

Sitronix Technology Corp.

矽創電子股份有限公司

8016: TT

投資人論壇

Sitronix

公司簡介

Company Name	矽創電子股份有限公司
Established	1998年7月
Capitalization	USD 40 million
Chairman and CEO	毛穎文 Vincent Mao
IPO Listing	2003年12月 (8016)



Consolidated

矽創電子

Sitronix

Display Driver IC



鈺創電子(91%)

昇佳電子(46%)

sensortek
Sensor IC



mCore
MCU/DSP



合肥創發微電子(90%)

HFST
Touch & Fingerprint IC



力領科技(100%)

FORCELEAD



極創電子(64%)

INFST
Power Management IC



Incubator since 2009

產品組合

Mobile Displays

Mobile Display Driver IC
手機顯示器

Industrial & Automotive Displays

Automotive Display Driver IC
車載顯示器

Industrial Display Driver IC
工控顯示器

Sensors

SoC

System on Chip (SoC) products
其他非顯示器 IC



Subsidiary



Subsidiaries



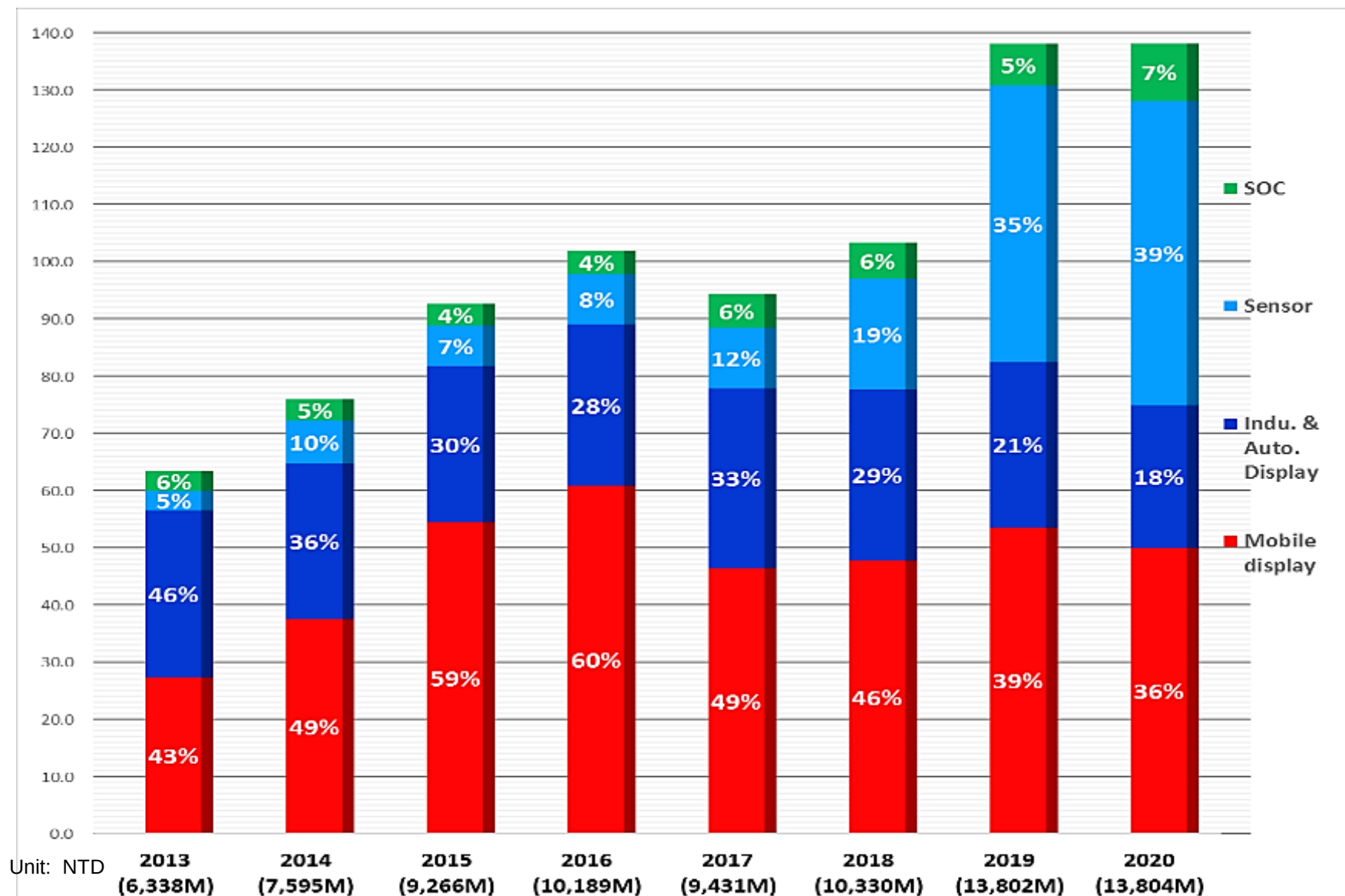
Differentiation

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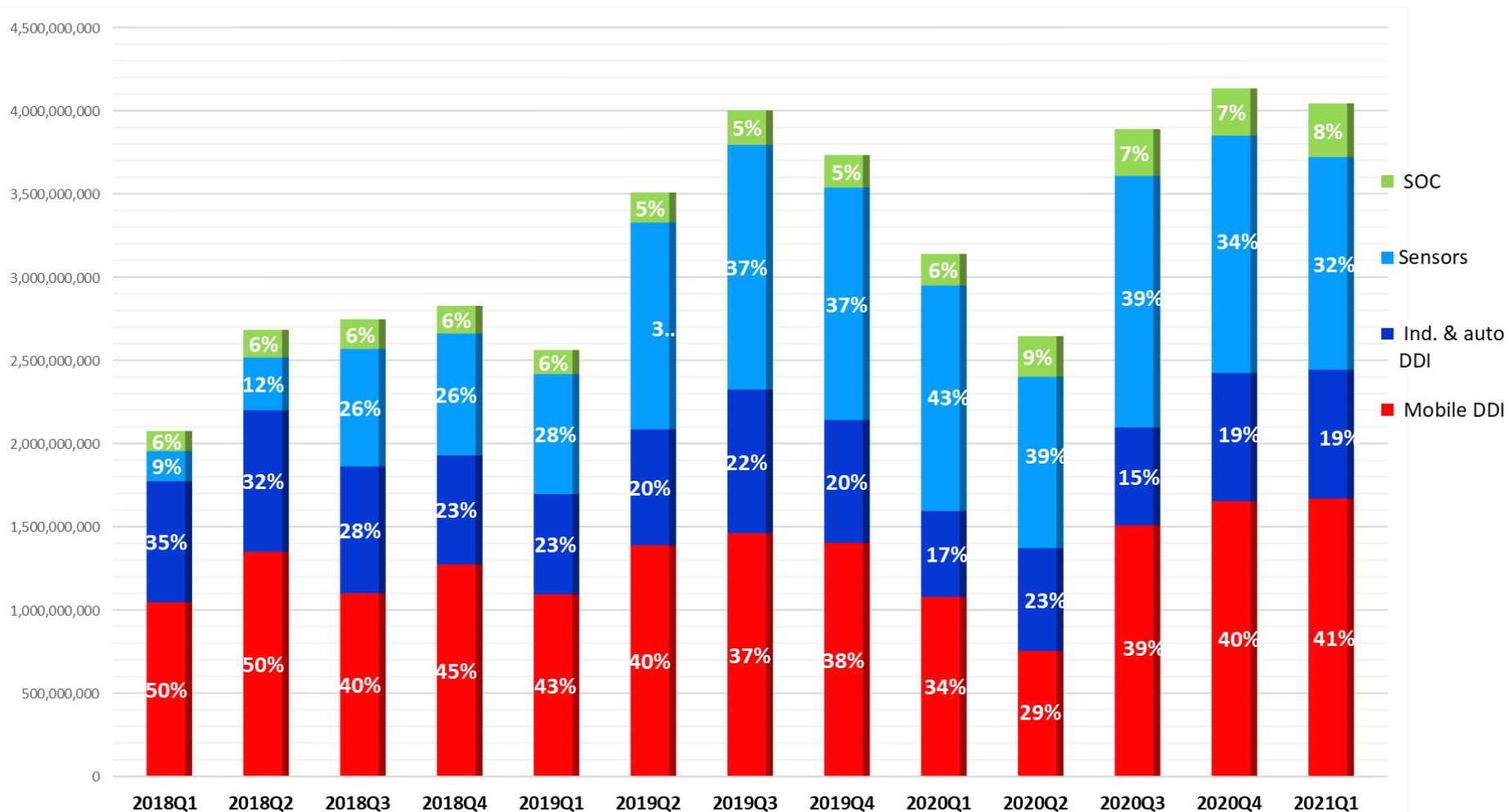
Diversification

