ams

Q1 2014 results

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April 2014

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What we do for our customers




ams provides innovative analog solutions to the most challenging applications in sensors, sensor interfaces, power management, and wireless.

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ams overview



At a glance

- Focus on high performance analog semiconductors
- Sensor solutions, sensor interfaces, power management, wireless
- Ultra-low power, highest accuracy, sensitivity and integration
- Analog IDM: world class design + in-house manufacturing

By the numbers

- 350+ analog engineers
- Over 30 years of design experience
- Revenues Q1 2014 EUR86m/$118m (Q1 2013: EUR85m/$112m) FY2013 EUR378m/$502m (2012: EUR388m/$498m)
- More than 1,400 employees worldwide
- Over 7,800 customers worldwide

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Our focus

	High performance sensors and analog ICs	
Target markets	Consumer and Communications	Industrial, Medical, Automotive
	59% of revenues (FY 2013)	41% of revenues (FY 2013)

Core expertise	Sensor solutions, sensor interfaces	Power management	Wireless

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OUR MARKETS

CONSUMER AND COMMUNICATIONS

INDUSTRIAL, MEDICAL, AUTOMOTIVE

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Consumer and Communications

Sensor solutions and sensor interfaces, power management, wireless

Sensors

- Light sensors, gesture sensor
- MEMS microphone ICs
- Hall/inductive/ capacitive sensors

Power management

- Power management ICs
- Lighting management ICs

Wireless

- NFC front ends, antenna booster
- RFID readers (UHF/HF/NFC)
- LF/HF/UHF transceivers/ smart tags

Specialty solutions

- Active noise cancellation (ANC)
- Wireless sensors (lightning sensor)
- Specialty sensor interfaces

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Light sensors

Worldwide leader in intelligent integrated light sensors

Sensor solutions

- **RGB color -** for full analysis of light spectrum and temperature; enhance display picture quality
- **Ambient light (ALS) -** measure monochromatic ambient light to control display brightness
- **Proximity (Prox) -** detect proximity of user's ear to control display/touchscreen on-state
- **Gesture -** sense hand movement in proximity of device surface to create touchless interface

Gesture 4-in-1 sensor module shipping in high volume

Consumer electronics

- Smartphones, tablet PCs, upcoming mobile devices
- HDTV, PCs, notebooks

Sensor-driven lighting

- Major light sensor applications for the future
- Smart, dynamically managed home, industrial, and outdoor lighting

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Success: Gesture recognition sensor

Simplifying the human-machine interface (HMI) with high performance touchless technology

Highly integrated gesture sensor innovation

- ams' leading photodiode technology adapted to provided highly reliable, precise touchless user interface for consumer, communications, medical, automotive, and industrial markets
- Sophisticated gesture engine accommodates complex IR-based gesture sensing
- TMG3993 IR gesture, color ambient light sensing (ALS) and proximity detection 4-in-1 module with mobile coupon redemption
- Industry standard module package size with <10mm^2 footprint

Supplying leading high-end smart-phone platform

Benefits

- Highly integrated solution for maximum system value
- Configurable gesture commands provide application flexibility
- Reduces system BOM cost and board space requirements
- Mobeam^{TM} bar code functionality simplifies mobile commerce
- Enables next generation user interface applications

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Wireless solutions

Mobile transactions: NFC solutions

- Solutions for smartphone embedded NFC and complete NFC on SIM/microSD card
- Antenna booster technology analog front-ends with auto antenna tuning
- World-leading expertise in NFC technology
- OEM relationships build market acceptance

Enabling a seamless experience in smartphone NFC

Authentication: RFID solutions

- Integrated one-chip UHF reader solutions offer low solution cost for cost-effective RFID deployment
- Other RFID: HF readers, smart tags, LF/HF/UHF transceivers
- Applications: consumables, goods tracking and authentication, retail shrinkage prevention

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Success: NFC antenna booster

