

Optical Storage

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Contents

- **Profile Optical Storage**
- **Market outlook and Philips Optical Storage ambition**
- **Optical Storage strategy**
 - product roadmap
 - customer orientation
 - business model
- **Summary**

Philips Track Record in Optical Storage

- Long history in R&D, resulting in strong patent portfolio
- Leader in standards setting from CD to DVD ReWritable
- Instrumental in opening up Data- and Consumer Recordable and ReWritable markets

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Optical Storage

Profile	
Activities	CD and DVD components and modules
Focus	Recordable and ReWritable applications
Revenues 2000 (projected)	€1.4 b
Design /Development	600 persons

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Optical Storage Application Market Segments



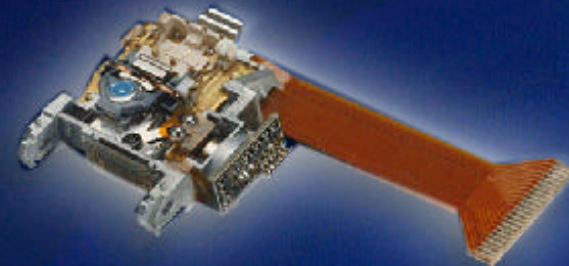
Consumer



Data



Automotive



Optical Sub-Systems

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Optical Storage Product Portfolio

Applications

Data					
Automotive					
Consumer					
Optical sub-systems					
	Optical Sub-Systems	Mechanism	Loader	Engine	Drive



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Optical Storage - largest customer accounts 2001



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Philips Optical Storage

Main Production and Development Centers



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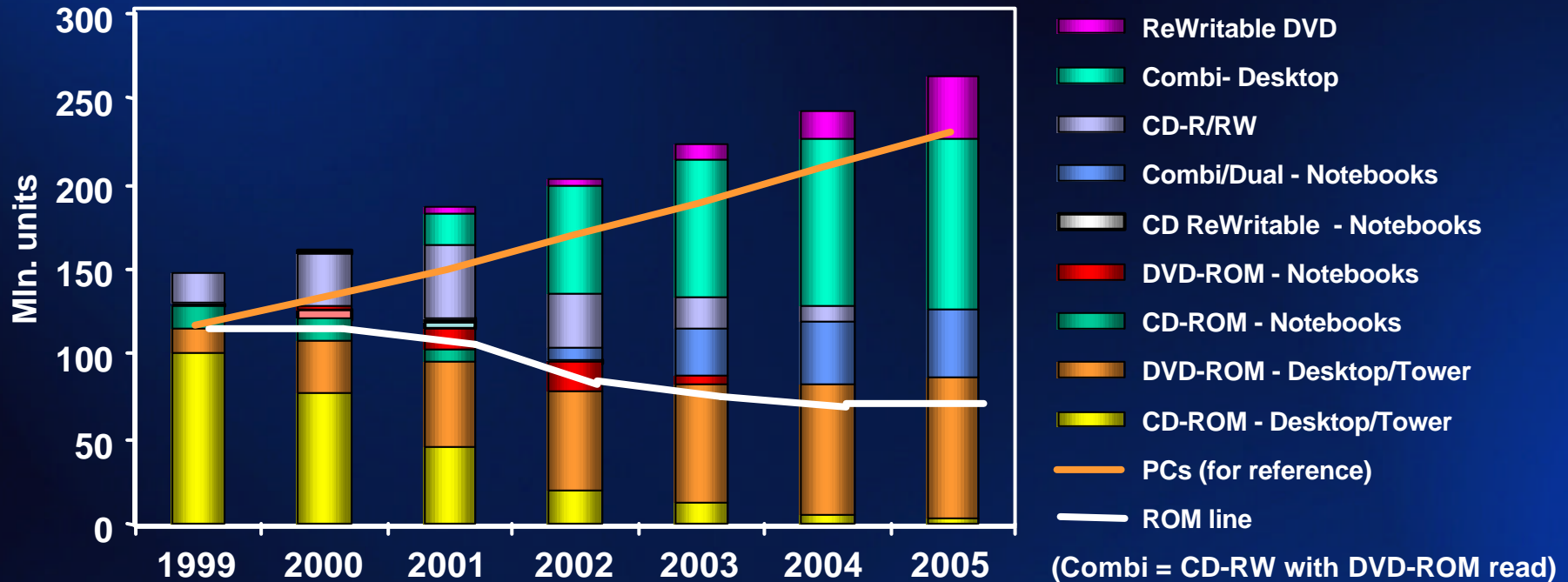
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Total PC related CD/DVD markets in units

