



#### **WIN Semiconductors**

Wireless • Information • Networking

**Company Presentation** 

**June 2016** 

#### **Safe Harbor Notice**



- This presentation contains certain forward-looking statements that are based on current business expectations and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.
- Except as required by law, we undertake no obligation to update any forward looking statements, whether as a result of new information, future events or otherwise.

#### **Outline**

- ✓ Market Outlook
- ✓ Technology
- ✓ The WIN Strategy
- ✓ Financial Review & Guidance
- ✓ Q&A



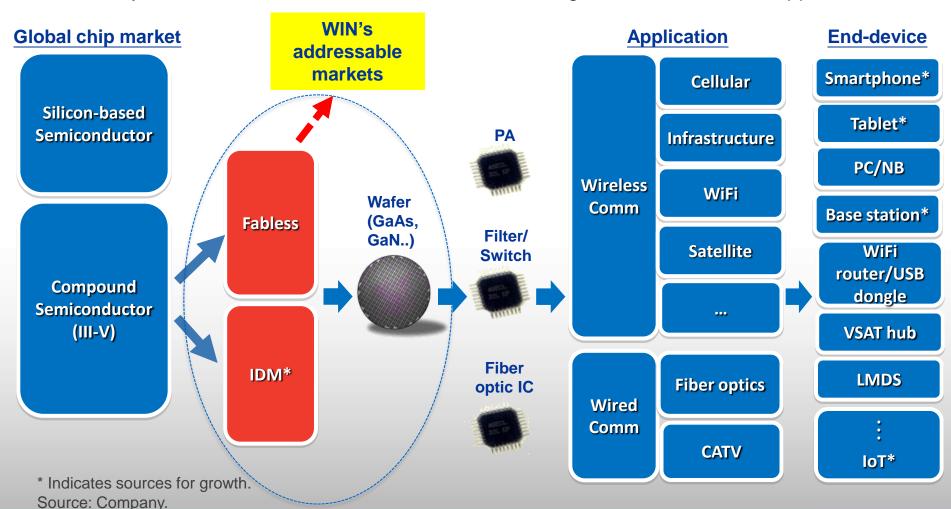


### **Market Outlook**

#### **WIN's Market Positioning**



 WIN positions itself as a dedicated compound semiconductor wafer foundry offering foundry works to fabless and IDM customers who target in communication applications.



## **Summary of Growth Momentum (2016)**









**4G Smartphones** 

**IoT Gateway** 

**5G Network** 

#### **Short Term:**

- Fast growth of 4G adoption (>65% of cellular terminals)
- Rapid increase of 5/6-mode smartphones
- 802.11ac dual band MIMO

#### **Mid-Term:**

- LTE-A widely adopted Carrier Aggregation (CA capable)
- Wi-Fi & 11ac MIMO for mid/low-end smartphones
- Strong infrastructure growth



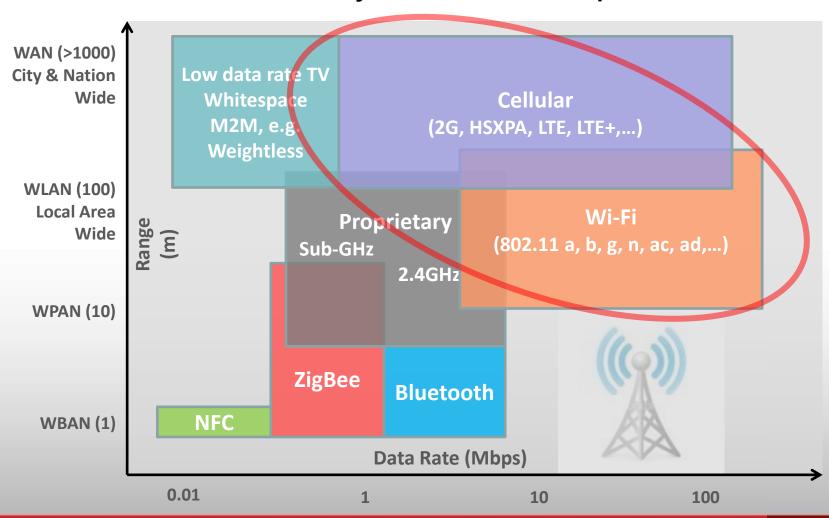
#### **Long Term:**

- Pre-5G launch (e.g. through broadband satellite, dense cells, ...)
  - 5G launch with massive IoT deployment