Reliable near field communication (NFC) to assure worry-free mobile transactions

Wireless innovation

- Advanced active tag analog front end (AFE)
- Active antenna boost overcomes reception problems in smartphones or for small form factor antennas
- Designed for ultra small form factor applications

Benefits

- World's first High Frequency (HF) active booster amplifies the antenna by >80x for NFC in small areas
- Overcomes field-dampening metal environments to ensure 100% read rate
- Extends range up to 10cm (free air) for NFC on SIM cards
- Accelerating NFC smartphone adoption via large scale OEM engagement

Gearing up for large scale OEM adoption in 2014

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MEMS microphone ICs

MEMS microphone interfaces for smartphones, handsets, tablet PCs, notebooks, and other mobile devices

- Over 1.6 billion MEMS microphone ICs shipped in 2013
- Industry leader with over 60% market share
- Extensive product portfolio based on more than 10 years of expertise
- Dynamic market driven by device adoption/penetration, audio quality and cost optimizations
- Leader in low noise focusing on higher value market segments

MEMS mics now standard feature for mobile devices

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Power management solutions for mobile devices

PMIC solutions enable optimum battery life and system performance

Power management innovation

- High performance PMIC design delivers superior value for the next generation of clamshell and other mobile devices utilizing multicore processor designs
- Supports leading mobile graphics processor’s current and upcoming platforms
- Patent pending unique technology to manage high speed, high current power stages

Benefits

- Enables highest frame rates at maximum screen resolutions for mobile devices while maximizing battery life
- Industry’s first programmable and scalable converter solution supporting up to 20 amps load in 10 microseconds
- Industry’s smallest total size multiphase DC/DC design, resulting in a PCB area savings of 50%

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Industrial

Sensor solutions and sensor interfaces

Industrial automation and control

- Motion control
- Industrial sensors
- Drives and electrical motors

2D and 3D position encoders

- Magnetic rotary and linear encoders
- Integrated high performance Hall sensors
- Broad portfolio for widest range of applications

Building automation and security

- HVAC
- Safety
- Bus systems

Seismic sensor interfaces

- Highest sensitivity sensor solutions

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Medical

Sensor solutions and sensor interfaces, power management, wireless

Medical imaging: Leader in lowest noise sensor solutions

- Computed tomography – supplier to #1
- Digital X-ray – supplier to #1
- Mammography – supplier to #1
- Ultrasound – supplier to market leaders

Personal health devices

- Diabetes management
- Heart rate monitors

Robotic surgical solutions

- Encoder-driven accuracy

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Automotive

Sensors and sensor interfaces, bus systems, power management, wireless

Position sensing

- Pedal & throttle position
- Transmission (clutch, gear shift)
- Steering wheel angle and torque
- Brushless motor control applications

Battery power management

- Battery management for conventional, hybrid, and electric vehicles
- Highly-efficient power management

Safety systems

- Collision avoidance LIDAR systems (pedestrian detection)
- ESP (Electronic Stability Program)
- FlexRay® high bandwidth data network

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Success: Laser-based LIDAR collision avoidance

Enables automatic braking for accident avoidance and pedestrian protection

Automotive innovation

- Obstacle distance detection by laser pulse time-of-flight measurement
- Laser beam scans area in front of vehicle, beam reflection is measured with highest speed and accuracy
- Chip set comprising three channel high bandwidth amplifier and high speed pipelined ADC
- In volume production, additional car platforms launching 2014, second generation nearing release

Benefits

- Very cost-effective active safety feature
- Allows for fully automatic braking in dense city traffic
- Simple assembly close to rear view mirror
- Seamless integration with vehicle stability system via standard CAN bus

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Scalable and profitable manufacturing model

In-house capacity + manufacturing partnerships: proven excellence for profitable growth

Wafer manufacturing

- 200mm in-house fab (2014E 150k wafers p.a.)
- CMOS nodes: 0.18µm – 0.35µm – 0.8µm
- Specialty analog processes
- Best-in-class efficiency
- Multi-source security: TSMC, UMC, IBM

