



元太科技工業股份有限公司  
E INK HOLDINGS INC.



# Company Presentation

December 2010



## Safe Harbor Notice

*E Ink Holdings' statement of its current expectations are forward-looking statements subject to significant risks and uncertainties. Actual results may differ materially from those contained in any forward-looking statements.*



# Milestones

*E Ink Holdings is years ahead of competition in the EPD space*

- 1992**    **Founded by Taiwan's leading paper making and printing group YFY and is the 1st TFT-LCD company in Taiwan**
- 2004**    **Listed on Taiwan OTC**
- 2005**    **Acquired EPD business from Philips**
- 2008**    **Acquired Hydix (Korea) to expand capacity**
- 2009**    **Acquired E Ink Corporation (USA) to integrate the supply chain**

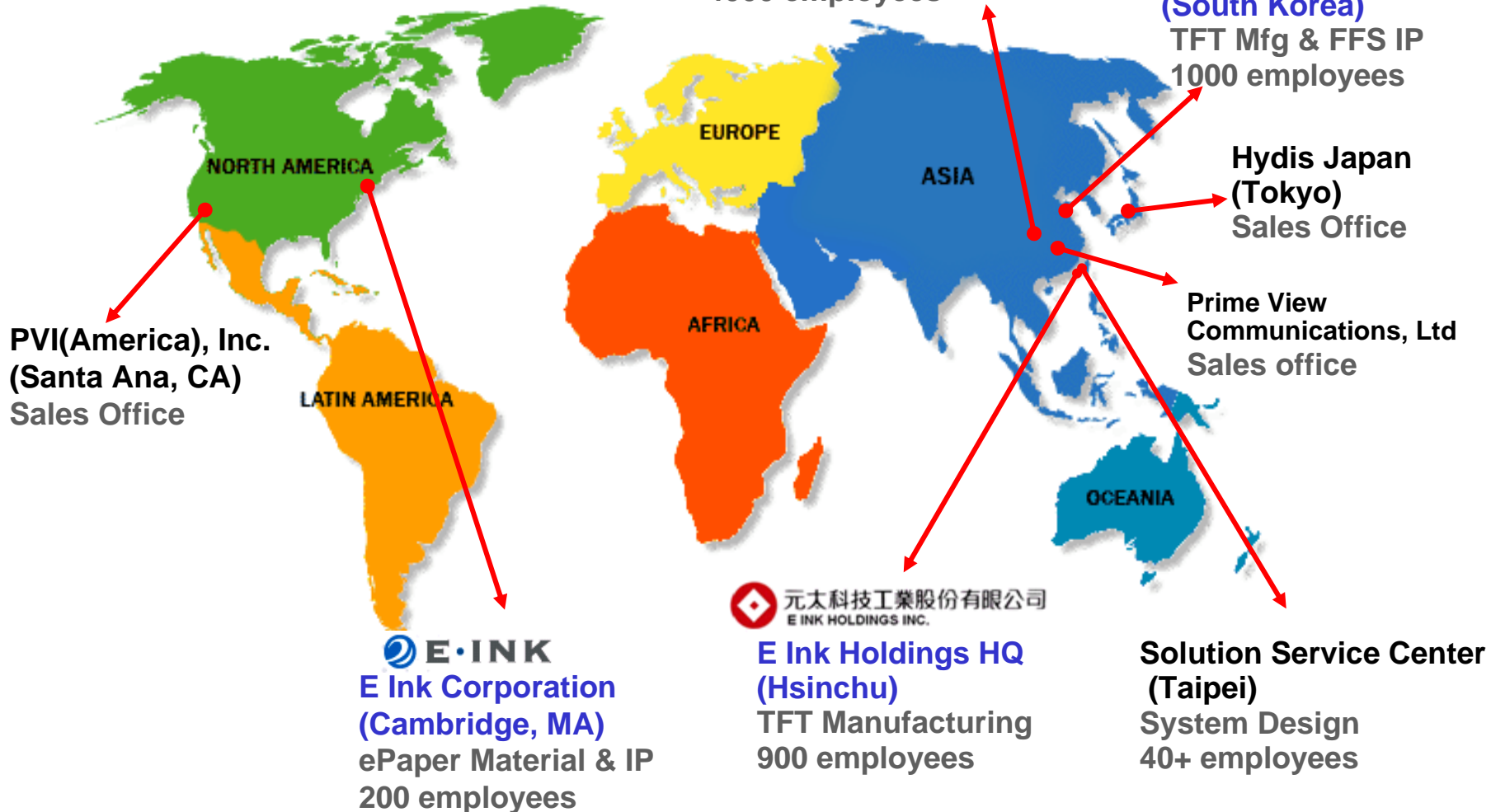
Founded in 1997 based on research started at the MIT Media Lab, E Ink Corporation is the leader in electronic paper display materials and intellectual property. E Ink has a strong patent portfolio and has commercialized many different forms of "Electronic Paper" solutions over the past ten years.



