV to the lending bank in connection with this short-term loan and a long term loan of CHF 1.000.000 (cfr. note i).

As of December 31, 1999 Melexis NV has engaged itself to the following financial covenants:

- minimum solvency-ratio of 30 % on a consolidated basis.
- maximum bank debt/equity-ratio of 1.6 on a consolidated basis.

Furthermore and as described in a) the company had in 1998 a compensating balance agreement whereby cash owned was given as guarantee to cover loans (amount EUR 23,9 mio) taken up by its parent company. At the end of 1999, the company has an agreement with a commercial bank whereby straight loans taken up by the company in excess of 50.000.000 BEF are guaranteed by cash and cash deposits owned by Melexis NV.

#### I LONG-TERM DEBTS

Long-term debts consist of the following:

	3	1 st December	
	1999	1998	1997
	EUR	EUR	EUR
Long-term loans	740.764	353.248	588.747
Less current maturities	148.900	235.499	235.499
Long-term portion of long- term loans	591.864	117.749	353.248

Melexis NV has a long-term loan with a Belgian commercial bank. This loan is denominated in BEF, bearing interest at 5,55% per annum and is repayable in quarterly installments of EUR 58.875. The first installment was paid on 20 August 1996. The loan is secured by a power of attorney that was given to the lending bank in connection with mortgage raising. The mortgage relates to the industrial land and buildings of the company of which the net book value amounted to EUR 291.058 as of 31 December 1999.

Melexis AG has a long-term loan with a Swiss commercial bank. This loan is denominated in CHF, bearing interest at 2.625 %. The first installment will be paid on 2 March 2000. The loan is secured by a power of attorney that was given to the lending bank in connection with mortgage raising. The mortgage relates to the industrial land and buildings of Melexis AG of which the net book value amounted to EUR 1.396.947 as of 31 December 1999.

#### J | INCOME TAXES

Melexis NV was subject to a special income tax regime. Under this regime, a 0% tax rate was applicable. This special tax regime expired at the end of financial year 1999. From January 1, 2000 onwards, the company will be subject to the regular Belgian corporate tax regime (currently 40,17 % on taxable income).

In 1999, Melexis NV sold part of its business to its wholly owned subsidiaries Melexis Tessenderlo NV and to Thesys Mikroelektronik Produkte GmbH at market value. This transaction resulted in a goodwill amount in the Melexis Tessenderlo statutory financial statements of approximately 82 million EUR and in the

Thesys statutory financial statements of approximately 6 million EUR. These goodwills, which are eliminated in consolidation, result in tax deductable amortization charges at Melexis Tessenderlo NV and Thesys Mikroelektronik Produkte GmbH, which can be offset against future profits. The company has recorded a deferred tax asset for this temporary difference of approximately 0,8 mio EUR, representing the budgeted usage of this temporary difference over the coming 2 years, 2000 and 2001. The positive income tax effect includes the following:

	31 st December		
	1999	1998	1997
	EUR	EUR	EUR
Current income tax	_	_	_
Deferred tax	1.075.748	98.127	2.652
Other			
	1.075.748	98.127	2.652

At the date of acquisition of Thesys Mikroelektronik Produkte GmbH, this company had tax loss carry forwards of approximately 3 mio Eur for which no deferred tax assets were recognized.

#### K | STATEMENT OF SHAREHOLDERS' EQUITY

	Number of Shares	Share capital	Share premium	Legal reserve	Retained earnings	Cumulative translation adjustment	Total equity
		EUR	EUR	EUR	EUR	EUR	EUR
December 31, 1997	45.600.000	565.197	29.844.658	56.520	14.613.404		45.079.779
Refund IPO costs			290.761				290.761
Net income					8.263.979		8.263.979
Cumulative translation adjustment movement						(21.094)	(21.094)
December 31, 1998	45.600.000	565.197	30.135.419	56.520	22.877.383	(21.094)	53.613.425
Net income					14.013.274		14.013.274
Cumulative translation adjustment movement						(63.037)	(63.037)
Interim dividend					(13.680.000)		(13.680.000)
December 31, 1999	45.600.000	565.197	30.135.419	56.520	23.210.657	(84.131)	53.883.662

### L | SHAREHOLDERS' EQUITY AND RIGHTS ATTACHED TO THE SHARES

As of 31st December 1999, the common stock consisted of 45.600.000 issued and outstanding ordinary shares without face value.