Incubator

合併年營收 依產品別



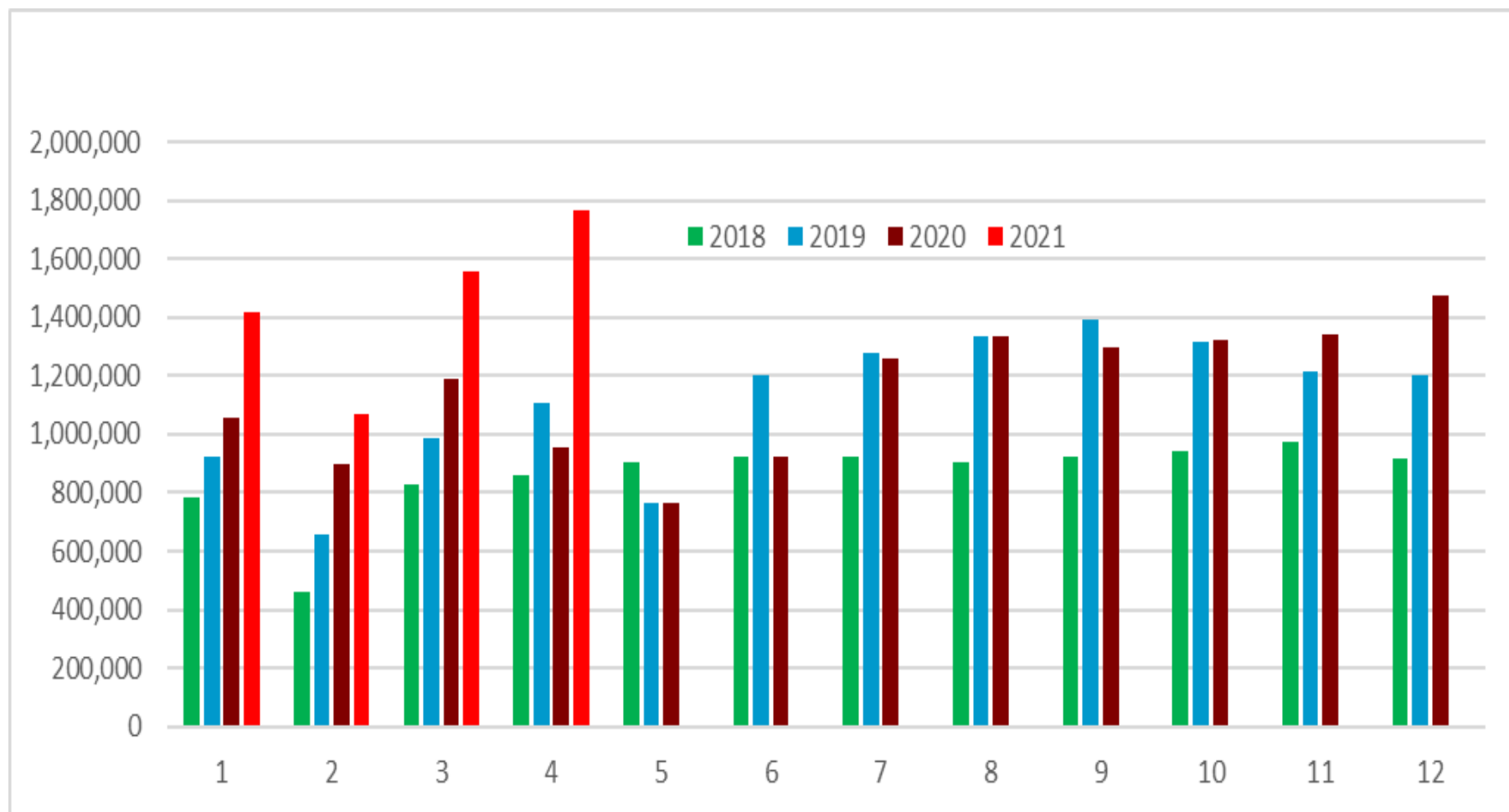
季度合併營收 依產品別



Unit: NT\$

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合併月營收



Unit: NT\$ thousands

Accounting standard: IFRS

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合併損益表

Item	Q1 21		2020		Q4 20		Q3 20		Q2 20		Q1 20	
	Results	% of sales	Results	% of sales	Results	% of sales	Results	% of sales	Results	% of sales	Results	% of sales
Net Sales	4,042,640	100%	13,804,562	100%	4,132,917	100%	3,887,941	100%	2,644,857	100%	3,138,847	100%
Gross Profit	1,906,725	47%	4,785,825	34%	1,595,562	39%	1,253,220	32%	925,366	35%	1,011,677	32%