# Worldwide Locations

*Further integration to lower cost and support growth*

- Market Cap: US\$ 1.8 Billion
- Revenue: US\$500 Million (1Q-3Q 2010)





# Key benefits of EPD

*Highly Innovative & Eco Friendly Technology*

## Readability

- Innovative digital reading experience – **Paper-like**
- No eye strain
- Read fast from any angle
- Sunlight readable – no shade required

## Portability

- Thin – so eBooks can be smaller than regular books
- Lightweight – like newspaper, unlike laptop
- Compact – a library in your pocket!

## Power Saving

- **No backlight** – uses natural light, like paper
- **Bi-stable** – leave power cord at home!
- Ultra long battery life

up to 14,800  
page turns  
(about 40  
books)

E Ink Holdings aims to provide the world's best reading experience



# Leading market position

*With blue-chip customers and product leadership*

**Solid relationship with the heavyweights in the e-reader industry**

amazon.com



Bambook 锦书



汉王 Hanvon



BARNES & NOBLE



acer

SONY



Bookeen

FOUNDER 方正

edo

iriver

enTourage eDGe™

kobo  
EREADER



南開津科  
CREATIVE & WEALTHY



**Strong E Ink Brand Presence in the market**

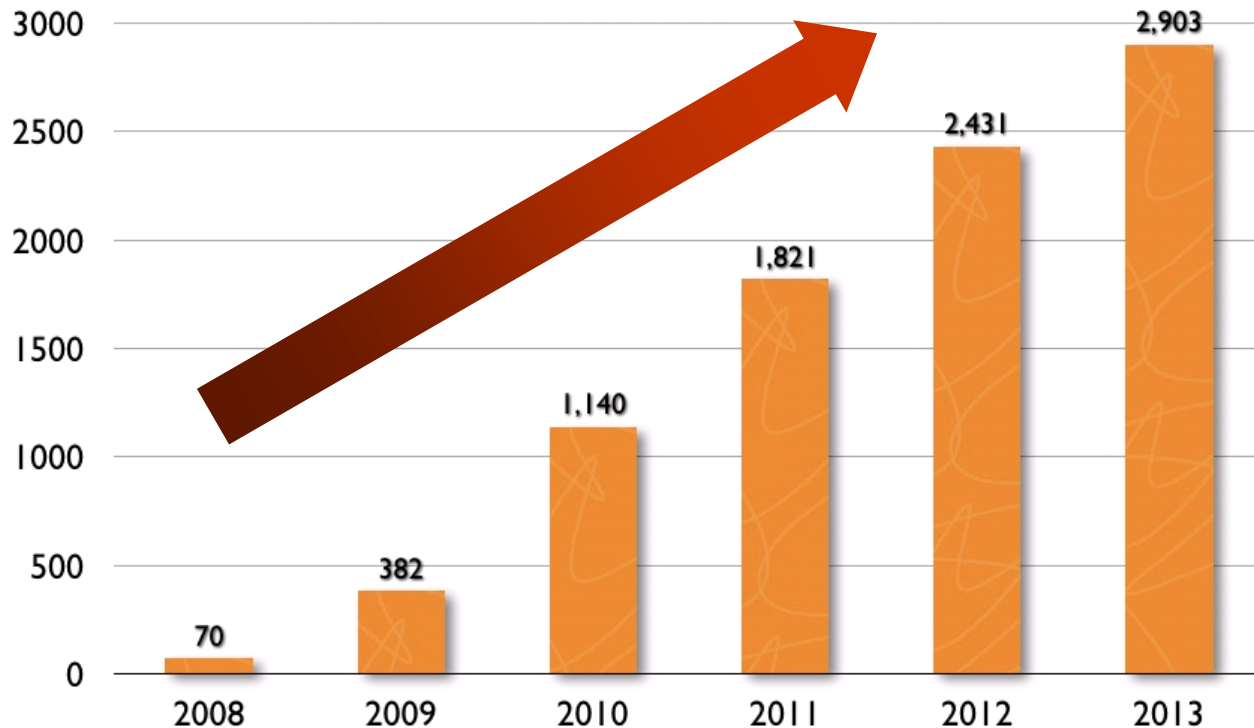


# The market opportunity is huge for ePaper

*Significant EPD growth and sales increase*

## Global Reflective eBook Reader Shipment Estimate

Unit: per 10,000 units



Source: DIGITIMES 2010



"...in 10 years ...there will be no newspapers, no magazines that are delivered in paper form. Everything gets delivered in an electronic form."