CAGR for Combi desktop is **141 %** for 2000-2005

CAGR for total rewritable market is **38%** for 2000-2005



(Sources: BI estimates based on IDC, BL RW, BL ROM)

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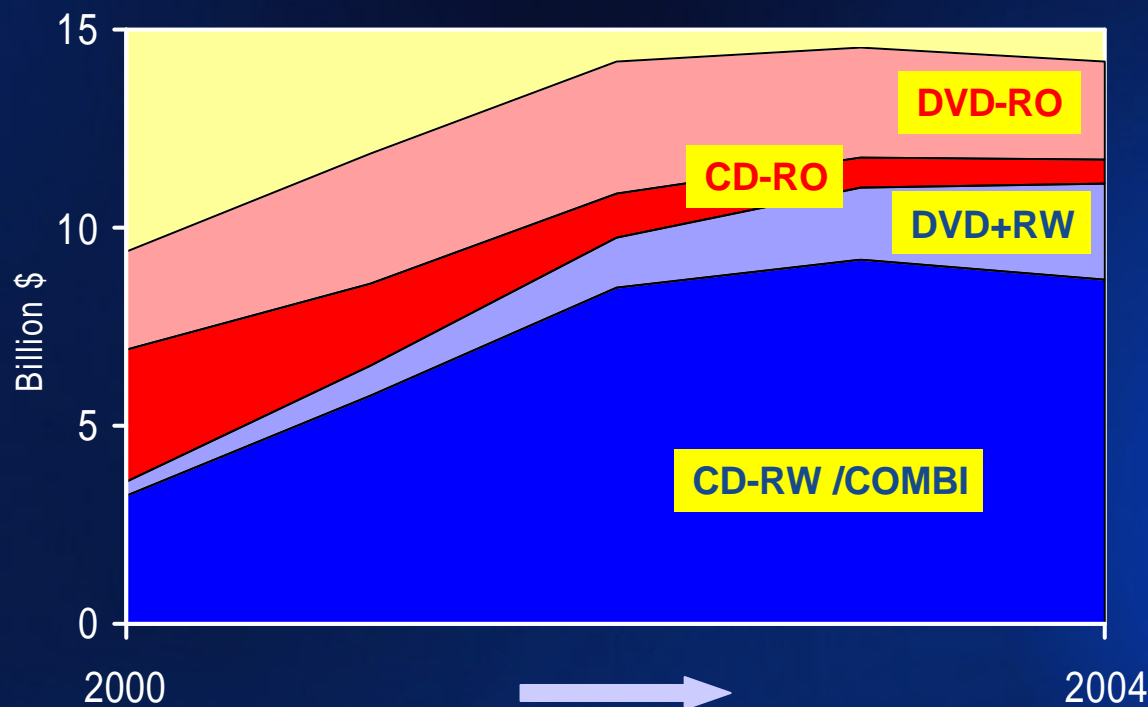


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Optical Storage Data and Consumer Market