Assembly and test

- In-house test in Austria and the Philippines
- In-house TSV 3D packaging line in Austria completed, currently in optimization and qualification, mass production H2 2014
- Multi-source assembly locations
- End-to-end fully integrated supply chain

2014 invest to increase wafer fab and test capacity on track

Project to identify wafer fab assets outside Europe

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Global value chain

🔴 Headquarters & fab
⬛ Distributor coverage
🟦 Design centers
🟧 Test center
🟨 Sales offices

- **9 design centers**
  Austria, Switzerland, Italy (2), Spain, Slovenia, USA (2), India
- **High volume test center**
  Philippines
- **Continuing growth in distribution design-ins and revenues**
  Over 30 distributors worldwide including
  Future Electronics, Digi-Key, Mouser

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Quality and responsibility commitment

Quality commitment

- Certified under
  - ISO/TS16949 (automotive)
  - ISO/TS13485 (medical)
  - ISO 14001 (environment)
- Zero defect commitment with industry-leading field failure rates
- Global quality systems with local resources/labs in key markets
- Top rankings by customers

Corporate responsibility

- Member of the UN Global Compact
- CDP (Carbon Disclosure Project) participant
- Conflict metals/hazardous-use materials program implemented
- 70% reduction of CO_2 footprint since 2003;
  mid-term goal to be a carbon-neutral company

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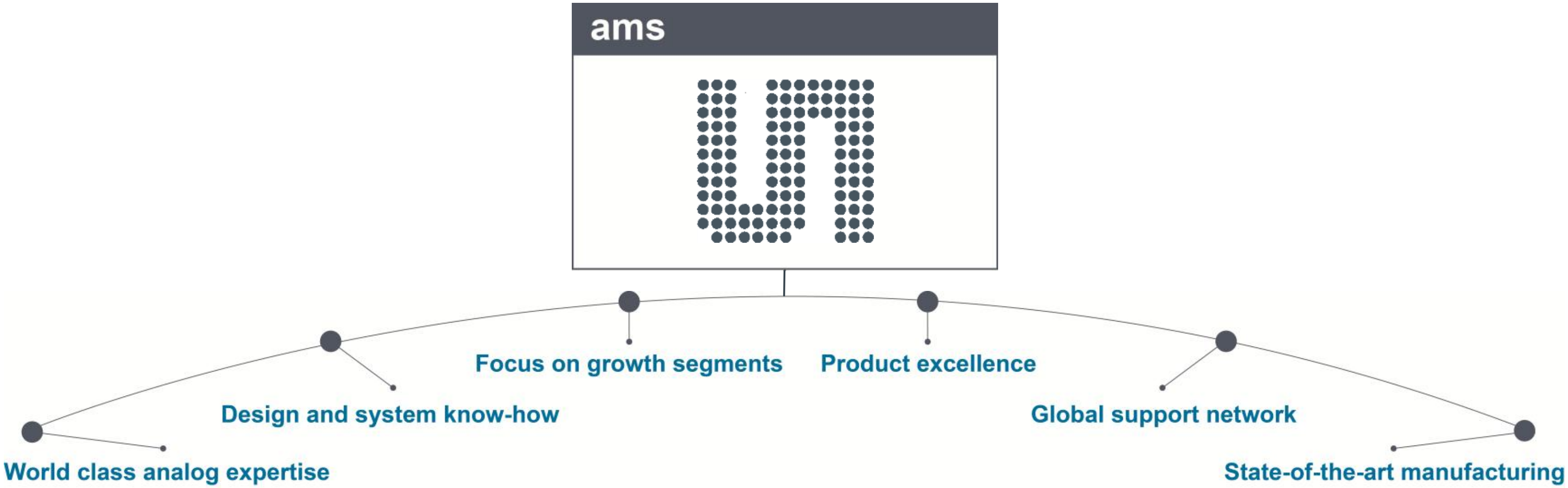
ams company highlights

