Zumtobel
Capital Markets Day

TridonicAtco „ a world of bright ideas“

Walter Ziegler

Agenda

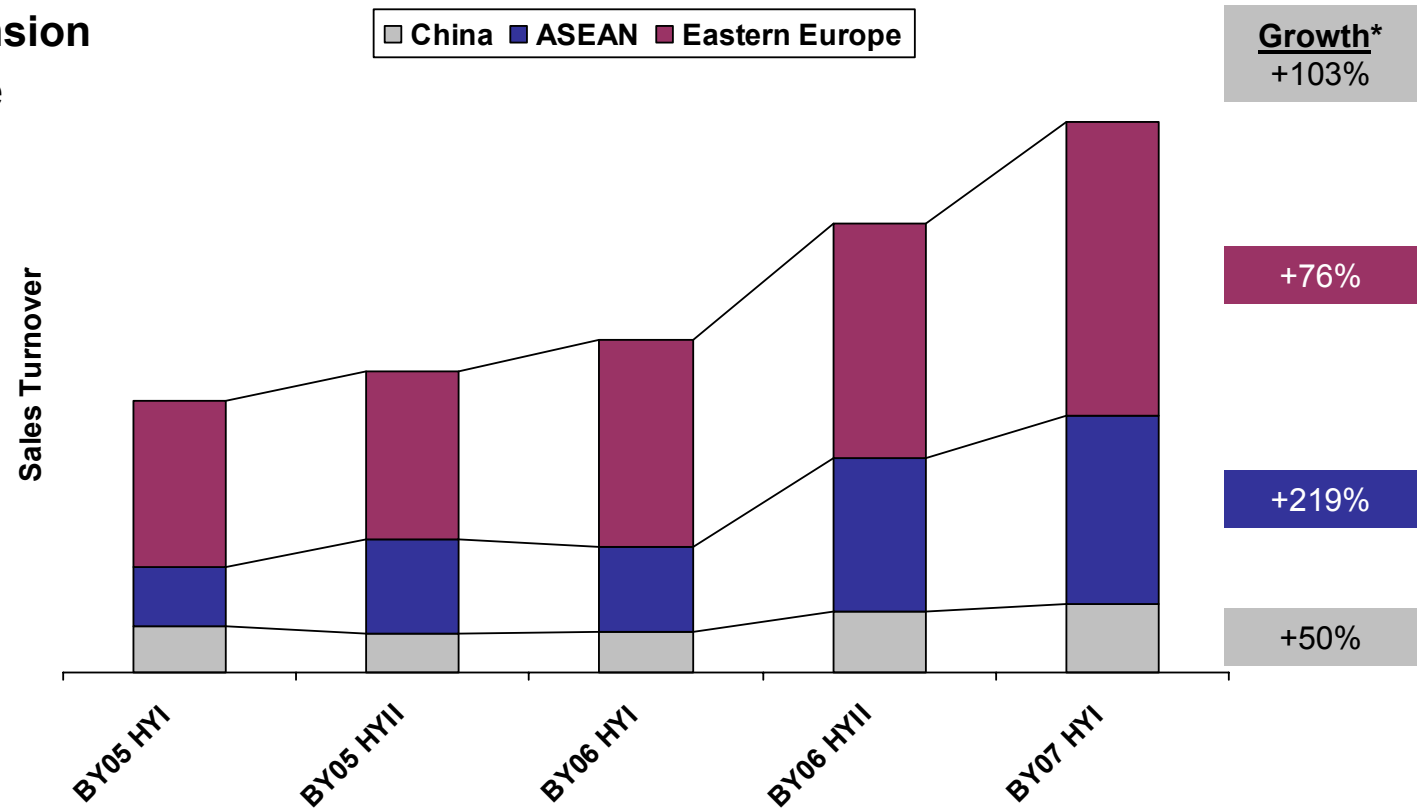
- **Key Business Drivers**
- **Innovation & Technology**
- **Further Trends for Innovation**

Our Path to Growth: Continuous and profitable growth in order to secure a place among the top three in the global lighting components market