Each holder of shares is entitled to one vote per share, without prejudice to specific restrictions on the shareholders' voting rights in the Company's Articles of Association and Belgian Company Law, including restrictions for non-voting shares and the suspension or cancellation of voting rights for shares which have not been fully paid up at the request of the Board of Directors.

Under Belgian Company Law, the shareholders decide on the distribution of profits at the annual shareholders' meeting, based on the latest audited accounts of the Company. Dividends may be paid either in cash or in kind. However, shareholders may not declare a dividend if the Company has not first reserved at least 5 per cent. of its profits for the financial year until such reserve has reached an amount equal to 10 per cent of its share capital (the 'Legal Reserve') or if, following any such dividend, the level of the net assets adjusted for the unamortized balance of the incorporation costs and capitalized research and development costs of the Company falls below the amount of the Company's paid-in-capital and of its

Non-Distributable Reserves. The Board of Directors may pay an interim dividend, provided certain conditions set forth in Belgian Company Law are met. Dividends may be paid either in cash or in kind.

In the event of a liquidation of the Company, the proceeds from the sale of assets remaining after payment of all debts, liquidation expenses and taxes are to be distributed proportionally to the shareholders, subject to liquidation preference rights of shares having preferred dissolution rights. The Company currently has no plans to issue any shares having such preferred dissolution rights.

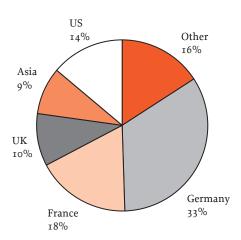
M) GOVERNMENT GRANTS The company recognizes government grants when there is reasonable assurance that the enterprise will comply with the conditions attaching to them and the grants will be received. They are recognized as income on a systematic and rational basis over the periods necessary to match them with the related costs. The grant related revenue is recorded net of the related expense in the income statement and as deferred income on the balance sheet. The revenue government grants recognized in 1999 comprises:

1999 EUR

Investment grants in building and machinery 487.684
Grants for research and development 186.622
674.306

#### N | SEGMENT INFORMATION

#### Revenues by destination



The following table summarizes sales by destination:

		31 st Deceml	ver
	1999	1998	1997
	EUR	EUR	EUR
France	9.323.054	4.151.256	3.851.578
UK	5.094.040	5.816.294	3.282.391
Germany	17.823.292	7.359.438	3.486.312
USA	7.398.657	5.930.210	4.720.292
Netherlands	2.905.380	2.444.037	1.182.857
Belgium	2.658.418	2.159.392	1.443.760
Italy	525.234	316.405	710.162
Brazil	116.627	130.688	591.630
Switzerland	211.542	147.029	211.810
Denmark	208.794	237.393	252.510
Asia	4.879.584	-	-
Other	1.931.685	2.953.438	17.885
Total	53.076.307	31.645.580	19.751.187

#### Revenues by customer

The following table summarizes sales by customer (sales in excess of 5% of total sales and as a % of total sales):

	31 st December			
	1999	1998	1997	
	0/0	0/0	0/0	
Customer A	6	II	23	
Customer B	3	6	8	
Customer C	12	15	16	
Customer D	I	5	5	
Customer E	10	13	8	
Customer F	8	13	12	
Customer G	2	3	6	
Customer H	10	2	0.6	
Customer I	7	2	0.3	
Customer J	5	0	0	
Total	64	70	78.9	

#### O | FINANCIAL RESULTS

	31 st December			
	1999	1998	1997	
	EUR	EUR	EUR	
Financial				
income:	3.046.551	2.329.154	921.350	
- interest income	1.630.876	1.429.040	486.244	
<ul> <li>exchange differences</li> </ul>	1.342.852	800.233	434.758	
- other	72.823	99.881	348	
Financial charges:	1.625.039	786.964	99.534	
<ul><li>interest charges</li></ul>	375.175	221.431	66.943	
<ul> <li>exchange differences</li> </ul>	1.193.817	540.270	0	
- other	56.047	25.263	32.591	
Net financial				
results	1.421.512	1.542.190	821.816	

#### P | RELATED PARTIES

Melexis currently buys its wafers from the X-FAB group of companies, which are related companies. The price is based on market prices for processed wafers. X-FAB sells an important part of its production to other IC-vendors than Melexis NV at similar prices. Melexis also buys services from other related companies, mainly development work of engineers who work in other locations. These services are invoiced at cost plus basis whereby the margin is based on market rates.