Shaping the world with sensor solutions



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Key figures

EURm

(IAS)		2013	2012	Q1 2014	Q1 2013
Total revenues		377.8 - 3%	387.6	86.3 + 2%	84.9
Gross margin (before amortization charge) (incl. amortization charge)		55% 52%	55% 52%	56% 54%	54% 51%
Result from operations (EBIT)		63.9 - 25%	84.8	15.4 + 47%	10.5
Net result		60.8 - 26%	81.9	14.7 + 48%	9.9
EPS (basic/diluted)	CHF EUR	5.56 / 5.34 4.52 / 4.35	7.67 / 7.30 6.37 / 6.06	1.32 / 1.26 1.08 / 1.04	0.91 / 0.87 0.74 / 0.70

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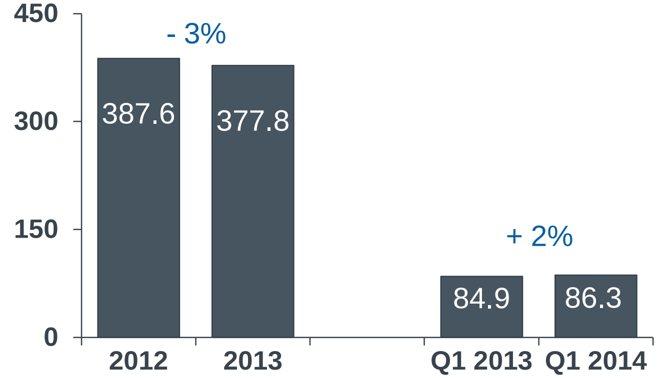
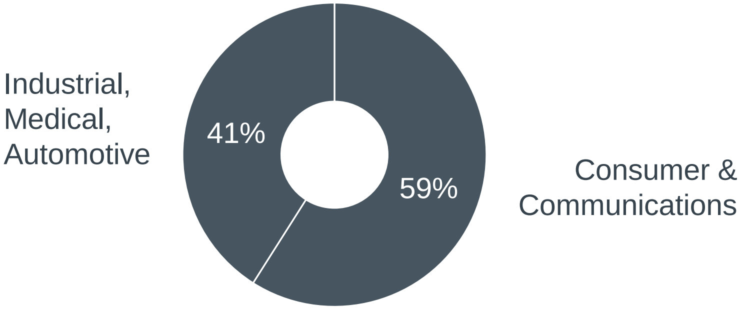
Financial results