# **GaAs Opportunities in IoT Wireless Connectivity**



#### **Today's Wireless Landscape**

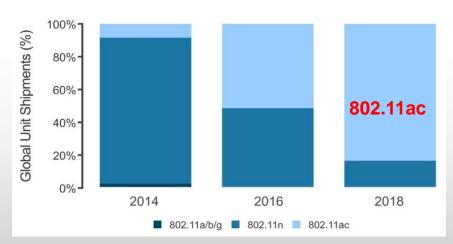


#### 802.11ac Router Growth Trend (2014-18)



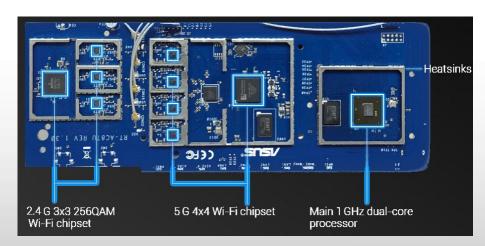
- Higher performance requirement in 802.11ac is a great opportunity for GaAs devices.
- Dual band (2GHz&5GHz) and MIMO requirements represent volume opportunity for GaAs components.
- Same trend is happening in high-end smartphones.
- Low/mid-end smartphones will be the next to adopt 11ac dual bands and MIMO.

#### 802.11ac access points expected to dominate the global WLAN market by 2018



Source: Infonetics Research, Wireless LAN Equipment and WiFi Phones, Quarterly Market Share, Size, and Forecasts, May 2014

#### 802.11ac Dual-Band Wi-Fi Router with MIMO

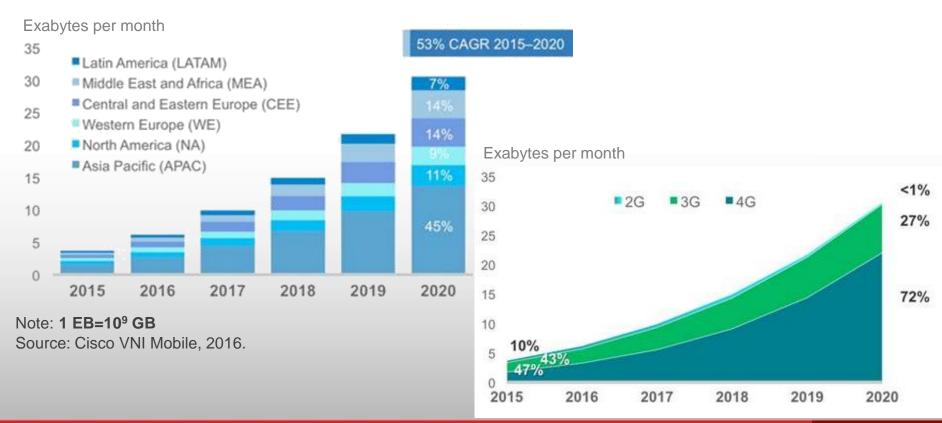


Source: ASUS's Company Website

#### **Rising Demand for Mobile Data**



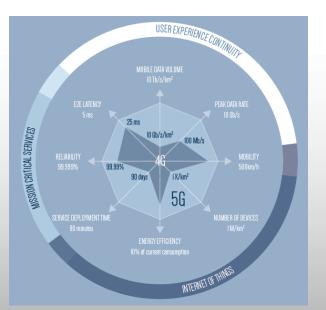
- Thanks to the constant bandwidth upgrades driven by mobile devices and 4G/LTE, demand for mobile data is rising rapidly where mobile video consumes the most bandwidth and grows the fastest for mobile data (the <u>Big Data trend</u>).
- Cisco forecasts 30.6 Exabytes per month of mobile data traffic by 2020.

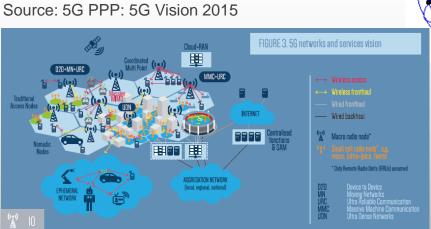


#### Long Term Momentum (2018~)



- Pre-5G launch: Broadband internet service through satellite communication (>10GHz) as an example.
- 5G launch using significant higher frequency bands.
- 6GHz ~ 80GHz, small cells, massive MIMO, phase array, ... etc.