Key business drivers

1. Geographical expansion

- Eastern Europe
- ASEAN
- China



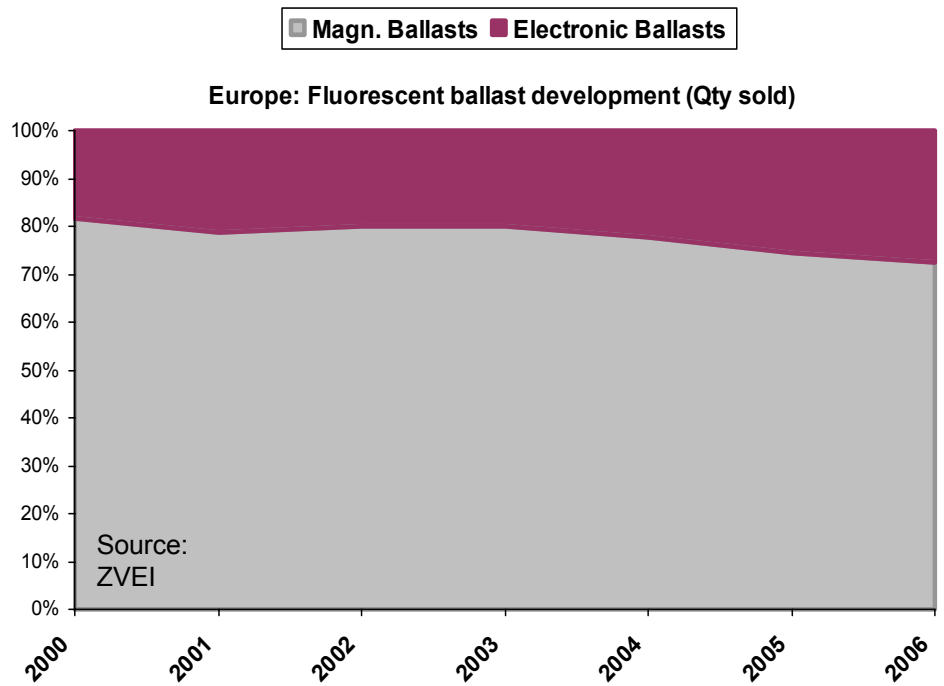
* Growth BY05 HY1 – BY07 HY1
Source: Internal Records

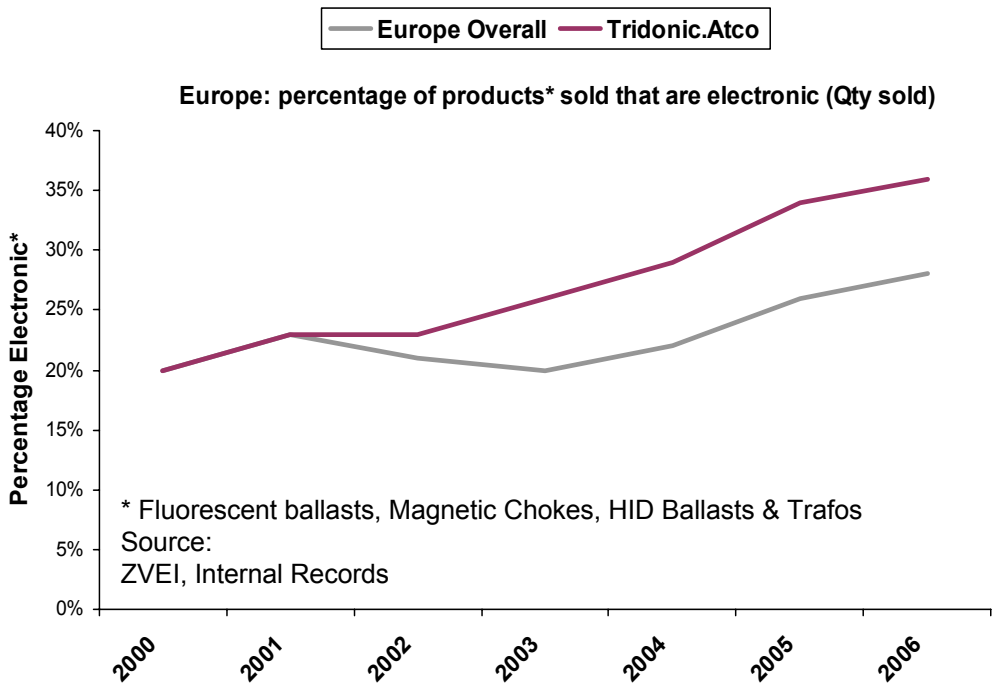
Our Path to Growth: Continuous and profitable growth in order to secure a place among the top three in the global lighting components market