Trends

- Shift from Read Only (RO) to ReWritable (RW)
- Shift from CD to DVD



Combi = CD-RW with DVD-ROM read

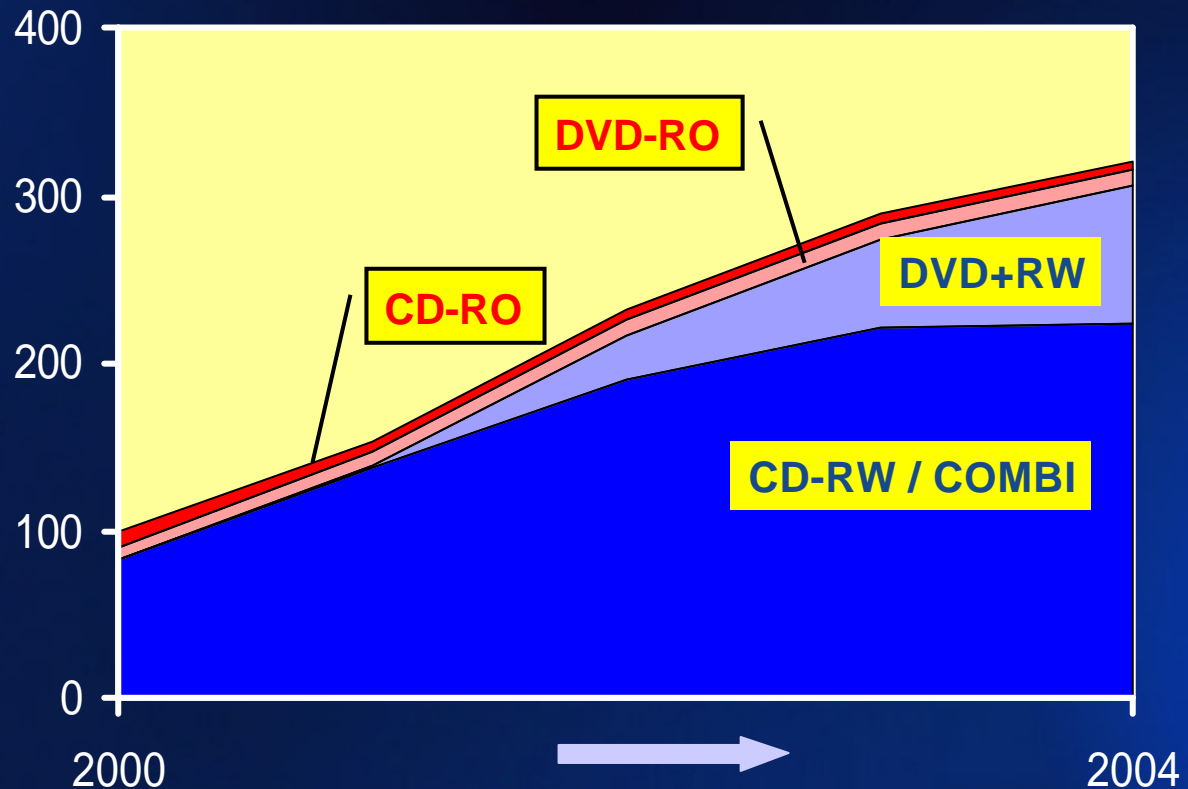
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Philips Turnover in Data and Consumer Market

- Optical Storage will leverage leading position in CD-RW ...
- by focusing on new rewritable applications and standards...
- to outperform average market growth



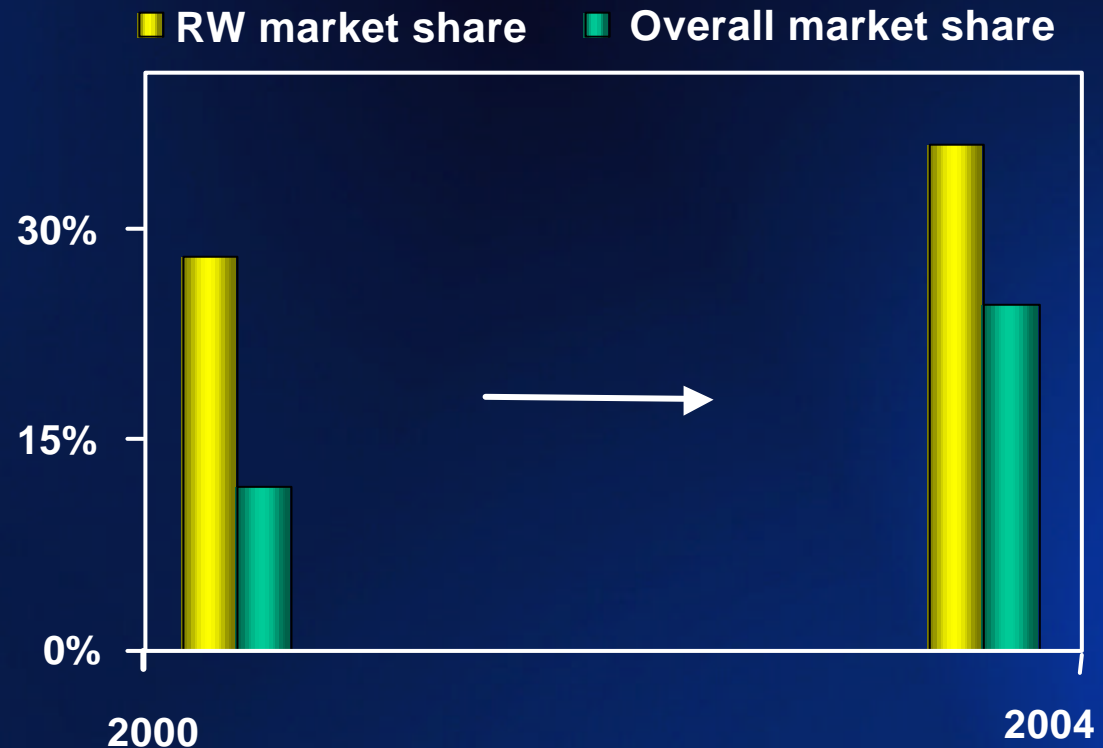
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Market Share Development