- Steve Ballmer, Microsoft CEO



"Our students still learn from instructional materials in formats made possible by Gutenberg's printing press. It's nonsensical — and expensive"

- Gov. Schwarzenegger  
California digital textbook initiative

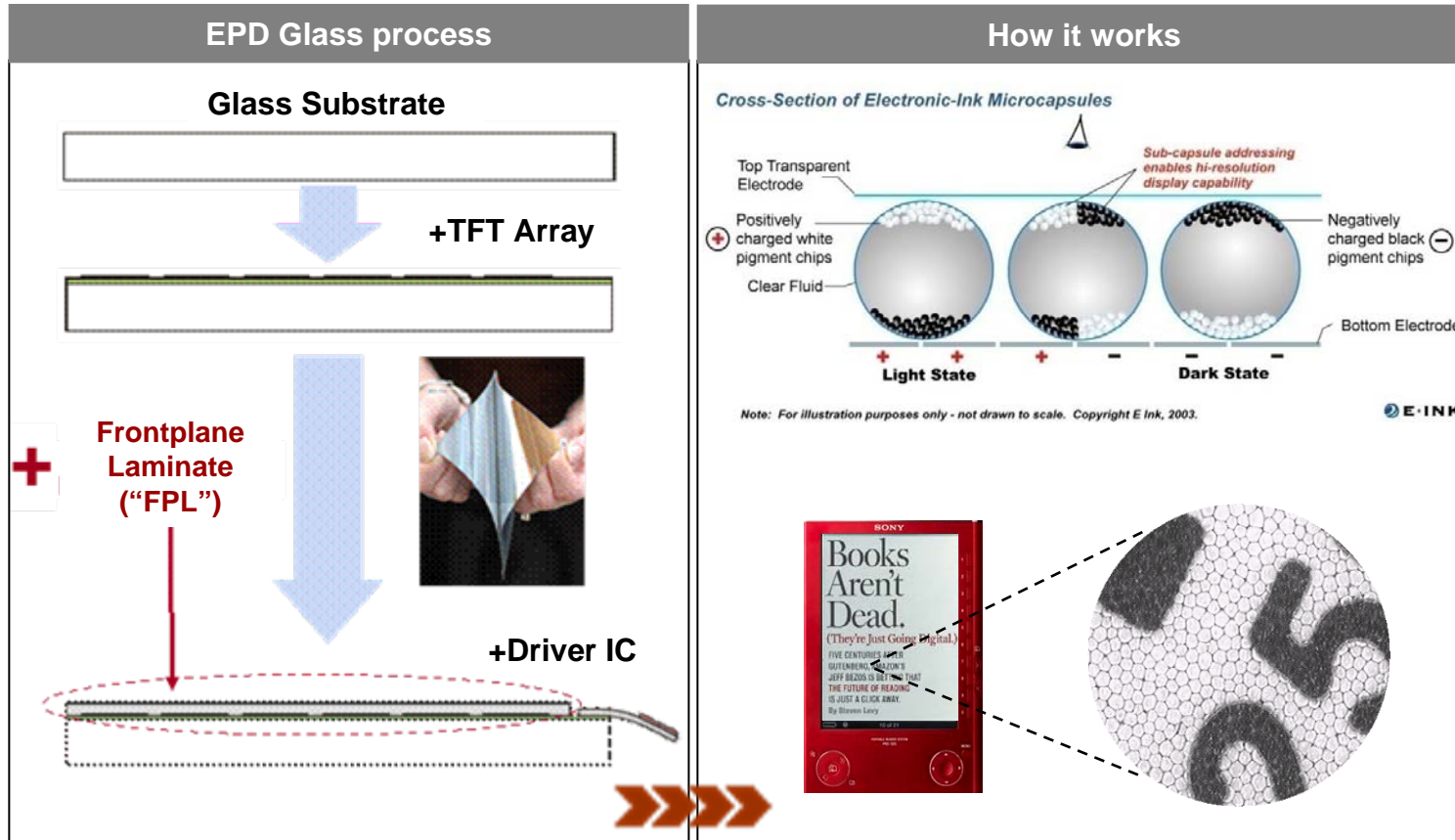




# E Ink technology overview

Reflective technology with high whiteness and contrast ratio

Technology based on moving black and white particles in microcapsules using electric charges