Key business drivers

2. Market dynamics

- Substitution effect – electronic control gear gaining importance vis-a-vis magnetic chokes
- A high proportion of TridonicAtco‘s sold products are electronic



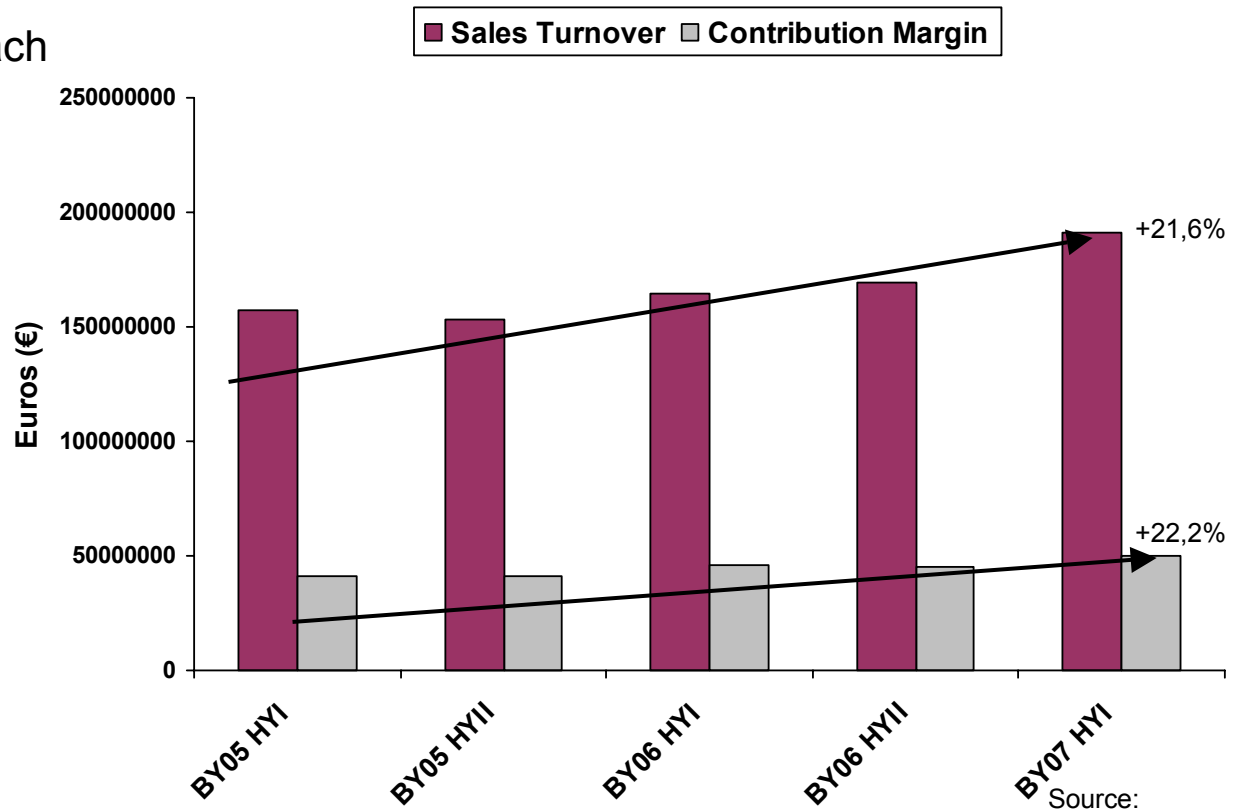


Our Path to Growth: Continuous and profitable growth in order to secure a place among the top three in the global lighting components market