EURm

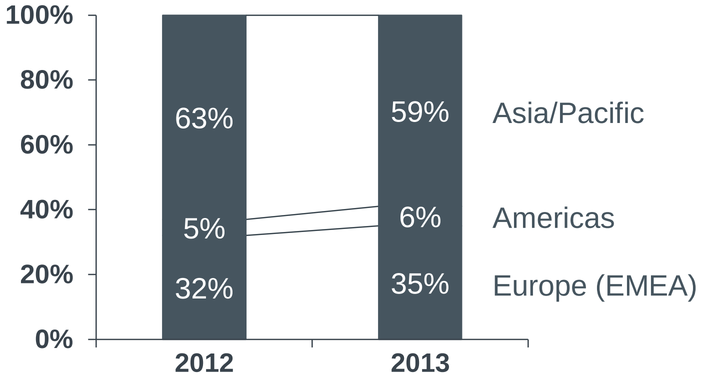
Total revenues



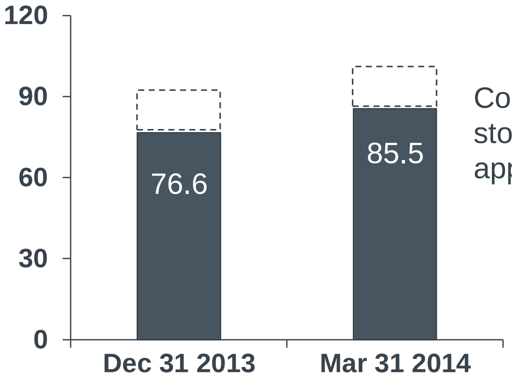
Total revenues by market 2013



Total revenues by region 2012 / 2013



Total backlog



Consignment stock agreements approx. EUR10-12m

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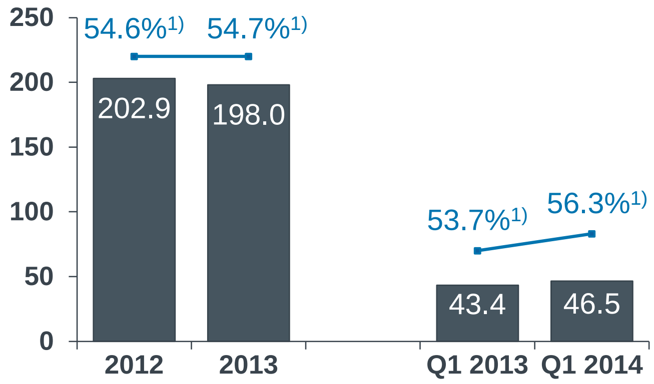
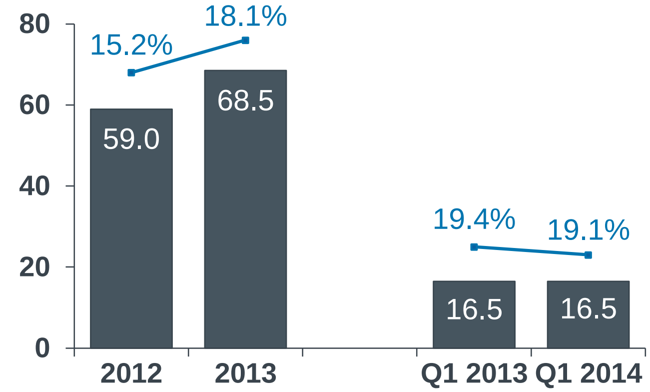
Financial results

EURm, % of revenues

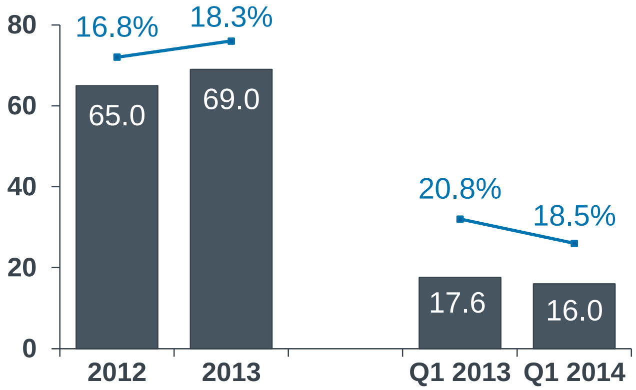
Gross profit, gross margin



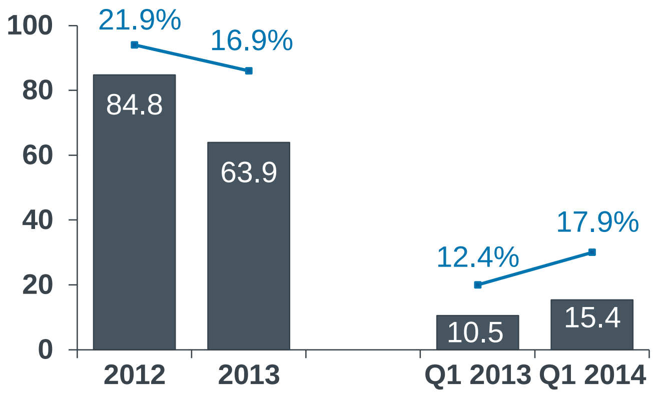
R&D



SG&A



EBIT



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1) before amortization charge