As per December 31, 1999 the Company had the following positions outstanding towards related parties:

#### Accounts receivable upon affiliated companies:

·	
	31st December,1999
	EUR
еріq group	2.571.665
Elex nv	422.507
X-Fab III (a subsidiary of Elex)	803.905
Sigma Delta Holding	3.812.800
Joritel (a subsidiary of Elex)	634.444
X-Fab II (a subsidiary of Elex)	20.473
Total	8.265.794
Accounts payable affiliated compa	nies:
	31st December,1999
	EUR
Elex nv	8.203.467
X-Fab II (a subsidiary of Elex)	1.529.881
X-Fab 1 (a subsidiary of Elex)	2.291
Sigma Delta Holding	3.226
Total	9.738.865

#### Q | COMMITMENTS

As of 31st December 1999, the company had purchase commitments for tangible fixed assets amounting to EUR 1.479.320.

#### R | LITIGATION

The company is currently not subject to any legal proceeding.

#### S | POST-RETIREMENT BENEFITS

The company has not arranged for post-retirement benefits for its employees. Accordingly, the company has no such liabilities/commitments.



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Microelectronic Integrated Systems

- 1. Letter to the Shareholders
- 2. Key Figures
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- 4. Melexis Products
- 5. Melexis' Strategy
- 6. Selected Summary Financial Data

7. Board of Directors



### 7. Board of Directors

#### 7.1. Officers and Members of the Board of Directors and Key Employees

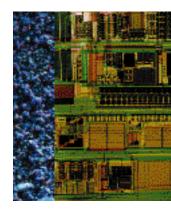
In accordance with the Belgian law, the Board of Directors manages the company's affairs. Pursuant to the Bylaws, executive authority for daily management and implementation of the decisions of the Board of Directors may be delegated to one or more directors referred to as Managing Directors ('afgevaardigd bestuurder').

The officers, directors and managing directors of the company are as follows:

Name	Age	Position
Roland Duchâtelet	53	Chairman of the Board and Managing Director
Rudi De Winter	39	Vice Chairman of the Board and Managing Director, Chief Executive Officer
Françoise Chombar	37	Director, Chief Operating Officer
Lucien De Schamphelaere	66	Director (non-executive)
Simon Middelhoek	68	Director (non-executive)
Brad Marshall	63	Director, President of Melexis Inc.
Karen van Griensven	29	Chief Financial Officer
Willy Sierens	50	Advanced Technology
Klaus Hermann	44	Quality & Environmental Management Representative

Mr. ROLAND DUCHÂTELET was private shareholder of the company since April 1994 and has served as a Managing Director since that date. Prior to that date, Mr. Duchâtelet has served in various positions in production, finance, product development and marketing functions for several large and small companies. He contributed in the start-up of 2 other semiconductor manufacturers: Mietec Alcatel (Belgium) from 1983 to 1985 as business development / sales manager and Elmos GmbH (Germany) from 1985 to 1989 as marketing manager. Mr. Duchâtelet was the co-founder of the parent company of Melexis NV. He holds a degree as Electronics Engineer, Applied Economics and an MBA from the University of Leuven.

Mr. Rudi De Winter was private shareholder of the company since April 1994. He served as acting Chief Executive Officer and Managing Director since 1996. Prior to that date, Mr. De Winter served as development engineer at Mietec Alcatel (Belgium) from 1984 to 1986 and as development manager at Elmos GmbH (Germany) from 1986 to 1989. In 1990, Mr. De Winter became director together with Mr. Duchâtelet of Elex NV, the parent company of Melexis NV. Mr. De Winter holds a degree as Electronics Engineer from the University of Gent. Mr. De Winter, Chief Executive Officer and Ms. Chombar, Chief Operating Officer, are married.



Ms. Françoise Chombar has served as acting Chief Operating Officer since 1994. Prior to that date, she served as planning manager at Elmos GmbH (Germany) from 1986 to 1989. From 1989 she served as operations manager and director at several companies within the Elex group. Ms. Chombar became director in 1996. She holds a degree as Interpreter in Dutch, English and Spanish from the University of Gent.

Mr. Lucien De Schamphelaere is the founder and Chairman of the Board of Directors of Xeikon NV, a company listed on the NASDAQ national market. Mr. De Schamphelaere held over a period of over 35 years several management positions in the fields of process control and instrumentation at Agfa Gevaert. Mr. Deschamphelaere is also director of Imec vzw, a Belgium based semiconductor research institute. Mr. De Schamphelaere holds a degree in Electronic Engineering.