Key business drivers

3. Knowledge / people

- TridonicAtco academy
- Accentuated market approach
- Improved push/pull ratio



Source: Internal records

TridonicAtco Innovation & Technology - Overview

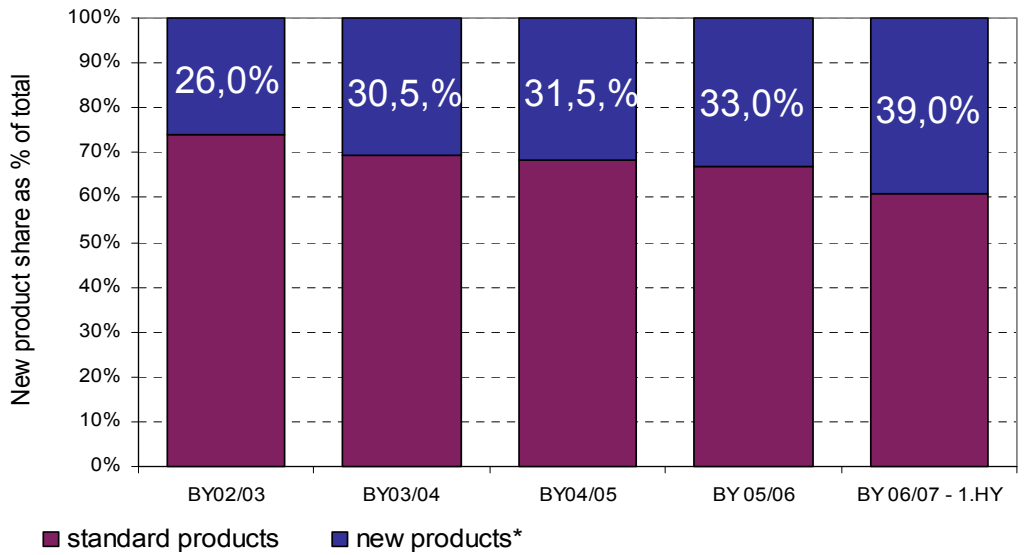
Innovation & Technology

Strong R&D and focus on new applications

- 200 inventions and 800 patents
- New LED light sources as main drivers of innovation

Key Figures

- Employees directly involved in R&D activies: 131 (average BY 2006)
- Spending in R&D activities (in % of revenues): 3,7% (BY 2006)



* New products = products not older than 3 years
Source: Internal Records

New products

Innovation & Technology

Electronics

- Fluorescent ECG for both fixed output and dimming (Designed to Cost)
- New low voltage transformer (Viper)
- Innovative new LED based Emergency lighting products

- **Magnetics**
- Focus on stabilizing business further
- Price fluctuations on the raw metrial side (copper, steel) passed on to the market with some time delay
- New product for HID outdoor applications
- New magnetic choke for Russian and Asian markets (EC 40mm)

New products

Innovation & Technology

LED

- Linear LED systems for freezer / refrigerator cabinets and shop-fitting
- Modules designed specifically for the automotive industry