Paper-like

Ultra-Low Power

Thin & Flexible

E Ink is the leading electrophoretic technology

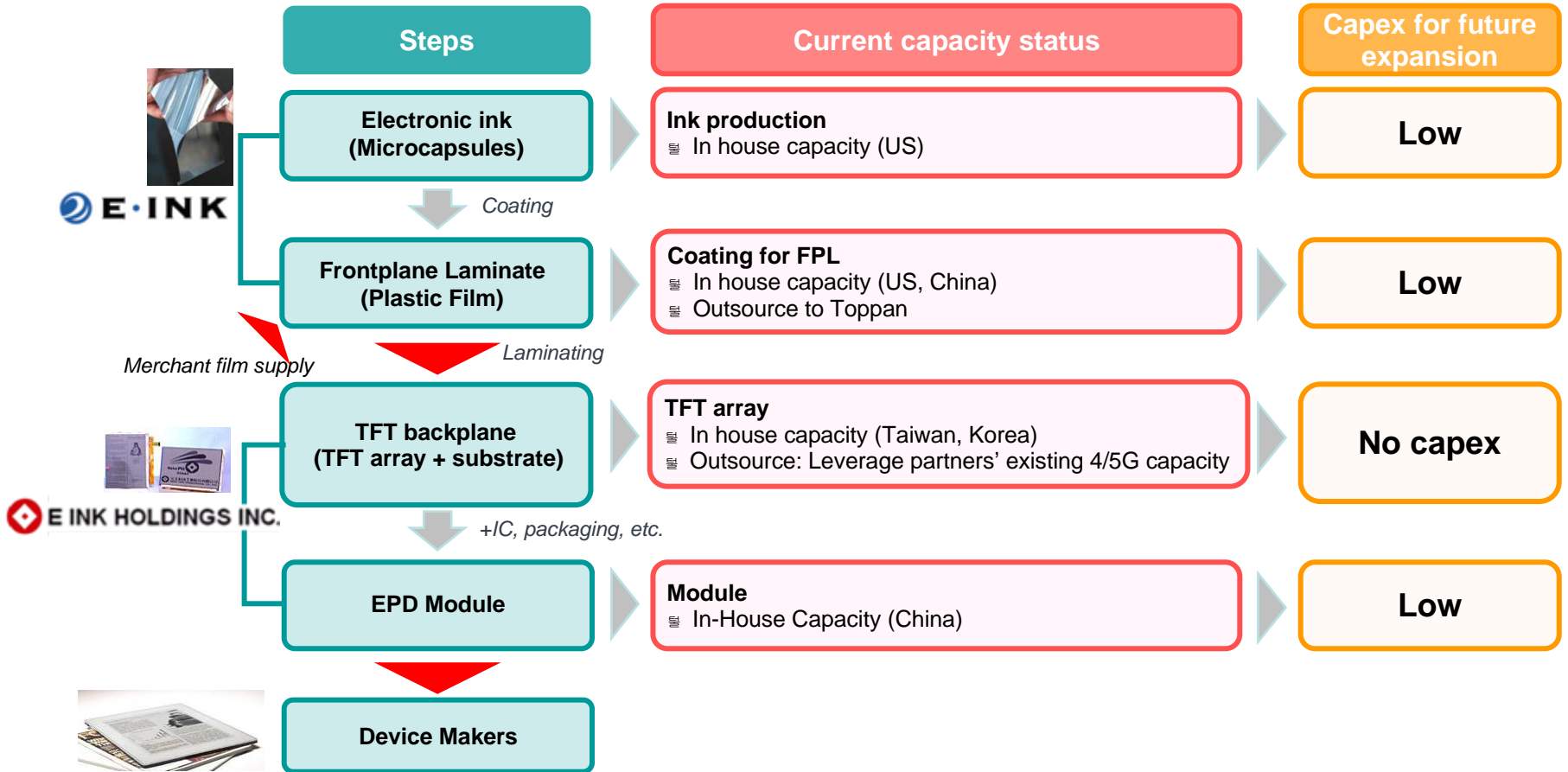




# Streamlined EPD supply chain

*Expedite capacity expansion to meet market demand*

## Integrated ePaper display supply chain



Streamlined EPD supply chain allows growth on limited capex



# Strong R&D capabilities

*Rich R&D pipeline and patent portfolio*

FFS technology (“Fringe Field Switching”)

- ✓ Sunlight readable
- ✓ Wide viewing angle
- ✓ Power saving



## ElH & Hydys

- ✓ TFT-LCD Patents
- ✓ ~3,000+ issued
- ✓ ~2,000+ pending



- ✓ TFT-EPD Patents
- ✓ 160+ US patents
- ✓ 70+ foreign issued patents

- ✓ Research began at MIT Media Lab
- ✓ Electrophoretic technology

EPD technology leader

We have a rich patent portfolio to support and protect our leadership position



# Technology roadmap

*New products rolling out*

## Color Technology Roadmap

High Contrast Ink

Full Color



E-Textbook



Full color module



E-Magazine

## Touch Technology Roadmap

Resistive

Capacitive

Digitizer

## Flexible Technology Roadmap

Unbreakable

Flexible



E-Tag



E-Magazine



E-Signage



E-Map

Planning

Future/R&D

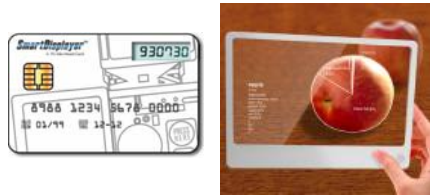
Future technology roadmap based on innovation: Color, Touch, Flexible