Operating Expense	769,430	19%	2,495,301	18%	770,858	19%	628,945	16%	525,562	20%	569,936	18%
Operating Income	1,137,566	28%	2,383,048	17%	824,947	20%	624,540	16%	400,466	15%	533,095	17%
Income before Tax	1,157,423	29%	2,523,626	18%	847,825	21%	628,840	16%	497,065	19%	549,896	17%
Net Income*	786,603	19%	1,384,818	10%	485,902	12%	315,601	8%	291,899	11%	291,416	9%
EPS	6.55	-	11.53	-	4.04	-	2.63	-	2.43	-	2.43	-

Unit: NT\$ thousands (except EPS)

Accounting standard: IFRS

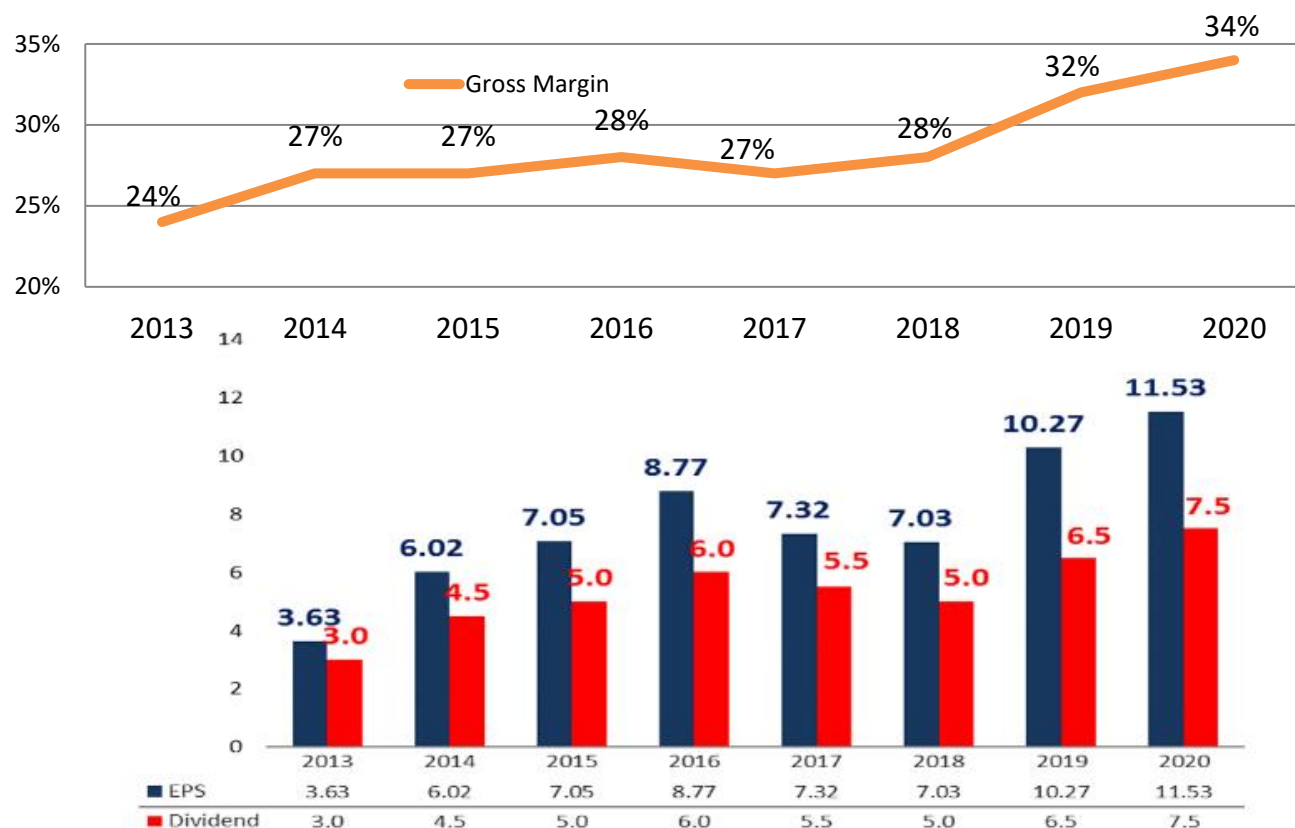
* Listed on the English translation of our financial statements as
"Profit (loss), attributable to owners of parent"