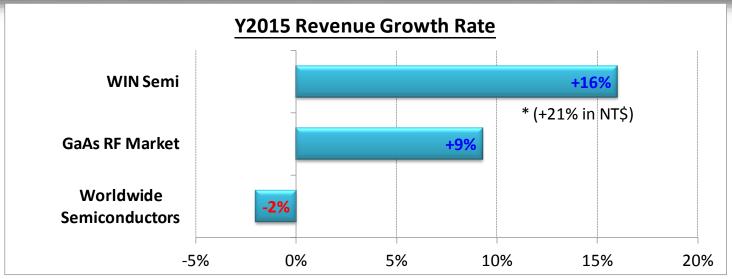


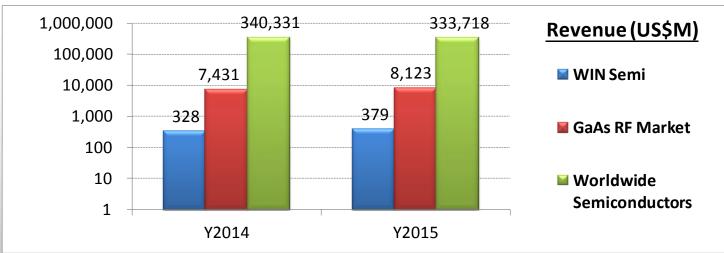


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#### **Semiconductor Revenue Growth**







Source: (1) Worldwide Semiconductors Revenue, Gartner, Jan. 2016.

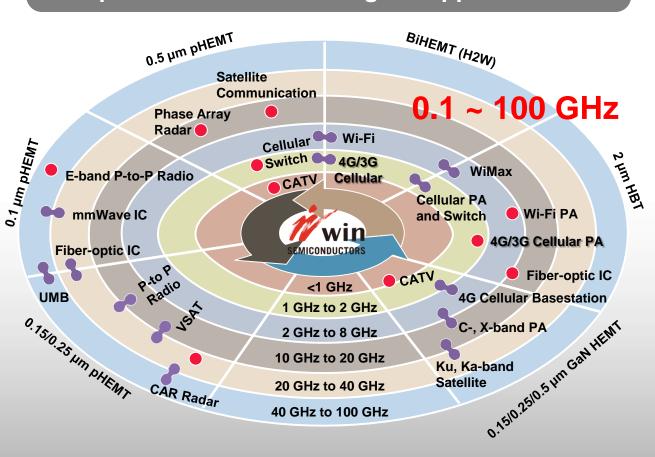
(2) RF GaAs Device Revenue Reaches a New High in 2015, Strategy Analytics, Apr. 2016.



## **Technology**

## Broad Portfolio of Advanced Technologies win

The most comprehensive technology portfolio in industry enables customers to develop optimized products for a wide range of applications

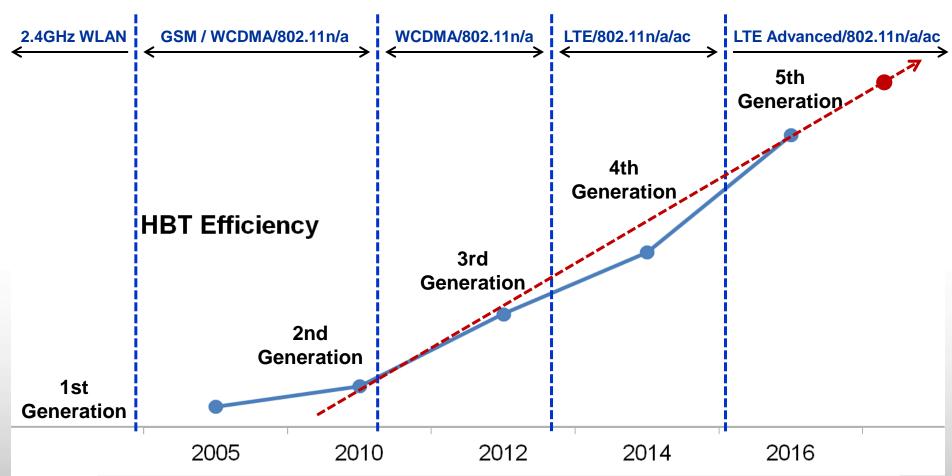


- Dominant market share for high-performance HBT used in LTE PAs
- ✓ Leading BiHEMT technology for advanced integrated FEM
- First and only foundry worldwide to commercially develop 0.1µm pHEMT on 6" GaAs wafer
- ✓ Industry leading 0.15–0.25µm pHEMT technology
- ✓ Supports broad range of products such as PAs (from 50MHz–100GHz), switches, and fiber optic IC
- ✓ Developing GaN for high power devices (4G base station)