# Further EPD applications

## Application alternatives beyond publishing

The versatile properties of EPDs allow information to be printed on almost any surface



- Architectural (Smart Glass)
- Defense / Security
- Rewriteable Films / Printing
- Out-Licensing



### Smart Surface



- Changeable Keypads
- In-Store Signage
- Outdoor Signage
- Indicators
- Smart Labels
- Mobile Device Accessories

### Mobile Information



### Publishing

- eBooks
- eNewspapers
- eTextbooks

### Others

- Mobile Phones
- Mobile Internet Devices
- Handheld Data Collection
- GPS
- Secondary Displays
- Tablet PCs
- eNotepads

EPD can be applied to various applications in addition to publishing



# 3Q10 Consolidated Financial

(NT\$Million)	1Q10		2Q10		3Q10		1Q10~3Q10	
<b>Net Sales</b>	5,012	100.0%	5,169	100.0%	5,273	100.0%	15,454	100.0%
<b>Gross Profit</b>	1,488	29.7%	2,005	38.8%	1,648	31.3%	5,141	33.3%
<b>Operating Expense</b>	843	16.8%	959	18.6%	844	16.0%	2,646	17.1%
<b>R&amp;D Expense</b>	365	7.3%	459	8.9%	312	5.9%	1,136	7.4%
<b>Operating Profit</b>	644	12.8%	1,046	20.2%	804	15.2%	2,494	16.1%
<b>Non-op items</b>	310	6.2%	(25)	-0.5%	188	3.6%	472	3.1%
<b>Pre-tax Income(Loss)</b>	954	19.0%	1,021	19.8%	992	18.8%	2,967	19.2%
<b>Tax</b>	251	5.0%	334	6.5%	328	6.2%	913	5.9%
<b>Net Income</b>	703	14.0%	687	13.3%	664	12.6%	2,054	13.3%
<b>E Ink Net income</b>	<b>704</b>	<b>14.0%</b>	<b>700</b>	<b>13.5%</b>	<b>709</b>	<b>13.4%</b>	<b>2,113</b>	<b>13.7%</b>
<b>Minority Interest</b>	(1)	0.0%	(13)	-0.3%	(45)	-0.9%	(59)	-0.4%
<b>EPS</b>	0.70		0.65		0.66		2.01	



元太科技工業股份有限公司  
E INK HOLDINGS INC.



**Thank You**

**E Ink Holdings (EIH)**





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E INK HOLDINGS INC.