- By gradual increase of market share in the ReWritable (RW) market, we aim to double overall market share from 12% to 25% in 2004



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Optical Storage in Automotive

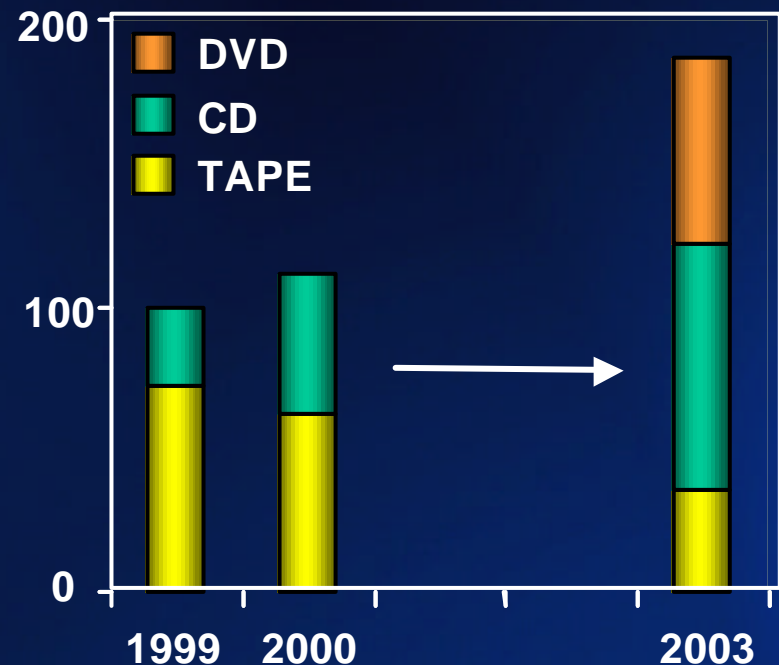
Strong Growth in Automotive Playback Modules

1999 - 2003:

- 17% CAGR of turnover in Automotive Playback Modules

while

- 53% CAGR of optical storage applications in Automotive Playback Modules



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Characteristics of the Optical Storage industry

- High innovation rate
- Rapid volume ramp up
- New Technology Standards settings by partnering

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Optical Storage Strategic Direction

Key Building Blocks

- Focus on developing leading products for the Data segment (CD-RW) and Automotive segment (CD and DVD) to retain our market leadership
- Concerted approach with selected partners to establish R/RW standards for Audio/Video consumer applications.
- Increase volume flexibility by outsourcing through selective partnerships
- Ongoing development of core technologies Optical Pickup Units, Modules, Drives and provide System integration. Take full advantage of relationship with Philips Semiconductors.

Ambition is strong profitable growth

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Six company group initiative for DVD+RW



SONY.

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RICOH



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Manufacturing and Supply Chain Expansion Strategy

- **High growth issues:**
 - Repetitive installation of new production lines
 - Ongoing optimization of outsourcing versus in-house production
 - Suppliers base
 - Web-based Logistics and IT Tools
- **Strategy to expand in Asia/Pacific using experienced contract manufacturers to maximize capital turnover and volume flexibility.**
- **Example : Ionics in the Philippines.**



Optical Storage product roadmap

- **Continuous upgrading CD Recordable for Audio Market**
- **DVD Video upgrading for Video market**
- **“X- game “ (performance and volume) CD R/W for Data Market**
- **Combi product (CD-RW/DVD-ROM) for Data Market**
- **DVD Recorder DVD+R/W for Data/ Video market**
- **Future Video recorder market: DVR (Blue laser technology)**
- **Product portfolio focus on high growth, high value added market segments**

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Optical Storage customer focus strategy

Top 10 PC-OEM manufacturers; Top 5 in After-market

PC OEM line-fit growing fast !