#### **WIN's HBT PA Generation**



#### For Cellular & WiFi



WIN's HBT efficiency shows significant improved every generation.

www.winfoundry.com

#### WIN's Technology Advantage



Unlike Si semiconductor technology in the digital world focuses on gate/line dimension shrinkage, the RF technology roadmap focuses on the following perspectives:

#### Better Performance

GaAs vs CMOS

✓ Higher power efficiency → Longer battery power



✓ Better linearity → Faster speed



✓ Lower noise → Better quality of signal



Higher Functionality Integration

WIN provides all of the GaAs solution for the above!

**WIN Property** 

#### **Integrated FEM Solution**

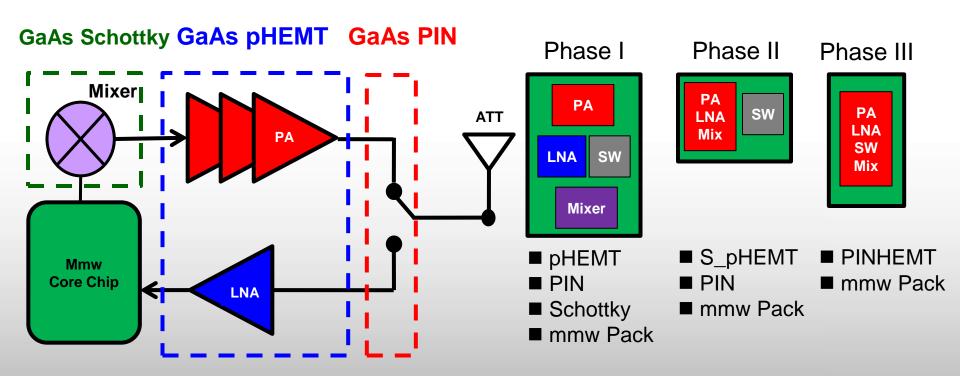


#### **Integrated GaAs in mmw**



#### For High Frequency Products

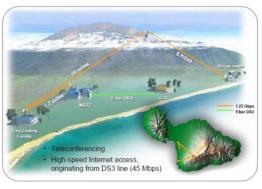
GaAs Key Components vs. Solution of Integrated GaAs Chips.



### WIN 0.25/0.15/0.10μm pHEMT Inside!







Ultra high frequency semiconductor technology provider!





Satellite Communications, Fiber optic Communication, Wireless infrastructure ...









#### The WIN Strategy



Invest in capacity to capture demand growth and improve margins through product remix

Scale & Technology
Leadership

Cost & Customer
Diversification

Invest in technologies to maintain competitive edge and sustain leadership

Leverage on technology and manufacture expertise to lift efficiency and drive cost down Grow and acquire new customers in existing and new markets to diversify customer base

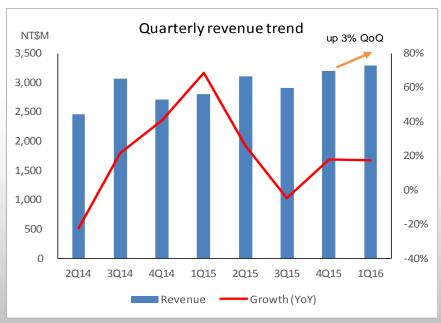


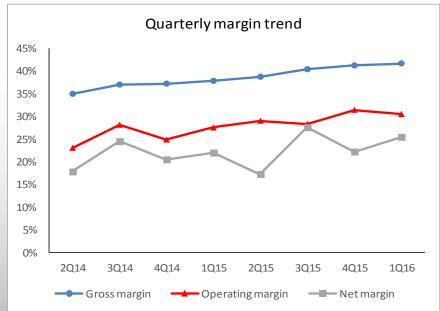
### **Financial Review & Guidance**

## **Revenue & Margin Trend**



- 1Q16 revenue was up 3% QoQ, mainly driven by the better-than-expected demand from the smartphone market. The 17% YoY revenue growth reflected the increasing overall demand for the RF industry.
- 1Q16 GM improved 0.4pp sequentially to a record high of 41.7%, primarily benefiting from continued high utilization and improving product mix. OPM decreased 0.9pp to 30.6%, but was still the second highest in our history.