Mr. SIMON MIDDELHOEK received a M.Sc. degree in Applied Physics from Delft University of Technology in 1956. In 1961 he received his Ph.D. (cum laude) in Mathematics and Physics from Amsterdam University. From 1956 to 1962, he worked at the івм Zurich Research Laboratory, Switzerland, from 1962 to 1963, at the івм Thomas J. Watson Research Center in Yorktown Heights, N.Y. and again in Switzerland from 1963 to 1969. In 1969 he joined the Faculty of the Electronic Engineering Department at Delft University of Technology as a professor for electronic instrumentation. In 1974 he initiated a scientific program on silicon sensors and microsystems. In 1996 he retired from his official duties, but is still supervising several Ph.D. students. Mr. Middelhoek is an IEEE Fellow, Member of the Royal Netherlands Academy of Arts and Sciences and Foreign Associate of the National Academy of Engineering (USA). He is editor-in-chief of Sensors and Actuators. At the Transducers 497 conference in Chicago he received one of the first Carrier Achievement Awards for his efforts in the field of silicon sensors.

Mr. Brad Marshall, served as a technical instructor, teaching Basic Electronics, Radar Systems and Missile guidance Systems in the us Air Force from 1955 to 1959. In the Air Force, Mr. Marshall graduated from the University of New Hampshire with a degree in Electronic Engineering, BSEE. He attended Worcester Polytechnic Institute, Worcester, MA, USA obtaining credits toward a Masters degree in Business Administration. From 1964 to 1993, Mr. Marshall was an employee of Sprague Electric now called Allegro, holding positions as R&D and design engineer, business unit manager, Vice President of marketing and product development. Since 1993, Mr. Marshall has been co-founder, shareholder and president of us Mikrochips, now Melexis Inc.

Ms. Karen van Griensven joined the company in 1997 prior to which she served in a similar position at Elex NV. Ms. van Griensven holds a degree as bio-engineer from the University of Gent and Montpellier and an MBA degree from the Solvay Institute in Brussels.

Mr. WILLY SIERENS joined the company in 1996, prior to which he held positions as process engineer (Electromag), management consultant (PA Technology) and project engineer (Diamant Board). Mr. Sierens holds a degree as Civil Engineer in the field of electro-mechanics from the University of Leuven. As the challenges in tomorrow's semiconductor industry ly in the combination of silicon and packaging, of electronic and mechanical characteristics, Melexis has chosen to dedicate special attention to those challenges by assigning Mr. Sierens full-time for advanced technology investigations into complex IC systems.

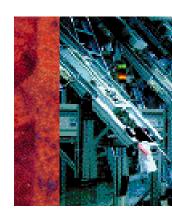
Mr KLAUS HERMANN joined the company in 1999 following the acquisition of 'Thesys Gesell-schaft für Mikroelektronik', prior to which he held positions as development engineer (Funkwerk Erfurt), Manager Reliability Laboratory (MTG) and Vice President Quality (Thesys Gesellschaft für Mikroelektronik). Mr Hermann holds a degree in Theoretical Physics.

#### 7.2. Compensation of Directors

As indicated in the Articles of Association, the office is non-remunerative. In 1999 the aggregate cash compensation paid or accrued by the Company for its directors and officers was as follows:

#### REMUNERATION OF DIRECTORS (in 1.000 EURO)

	Basic Salary	Monetary value of benefits	Bonuses	Long-term Compensation
a)As directors	-	-	-	-
b)As executives	226	-	-	-
Remuneration of other	133	-	-	-
senior executives				



#### Corporate Name:

#### Melexis NV

#### Registered Office:

Rozendaalstraat 12, B-8900 Ieper, Belgium

#### Date and Place of Incorporation

24th October 1988 at Ieper

#### **VAT Number**

BE 435.604.729

#### **Registry of Commerce:**

Registry of Commerce of Ieper, under the number 31.905

#### Legislation under which the Company Operates:

Laws of the Kingdom of Belgium

#### Legal Form

Limited liability company ('naamloze vennootschap / société anonyme')

#### Purpose:

According to Article 3 of the Articles of Association, the purpose of the Company is: The development, production and assembly of microelectronic integrated systems.

#### Liability of the Shareholders of the Company

According to Belgian Company Law, the liability of the shareholders of the Company is limited to the amount of their capital contributions.

#### Principal Offices of the Company:

The Company's offices are located at:

Rozendaalstraat 12, B-8900 leper

#### Telephone number

+32 57 22 61 31

#### Melexis NV

Rozendaalstraat 12

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Belgium

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#### Melexis AG

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#### Thesys Mikroelektronik Produkte GmbH

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#### Melexis Tessenderlo NV

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