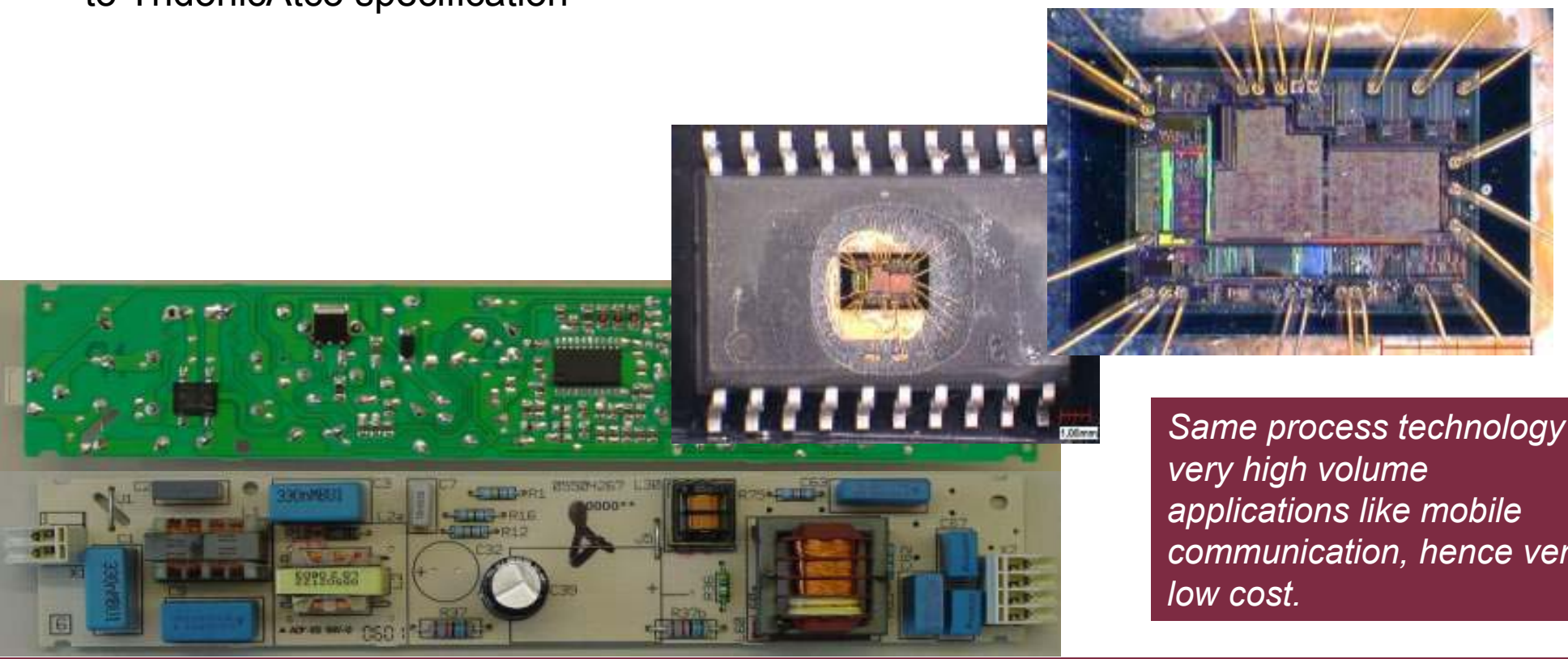
- Sidemarker in Headlamp for BMW 3 series
  SOP 03/2007
  100k units per year