合併資產負債表

Item	2021/3/31	2020/12/31	2020/9/30	2020/6/30	2020/3/31
Total Assets	15,205,696	13,816,160	12,691,112	13,313,165	11,315,424
Current Assets	12,168,616	11,544,737	10,741,502	11,320,483	9,386,607
Cash & Equivalents	5,352,063	5,586,541	3,751,335	4,123,024	3,356,031
AR	1,335,828	1,378,563	1,239,710	1,103,291	1,248,372
Inventory	1,778,865	1,543,734	1,818,842	2,495,793	2,387,205
Total Liability	6,341,128	4,537,083	3,886,615	5,046,401	5,630,077
AP	1,965,114	1,893,923	1,616,864	1,411,218	2,065,666
Shareholder Eqt.	8,864,568	9,279,077	8,804,497	8,266,764	5,685,347

Unit: NT\$ thousands
Accounting standard: IFRS

毛利率、EPS、配息資訊



Year	Q1		Q2		Q3		Q4		Annual		
	EPS	GM	EPS	GM	EPS	GM	EPS	GM	EPS	GM	Cash dividend
2021	6.55	47%									
2020	2.43	32%	2.43	35%	2.63	32%	4.04	39%	11.53	34%	7.5
2019	1.70	33%	2.80	33%	3.22	32%	2.55	30%	10.27	32%	6.5