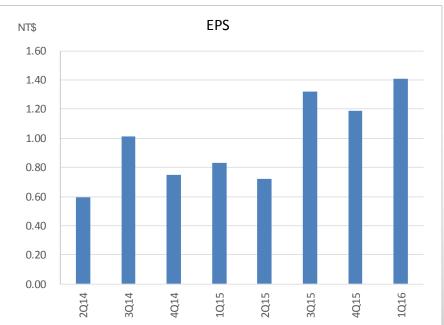
Source: company.

## **Earnings Trend**



- 1Q16 net profit reached a record high of NT\$839mn, which increased 18% QoQ and 36% YoY. The solid growth was attributable to revenue growth and GM improvement.
- 1Q16 EPS came in at NT\$1.41, compared to NT\$1.19 in 4Q15.



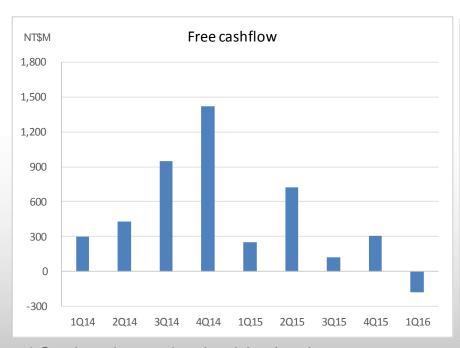


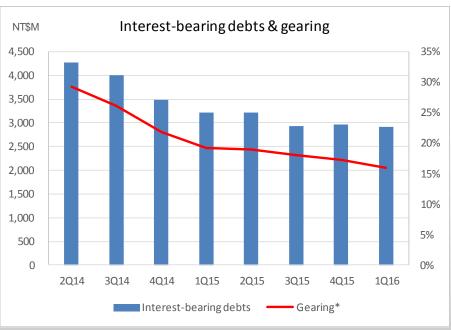
Source: company.

## **FCF & Gearing Trend**



 Free cash flow was negative in 1Q16, mainly due to the capex for continued capacity expansion. However, interest-bearing debts were maintained at below NT\$3bn and gearings declined to a historical low since listing, reinforcing our solid balance sheet position.

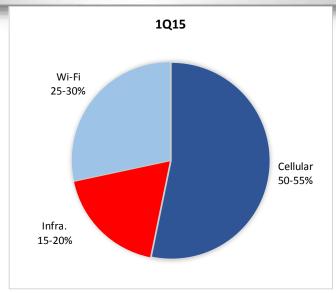


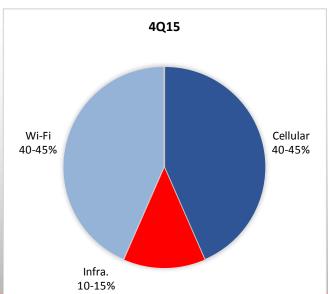


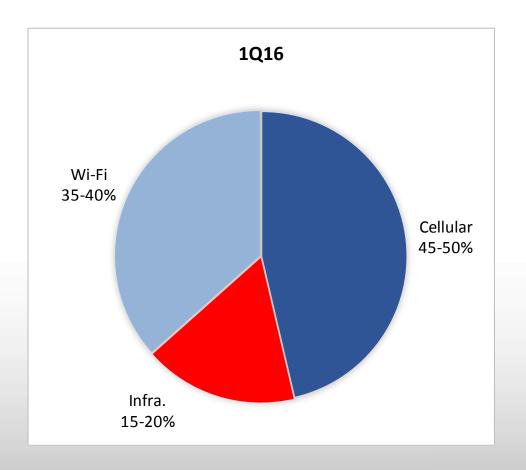
<sup>\*</sup> Gearing = interest-bearing debts / equity Source: company.

#### **Product Mix**









Source: company.

#### **2Q16 Guidance**



- We expect 2Q16 revenue to grow by high single digit QoQ.
- We expect 2Q16 depreciation expenses to be higher than 1Q16, which will impact 2Q16 gross margin by 1-2 pp.