- Remote Turn Indicator for Audi TT series
  SOP 04/2007
  100k units per year


- High Mounted Stop Lamp for Citroen Picasso
  SOP 04/2007
  240k units per year


Application **S**pecific **I**ntegrated **C**ircuit

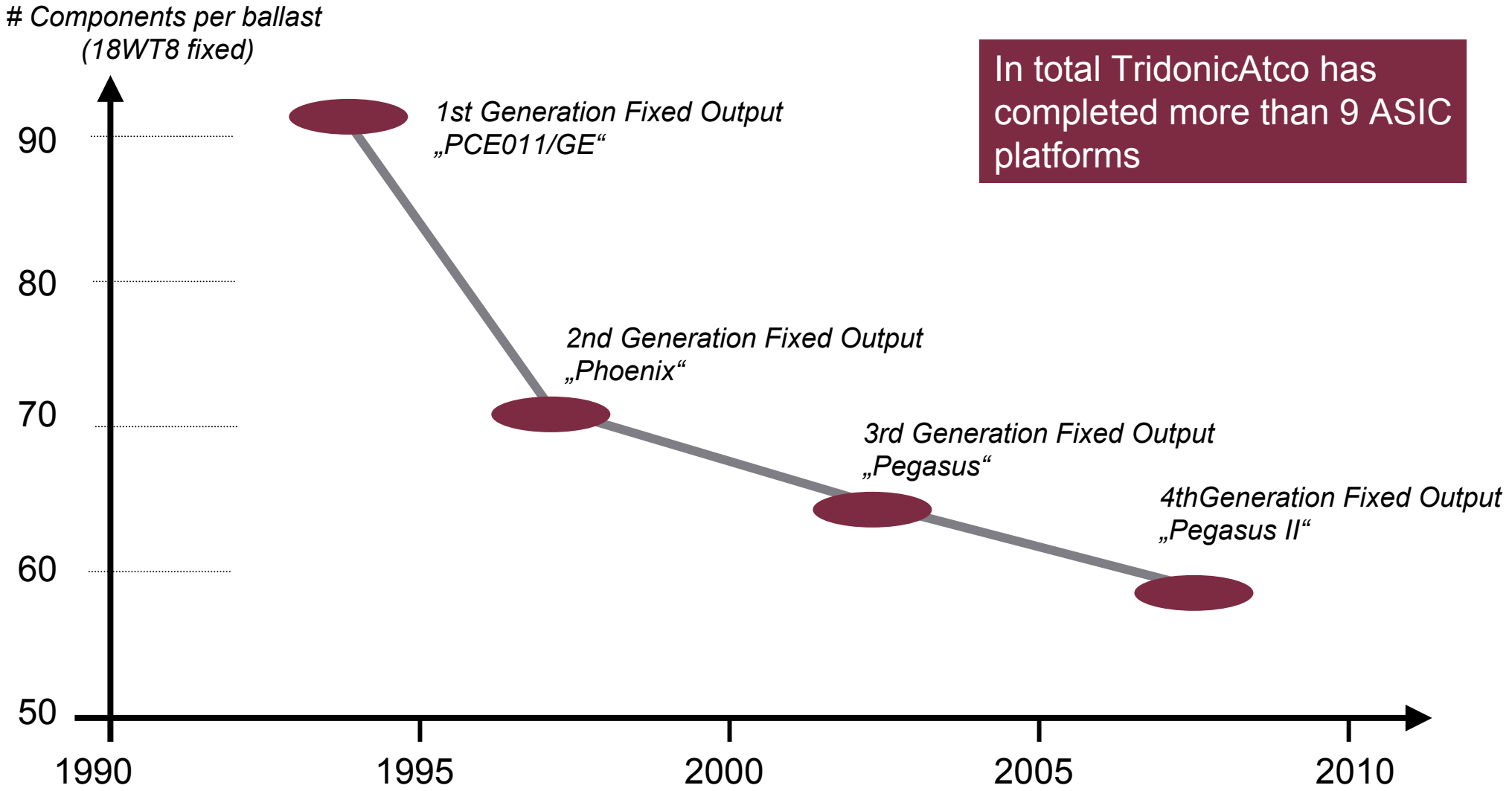
= Microelectronic chip designed and manufactured according to TridonicAtco specification



Same process technology as very high volume applications like mobile communication, hence very low cost.

TridonicAtco has more than 15 years of experience in ASICs

Innovation & Technology



In total TridonicAtco has completed more than 9 ASIC platforms

ASIC Technology enables continuous system cost reduction by design

Innovation & Technology

- **Reduced component count**
- **Large components can be made smaller due to more intelligent control methods**
- **Better manufacturing yield due to higher initial accuracy of the controlled power**
- **Better system efficiency enables the use of cheaper components**

1995

2005

Smaller component
for same function using
intelligent control

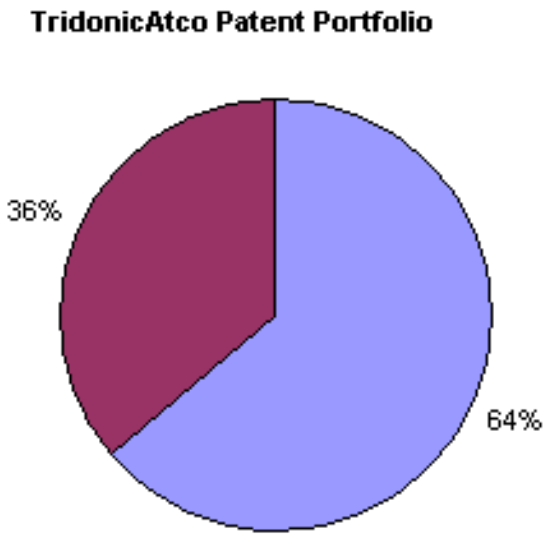
Much less components
due to integration

IP and Copy Protection

Innovation & Technology

- **TridonicAtco is industry leader in Digital Control for Lighting**
- **Wide IP protection of ASIC based solutions**
- **40% of the TridonicAtco Patent Portfolio are ASIC related**
- **1:1 copy of the products is almost impossible**
- **Roll out of ASIC technology into other product groups will substantially extend this portfolio**

Within the total number of about 150 patents about 36% are related to ASIC design topics