# 公司簡介

November 2010



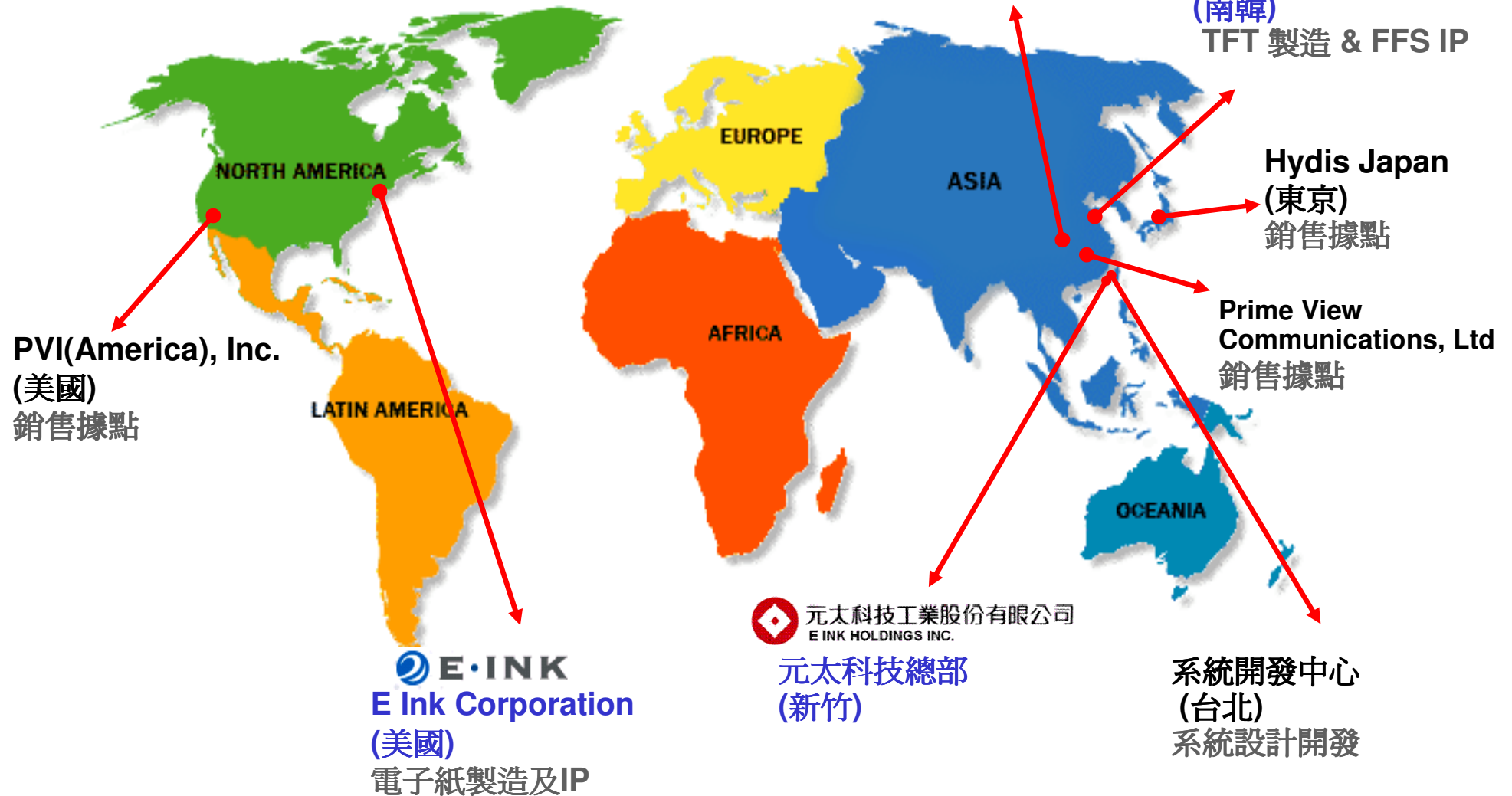
## 里程碑

- 1992 由台灣第一大造紙印刷企業, 永豐餘造紙成立, 為台灣第一家TFT-LCD公司
- 2004 於台灣上櫃
- 2005 併購 Philips集團之電子紙部門
- 2008 併購韓國 Hydix Technologies
- 2009 併購美國 E Ink Corporation, 垂直整合電子紙產業.



# 全球據點

- 市值: US\$ 1.8 Billion
- 合併營收: US\$500 Million (1Q-3Q 2010)