Top 10

- Compaq
- Dell
- IBM
- Hewlett-Packard
- Packard Bell/NEC
- Gateway
- Fujitsu-Siemens
- Toshiba
- Apple
- Acer

Ambition is 35% total Market share

After-market retail stable

Top 5

- HP
- Philips
- Acer
- Iomega
- Creative

Ambition is 25% total market share

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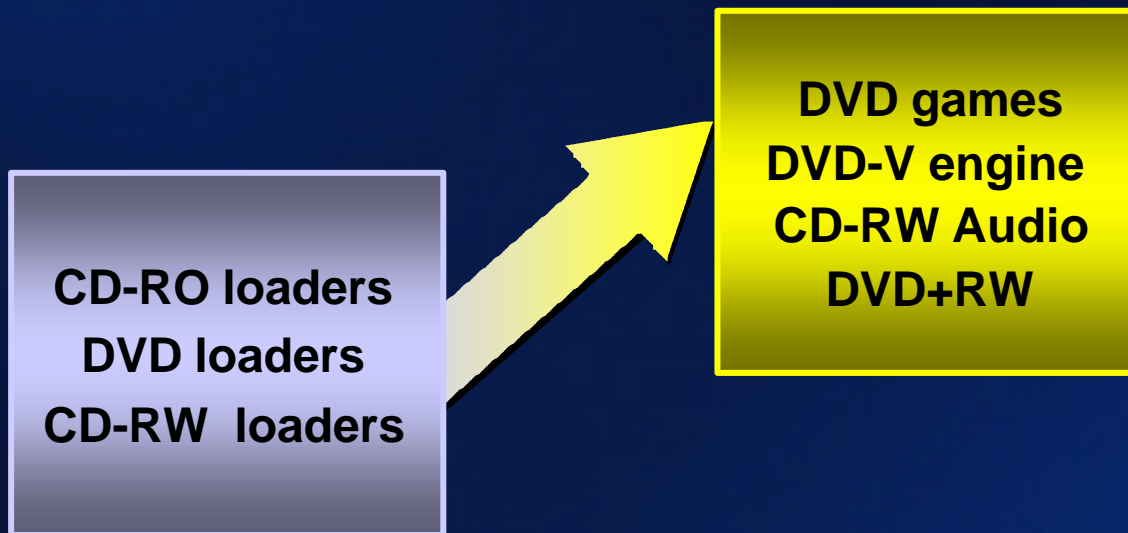


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Customer portfolio

Consumer

- **Growth / New market segments**
 - Structural shift in value chain towards engine supply and higher value-added product portfolio



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Key Customer Strategy

Consumer

- **Focus on high growth, high value add products using recordable- and rewritable technology: CD-R, CD-RW.**
- **Build Leading position in digital video recording: DVD+RW.**
- **Maintain position of high volume supplier and cost leader in high volume Read-only market of CD, VCD and DVD. Further broadening of customer base.**
- **Expand into Active Entertainment market.**

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Customer Portfolio

Automotive

Our customers include

- Visteon
- Robert Bosch / Blaupunkt
- Delphi Automotive Systems
- VDO / Mannesmann
- Daimler Chrysler Huntsville Electronics
- Johnson Controls Inc.
- Siemens AT
- Magneti Marelli
- Becker Automotive Systems
- Grundig

**Our customer base represents more than 80%
of the total OEM automotive world market
for telematics and infotainment**

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Key Customer Strategy

Automotive

- **High level of Customer intimacy and long term relationship**
 - outstanding product quality and delivery performance
 - technology leadership and design-in support
- **Continue long term business relationships with the main automotive OEM customers, by alignment of product / technology roadmaps and co-development.**

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In Summary...

- **The Rewritable and Recordable market will see a CAGR of over 30% over the coming years - and capture by far the most value**
- **Philips Optical Storage is currently well positioned in both the Data-, Consumer-R/RW ,and Automotive market**
- **Based on present leadership position and ambitious product roadmap, we aim to double our overall market share in the next coming years**

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