## **Q & A**

For more information regarding WIN <a href="https://www.winfoudry.com">www.winfoudry.com</a>

For all inquiries, suggestions, and comments ir@winfoundry.com





## **Appendix – 1Q'16 Financial Results**

# **Consolidated Statements of Comprehensive Income - Quarterly**



			/			
Unit: NTD Million	1Q'15	4Q'15	1Q'16 (unaudited)	QoQ	YoY	
Net revenue	2,807	3,197	3,292	+3%	+17%	
Gross profit	1,063	1,319	1,374	+4%	+29%	
Gross margin (%)	37.9%	41.3%	41.7%			
Operating expenses	(288)	(312)	(367)	+18%	+27%	
Operating expenses rate (%)	-10%	-10%	-11%			
Operating income	774	1,007	1,006	-0.1%	+30%	
Operating margin (%)	27.6%	31.5%	30.6%			
Non-operating incomes and expenses	(32)	(122)	(1)			
Income before income tax	742	885	1,005	+14%	+35%	
Income tax expense	(124)	(173)	(165)			
Net income	618	711	839	+18%	+36%	
Net margin (%)	22.0%	22.3%	25.5%			
EPS (NT\$)	0.83	1.19	1.41	+18%	+70%	
Other comprehensive income, net	78	156	173			
Comprehensive income	697	867	1,012	+17%	+45%	
ROE(%)	15%	17%	19%			
Approx. Utilization (%)	80%	90%	90%			
Depreciation	468	487	504			
CAPEX	499	1,706	879			

## **Non-operating Items**



Foreign exchange gains (losses)  Gains (losses) on disposals of property, plant and equipment  Gains (losses) on disposals of investments  Gains on financial assets (liabilities) at fair value through profit or loss, net  Share of loss of associates and joint ventures accounted for using equity  Others  (22)  (44  (4)  (40)  (40)  (41)  (41)  (41)  (42)		'	`
Foreign exchange gains (losses)  Gains (losses) on disposals of property, plant and equipment  Gains (losses) on disposals of investments  Gains on financial assets (liabilities) at fair value through profit or loss, net  Share of loss of associates and joint ventures accounted for using equity  (14)	Total	(32)	(1)
Foreign exchange gains (losses)  Gains (losses) on disposals of property, plant and equipment  Gains (losses) on disposals of investments  Gains on financial assets (liabilities) at fair value through profit or loss, net  10'15  (unaudited)  (44  Gains (losses) on disposals of property, plant and equipment  - (0  Gains on financial assets (liabilities) at fair value through profit or loss, net	Others	0	38
Foreign exchange gains (losses)  Gains (losses) on disposals of property, plant and equipment  Gains (losses) on disposals of investments  10'15  (unaudited)  (44  10'15  (unaudited)  11  12  13  14  15  (unaudited)  16  17  18  19  19  10  10  10  10  10  10  10  10	Share of loss of associates and joint ventures accounted for using equity	(14)	(4)
Foreign exchange gains (losses)  Gains (losses) on disposals of property, plant and equipment  10'15 (unaudited) (44  (00)	Gains on financial assets (liabilities) at fair value through profit or loss, net	2	8
Foreign exchange gains (losses)  10'15 (unaudited) (22)	Gains (losses) on disposals of investments	1	1
Unit: NTD Million 10/15 (unaudited)	Gains (losses) on disposals of property, plant and equipment	-	(0)
Unit: NTD Million 10'15	Foreign exchange gains (losses)	(22)	(44)
	Unit: NTD Million	1Q'15	1Q'16 (unaudited)

#### **Consolidated Balance Sheets**



(Unit: NTD Million)	Major Item	2015/3/31		2015/12/31		2016/3/31 (unaudited)	
	,	\$	%	\$	%	\$	%
Cash and cash equivalents		2,897	13%	1,870	8%	1,718	7%
Current financial assets at fair	value through profit or	903	4%	1,015	4%	774	3%
Current available-for-sale finar	icial assets	698	3%	630	3%	839	3%
Notes and accounts receivable,	, net	936	4%	700	3%	911	4%
Inventories		1,915	8%	2,471	10%	2,534	10%
Long-term investments		1,896	8%	2,086	9%	2,281	9%
Net property, plant and equipr	ment	12,939	57%	14,845	62%	15,057	61%
Total Assets		22,689	100%	24,111	100%	24,533	100%
Current liabilities		3,172		4,606		4,127	
Long-term borrowings		2,666		2,099		1,978	
Total Liabilities		6,026	27%	6,902	29%	6,303	26%
Common stock		7,434		5,966		5,967	
Total Equity		16,663	73%	17,209	71%	18,230	74%
Book value per share (NT\$)		22.41		28.85		30.55	
Key Indices							
Current ratio (Current assets	/ Current liabilities)	242%		152%		169%	
Debt ratio (Total liabilities /	Total assets)	27%		29%	\	26%	