# 電子紙的優點與特性

## 接近紙本 閱讀經驗

- 不會閃爍，眼睛不易疲累
  - 清晰明亮，對比度高
  - 無視角限制
  - 陽光下可清楚閱讀，不會反光
- 

## 方便攜帶

- 體積薄，耐用
  - 重量輕
  - 不易碎
  - 可於戶外閱讀
- 

## 超省電

- 不需要背光源
  - 雙穩態 (Bi-stable)
  - 超省電：單次充電可翻 1萬5千頁以上(約40本書)
-

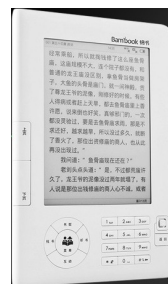


# 在電子書市場佔有領先地位

amazon.com®



Bambook 锦书



汉王 Hanvon



BARNES & NOBLE



acer

SONY



Bookeen

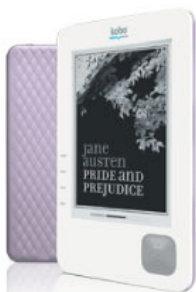
FOUNDER 方正

edon

Iriver

enTourage eDGe™

kobo  
EREADER



南開津科  
CREATIVE & WEALTHY

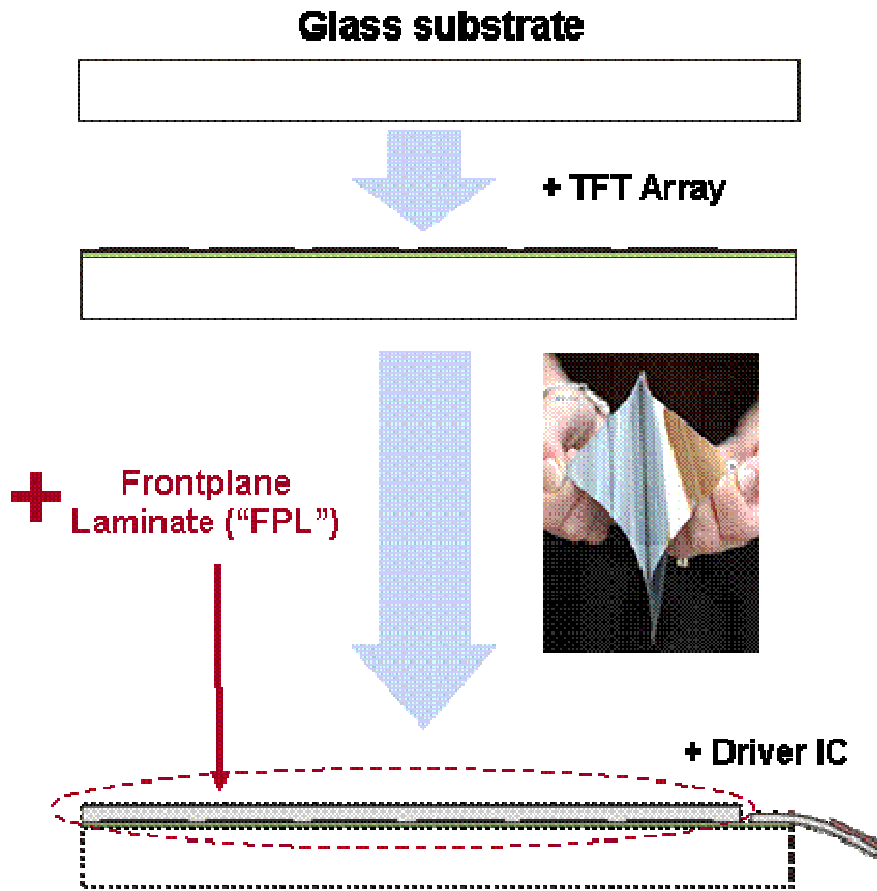






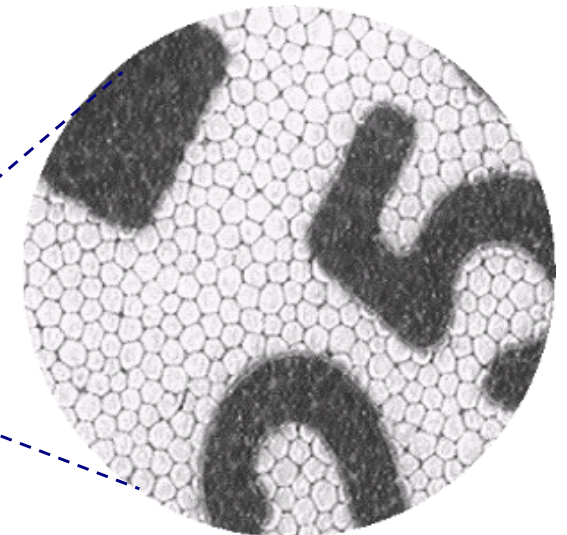
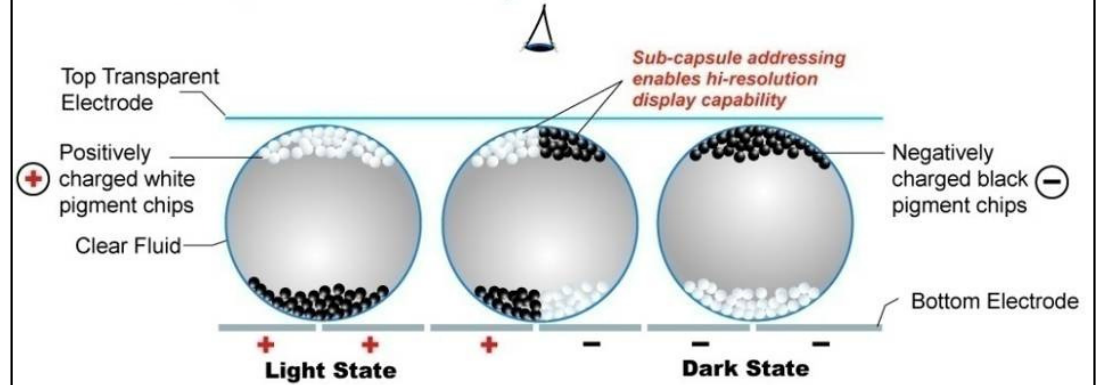
# E Ink 電子墨水技術及原理