ASICs implement Top Reliability and Lean Manufacturing Process

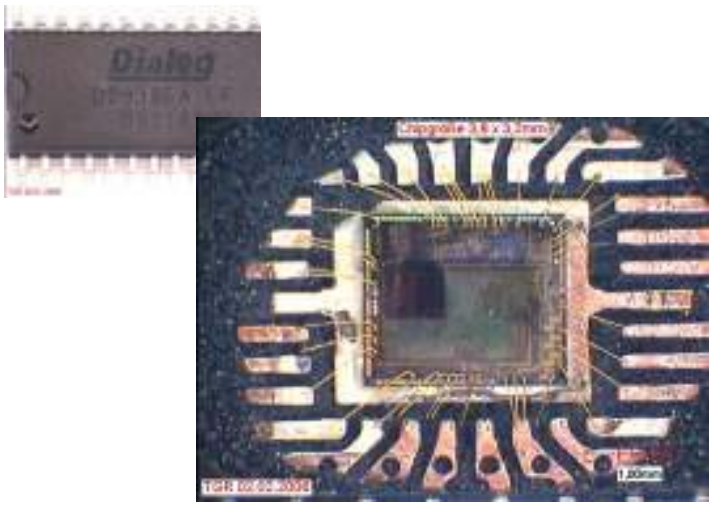
Innovation & Technology

- Cumulated application knowledge is implemented in ASIC
- Intelligent supervision of lamp and ballast function ensures robustness of ballast and longest lamp life
- Digital control sets the device function very accurately and minimizes manufacturing effort
- Guarding and protection functions ensure the correct use of the ballast

ASICs enable unique Functionality

Innovation & Technology

- One key advantage of the ASIC technology is the possibility to implement relatively complex functions without additional cost
- Control of fluorescent lamps at 1% dimming is only possible with very fast and accurate control systems
- Extended Communication enables new services and features (FOX, Corridor etc)