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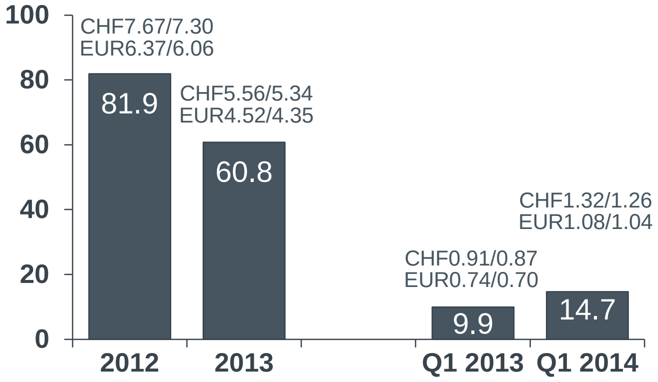
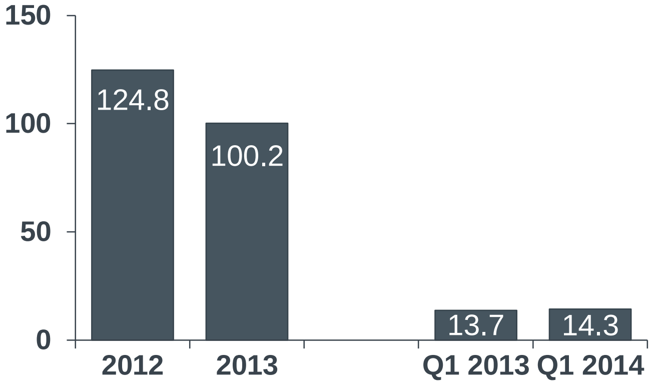
Financial results

EURm, % of revenues

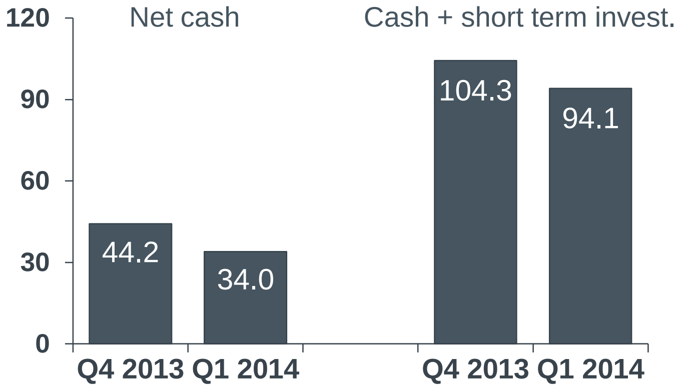
Net results, EPS (basic/diluted)