## 電子紙顯示器 (EPD) 製程



## 電子墨水顯示技術及原理

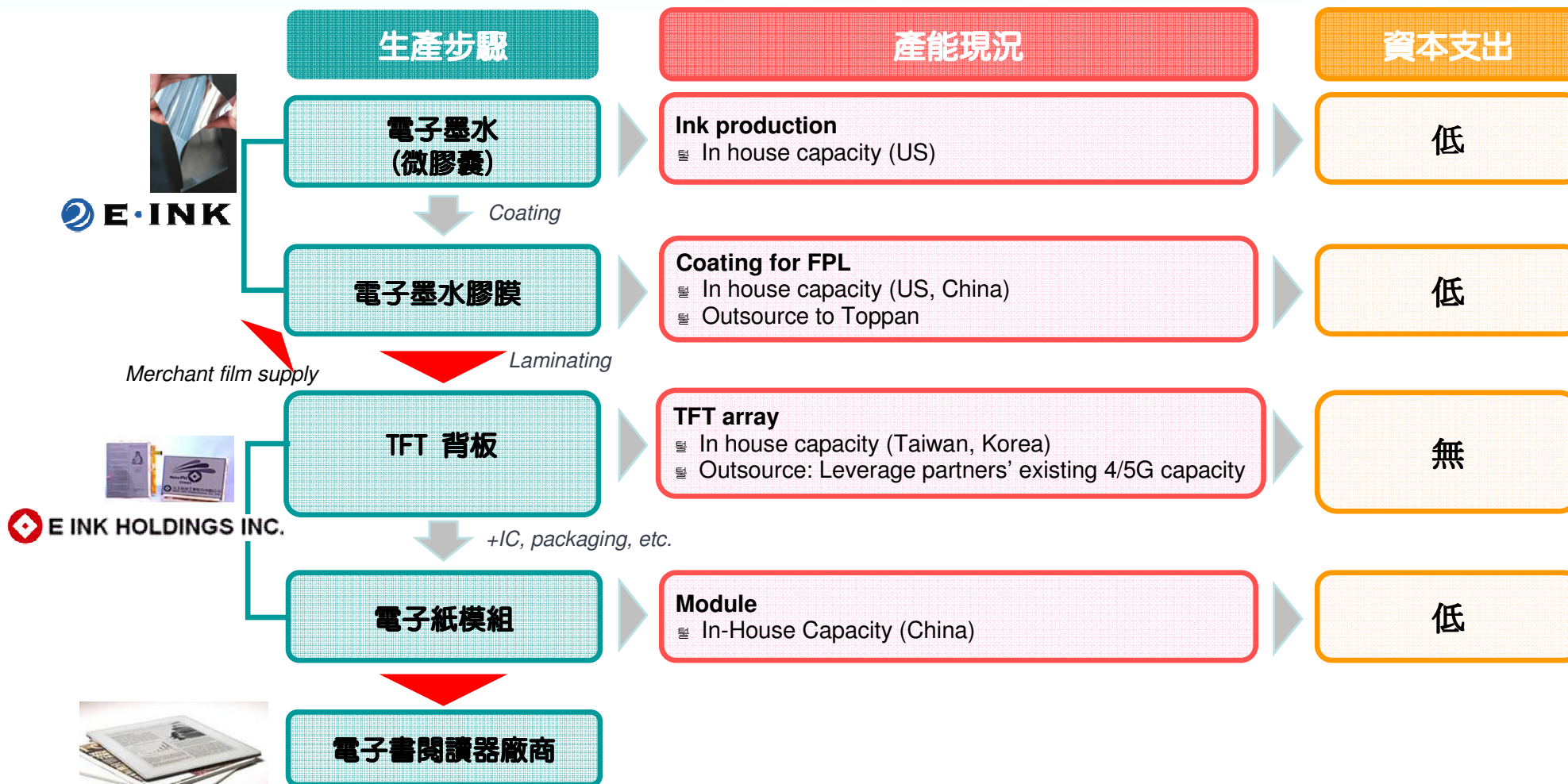
Cross-Section of Electronic-Ink Microcapsules







# 垂直整合電子紙生產鏈





# 堅強的研發能力及完善的IP

FFS technology (“Fringe Field Switching”)

- ✓ 陽光下可視
- ✓ 廣視角
- ✓ 省電



## EIH & Hydys

- ✓ TFT-LCD Patents
- ✓ ~3,000+ issued
- ✓ ~2,000+ pending



- ✓ TFT-EPD Patents
- ✓ 160+ US patents
- ✓ 70+ foreign issued patents

- ✓ 研究始於 MIT Media Lab
- ✓ 電泳式電子墨水技術

領導電子址技術



# E Ink 電子紙新產品

彩色電子紙

高對比黑白電子紙

全彩



E-Textbook



Full color module



E-Magazine

觸控電子紙

電阻式觸控

電容式觸控

電磁式觸控

可撓式電子紙

不易碎

可撓式



E-Tag



E-Magazine



E-Signage



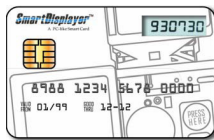
E-Map

Planning

Future/R&D



# 電子紙的未來應用



- Architectural (Smart Glass)
- Defense / Security
- Rewriteable Films / Printing
- Out-Licensing



## Smart Surface



- Changeable Keypads
- In-Store Signage
- Outdoor Signage
- Indicators
- Smart Labels
- Mobile Device Accessories

## Mobile Information



## Publishing

- eBooks
- eNewspapers
- eTextbooks

## Others

- Mobile Phones
- Mobile Internet Devices
- Handheld Data Collection
- GPS
- Secondary Displays
- Tablet PCs
- eNotepads



# 3Q10合併財務報表

(NT\$百萬元)	1Q10		2Q10		3Q10		2010年1-9月	
銷貨淨額	5,012	100.0%	5,169	100.0%	5,273	100.0%	15,454	100.0%
銷貨毛利	1,488	29.7%	2,005	38.8%	1,648	31.3%	5,141	33.3%
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