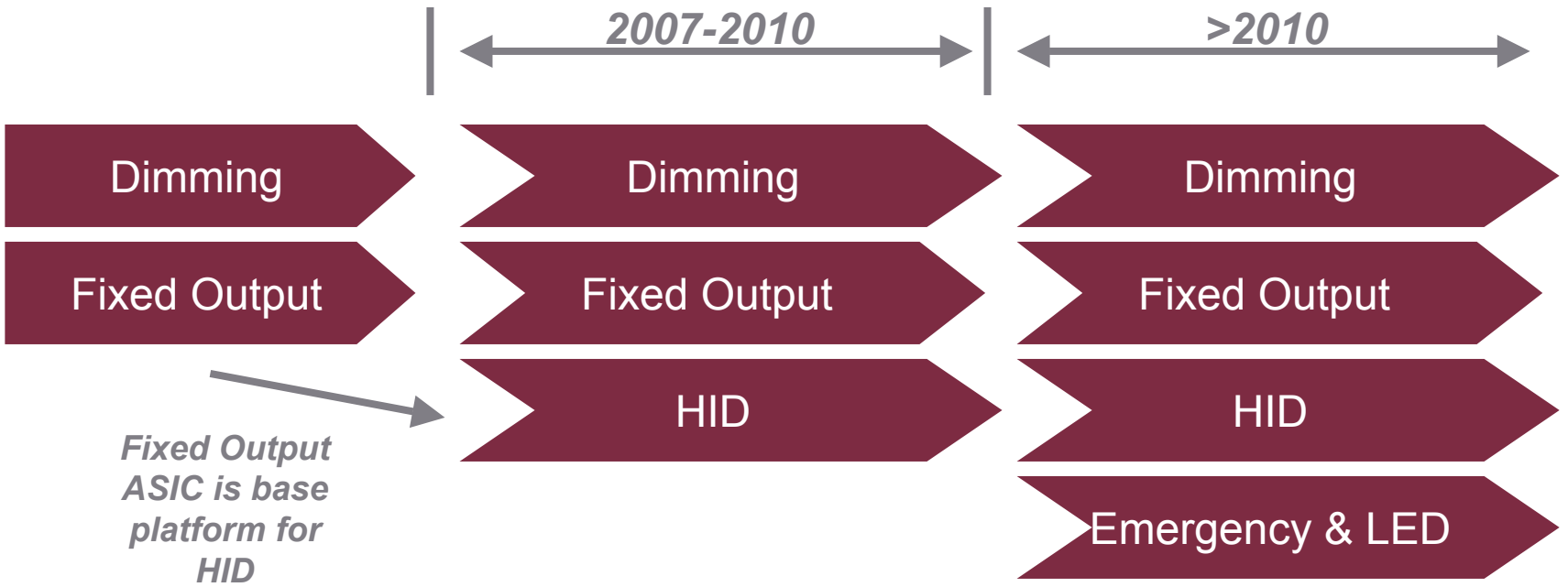


The heart of our dimming ballasts is a chip which contains in a 3x4mm die size a microcontroller with all memories and signal processing modules for a high end digital dimming ballast.

Future perspective: Roll out of technology in all high volume product segments

Innovation & Technology

- **ASIC technology is only profitable for high volume**
- **Cost of development has been substantially reduced by reuse of existing modules and a greatly improved design methodology**
- **Based on this technology foundation non recurring expenditure for new projects is lower, and time to market is shorter**



TridonicAtco has recently been successful in acquiring a range of prestigious projects involving highly advanced user requirements

Innovation & Technology - Reference projects

Rondo I / Poland
Award winning project

Project Description

- 40 Storey office tower
- 10 Storey ancillary building

The WinDim@net lighting management system controls 715 DALI circuits with 5681 digital dimmable ballasts, 1116 dimmable transformers and 2089 digital emergency units.

About WinDim@net

The WinDim@net lighting management system provides an excellent platform for intelligent, cost-effective and user-friendly control of complex wide-ranging lighting systems. The unique feature here is the combination of switching, dimming and emergency lighting functionality in a single system.

TridonicAtco has recently been successful in acquiring a range of prestigious projects involving highly advanced user requirements

Innovation & Technology - Reference projects

Renault-LED
LED Signage project

Project Description

- Signage for 1200 Renault branches worldwide
- To be completed in 2008

Some 150,000 LED P511-2 FU chains operated by 15,000 LED K240 and LED K220 electronic converters will have been implemented by completion of this project.

About powerLED chains

The flexible and robust powerLED chains are particularly suitable for use in illuminated advertising where long life, zero maintenance and maximum economy are crucial factors. Thanks to their protective coating, powerLED chains are suitable for both indoor and outdoor applications.

TridonicAtco has recently been successful in acquiring a range of prestigious projects involving highly advanced user requirements

Innovation & Technology - Reference projects

Westpac
World largest DALI project

Project Description

- 35 storey office tower
- Floor space of over 74,000m^2

In all there are 20,500 dimmable PCA EXCEL one4all, PCA ECO and PC PRO fixed output ECGs. In addition, some 8,000 TE one4all electronic transformers for low-voltage halogen lamps are in operation.
A total of 286 DALI lines were installed, as well as numerous DALI relays and other controllers from the TridonicAtco portfolio.

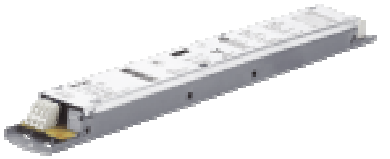
About DALI

The Digital Addressable Lighting Interface (DALI) is a digital protocol for the controlling of lighting in buildings, and is designed for scene-based lighting control systems. With just a few low-cost components, DALI offers intelligent room-based lighting management with high funtionality, low wiring costs and user-friendly operation

Energy efficiency and cost of ownership as main drivers of innovation

Further Trends for Innovation

- Energy saving **is getting more important**
  - e.g. CELMA in Europe
  - e.g. Planned ban on incandescant lamps in California and Australia
- Sensitivity for ecological and economical issues **(environmental pollution ; price of raw material, etc.)**
- Maintenance and operation cost
  - lighting controls solutions (intelligent lighting management) are requested more often
- New Lamp technology **(operation with electronic control gear only)**
  - T5 16mm fluorescent lamp
  - HID ceramic lamps
- Light emitting diodes
  - LEDs are used in design and general lighting applications because of increased efficiency and superior reliability



Conclusions

TridonicAtco Division

Key factors for our success:

- Unique know how regarding technology and applications
- Worldwide (except America) net of supply chains, distribution hubs and sales offices
- Favourable market environment through high demand on energy efficient solutions