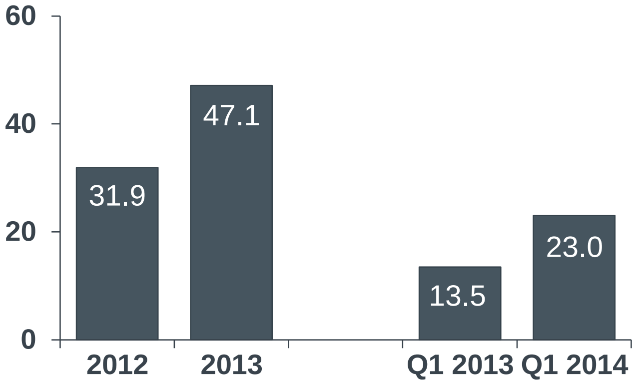
Operating cash flow



Net cash, cash + short term investments



Capital expenditures



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Thank you

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Profit and loss statement

EURm

(IAS)	2013	2012	Q1 2014	Q1 2013
Total revenues	377.8	387.6	86.3	84.9
• Products	343.0	359.7	76.8	76.8
• Foundry	34.8	27.9	9.5	8.1
Gross profit	198.0	202.9	46.5	43.4
• Gross margin incl. amortization charge	52.4%	52.3%	53.9%	51.2%
Research and development	- 68.5	- 59.0	- 16.5	- 16.5
Selling, general and administrative	- 69.0	- 65.0	- 16.0	- 17.6
Other operating income/expenses	3.3	5.9	1.3	1.2
Result from operations (EBIT)	63.9	84.8	15.4	10.5
• Operating margin	16.9%	21.9%	17.9%	12,4%
Net financing costs	- 0.5	- 1.4	- 0.1	- 0.2
Result before tax	63.4	83.4	15.4	10.3
Income tax result	- 2.6	- 1.5	- 0.7	- 0.4
Net result	60.8	81.9	14.7	9.9
EPS (basic/diluted) CHF	5.56 / 5.34	7.67 / 7.30	1.32 / 1.26	0.91 / 0.87
EUR	4.52 / 4.35	6.37 / 6.06	1.08 / 1.04	0.74 / 0.70

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Balance sheet

EURm

Assets (IAS)	Mar 31, 2014	Dec 31, 2013	Liabilities and equity	Mar 31, 2014	Dec 31, 2013
Cash and short term invest.	94.1	104.3	Interest-bearing debt	2.0	0.8
Trade receivables	63.1	63.7	Trade liabilities	28.4	28.3
Inventories	45.2	40.5	Provisions	22.3	23.2
Other current assets	13.3	10.5	Other liabilities	25.1	24.1
Total current assets	215.6	219.1	**Total current liabilities**	77.8	76.3
Fixed assets	166.3	145.4	Interest-bearing debt	58.1	59.3
Intangible assets	240.3	243.0	Employee benefits	24.1	23.6
Investments	4.9	5.1	Provisions	23.1	22.9
Deferred tax asset	33.3	33.3	Deferred tax liabilities	12.9	13.6
Other non-current assets	6.8	7.1	Other liabilities	12.3	12.6
Total non-current assets	451.5	433.9	**Total non-current liabilities**	130.4	132.0
			Shareholders' equity	458.8	444.7
Total assets	667.1	653.0	**Total liabil. and equity**	667.1	653.0

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Cash flow statement

EURm

(IAS)	2013	2012	Q1 2014	Q1 2013
Income before tax	63.4	83.4	15.4	10.3
Depreciation	35.2	33.3	8.5	9.0
Cash flow from operations	100.2	124.8	14.3	13.7
Capital expenditures	- 47.1	- 31.9	- 23.0	- 13.5
Cash flow from investing activities	- 46.8	- 65.7	- 22.8	- 14.5
Proceeds from borrowings	14.0	34.0	0	0.3
Repayment of borrowings	- 33.6	- 68.7	0	- 1.9
Dividends paid	- 19.4	- 8.1	0	0
Changes resulting from capital increase	11.2	18.6	1.4	7.8
Cash flow from financing activities	- 37.9	- 42.9	- 1.9	6.8
Change in cash and cash equivalents	15.4	16.2	- 10.5	6.1
Cash and cash equivalents at end of period	83.4	67.9	72.8	74.0

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Annual General Meeting

Key proposals 2014

Share split 1:5 to increase liquidity and ease of trading

- Technical step due to Austrian law requiring calculated nominal share value to be at least EUR 1.00: Reallocation of equity funds to increase calculated nominal share value before split
- Split 1:5 into 72.9m shares with calculated nominal value of EUR 1.00

Long term employee incentive plan (LTIP) 2014

- No vesting over first three years of plan, no time-based vesting, first vesting H2 2017
- Vesting contingent on two hurdle criteria:
  3-year EPS growth + 3-year total shareholder return vs. industry benchmark
- LTIP 2014 can be covered via treasury shares or new shares (conditional capital)
- ONLY IF hurdle criteria are fully met AND no options are covered via treasury shares,
  customary share count increase of up to 2% p.a. averaged over 5-year life of plan
- Elimination of existing large conditional capital and creation of new conditional capital solely in the amount of LTIP – same relative size as 2009 conditional capital