手機顯示器驅動ICs

Small-sized DDIC - zerocap

2018: 500M pcs
2019: 400M pcs
2020: 300M pcs

4G kids' watches



Sports cams
Pocket cams



Fitness trackers



Smartphone DDIC - zerocap

2018: > 130M pcs
2019: > 250M pcs
2020: > 320M pcs

Smart speaker

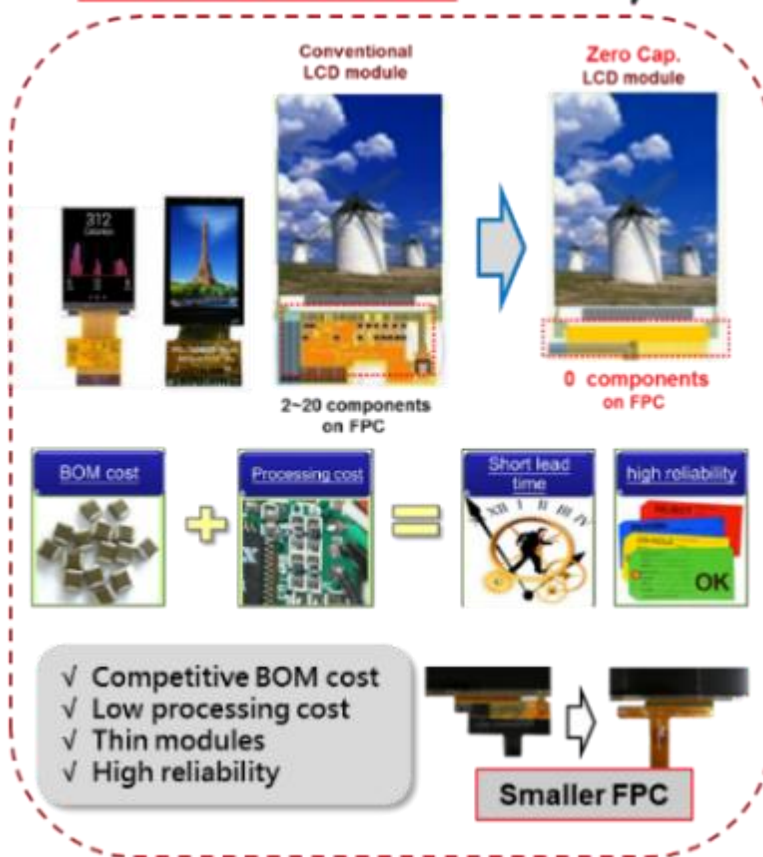


Payment terminal



Differentiation

Sitronix's Patents **zerocap**



超過70%手機驅動IC應用於AIoT

Tablets / payment terminal

- WXGA for tablets
- HD for tablets
- FHD for tablets



Work from home

- Projectors
- Printers
- Sound systems



Wearable devices

- QQVGA for fitness trackers
- QVGA for watches
- OLED for fitness trackers & watches



Automotive & outdoors

- Sports cams
- Navigators
- Aerial cameras
- CSD / HUD
- E-mirrors
- Cluster / Knob



Medical devices

- WVGA for monitors
- QQVGA for thermometers



Smart Home

- WVGA for Echo
- QVGA for door locks
- FHD for tablets



AMADA **Mazak**

Makita

HITACHI
Inspire the Next

Continental
FOR THE ROAD

TOYOTA

Ferrari

Mercedes-Benz

BMW

HYUNDAI

BOSCH **Panasonic**

cms **SIEMENS**
electronics

TOKYO ELECTRON **MITSUBISHI ELECTRIC**

NISSEI **PHILIPS**

KEYSIGHT
TECHNOLOGIES

OMRON

EPSON

BRAUN

Schneider
Electric

Honeywell

CITIZEN

SAMSUNG

dyson

TCL **SONY**

Midea **amazon**

LG **Electrolux**

NEC **TOTO** **Google**

Raritan
Know more. Manage smarter

Itron

三星电气
SAMSUNG ELECTRIC

威胜集团
Weishi Group

mi

Jio

Verifone

NOKIA

HUAWEI

LANDI 联迪 **ASUS**

小天才 **TECNO**
mobile

GoPro

GARMIN

hp

LEGO

KYOCERA

Gigaset

FUJI XEROX

AVAYA **brother**

LEXMARK

DENSO **ALPS** **ALPINE**
Entering the Core

YAMAHA

BHTC
COMFORT IN MOTION

VOLVO

MITSUBISHI

VW

SKODA
AUTO



車載顯示器驅動ICs

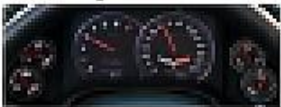
< 6 inch displays

7 - 9 inch displays

Diversification

Instrument Cluster Display

Analog



No Display

Hybrid (Analog + Digital)



Meters

Full Digital



Virtual Cockpit



Automobile Monitors



Multi-Function CSD



Display Audio



Climate Control



Twin CSDs
Display Audio
+
Navigation



Rearview Mirror Display



Overhead Monitor



Dual Headrest

Segment TN

Character TN

Graphic STN

Mono TFT

Color TFT



Diversification

TN / STN / mono TFT / color TFT



光學感測晶片 Optical Sensors

PS + ALS shipment

2018 : >340M pcs
2019 : >650M pcs
2020 : >720M pcs

Proximity Sensors (PS)

近接感測晶片 → 關屏防誤觸
turns off the display (anti-touch)

Ambient Light Sensors (ALS)

環境光感測晶片 → 調節螢幕亮度
screen brightness control

G1: PS + ALS 2-in-1 visible solution (2010)

G2: PS + ALS 2-in-1 invisible solution (2018)

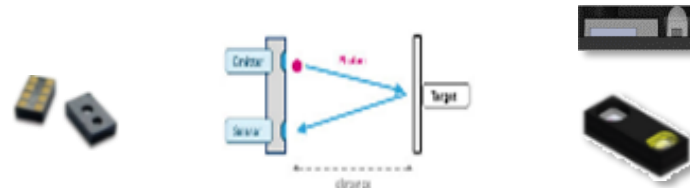
- Under-display 屏下方案 for AMOLED displays
- Slit type 狹縫方案 for TFT displays

Color temperature Sensors (RGB)

色溫感測晶片 → 調節螢幕色溫
screen color temperature control

G3: PS + RGB sensors (2019)

- for better reading experience



Waterdrop Screen

狹縫(Slit) ALS/PS
狹縫(Slit) PS / 屏下 ALS
前攝旁 ALS/PS
(Aside of Front Facing Camera)



Bezel-less Screen

屏下(Under-display) ALS/PS
狹縫(Slit) PS / 屏下 Under-display ALS



感測器之感度演進 → 單價促升

G1: PS + ALS visible solution 1x

G2: PS + ALS invisible solution → sensitivity 3x → 6x → 10x
- Under-display solution for AMOLED

G3: PS + RGB visible solution

G4: PS + RGB invisible solution

水滴屏 (Teardrop-shaped)



全景屏 (Full screen)



瀏海屏 (Notch type)



開孔屏 (Aperture type)



16:9 → 18:9 → 19:9 ...

Upgrading because of increases in...

1. Display resolution
2. PPI density
(resulting in a decrease in light transmittance)
3. AMOLED penetration rate

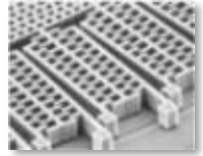
微機電感測晶片 MEMS sensors

G-sensor shipment

2018 : >30M pcs

2019 : >55M pcs

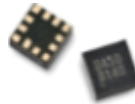
2020 : >80M pcs



Accelerometers (G-sensors)

→ Rotation detection

加速度感測器 → 屏幕旋轉偵測



✓ G-sensors for smartphones

✓ Low-power G-sensors for wearable & IoT devices



屏幕旋轉
Screen rotation



遊戲
Game control



手勢偵測
Gesture detection



穿戴式裝置: 光學感測器 + MEMS

True wireless stereo (TWS) earbuds

Accelerometers → click detection 敲擊偵測

Proximity sensors → on/off switch 功能啟用開關



敲擊偵測 Click detection

- 有來電時 Incoming call
單擊接聽 Click to answer
雙擊拒接 Double click to reject
- 音樂播放 Music mode
單擊暫停 Click to pause
雙擊換曲 Double click to switch

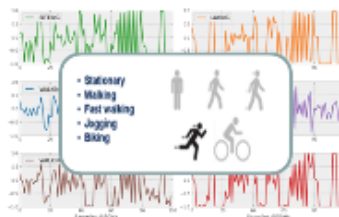
Smart watches & fitness trackers

Accelerometers → motion detection 移動偵測

Optical sensors → heartbeat detection 心律偵測 & UV sensors 紫外線感測



運動偵測 / 計步 Motion detection



抬手亮屏 / 動態心率輔助 Heartbeat detection



睡眠偵測 / 久坐提醒 Sleep quality monitoring



2020年以前

Flagship 旗艦機

Addressable Market
300-400M/year

Opticals for Displays
Under display
PS+ALS (VCSEL)
Visible
PS+RGB (VCSEL)

High end 高階機

Addressable Market
300-400M/year

Opticals for Displays
Slit type
PS+ALS (IR LED / VCSEL)
Under display
PS+ALS (VCSEL)

Mid range 中階機

Addressable Market
400-500M/year

Opticals for Displays
Slit type
PS+ALS (IR LED)

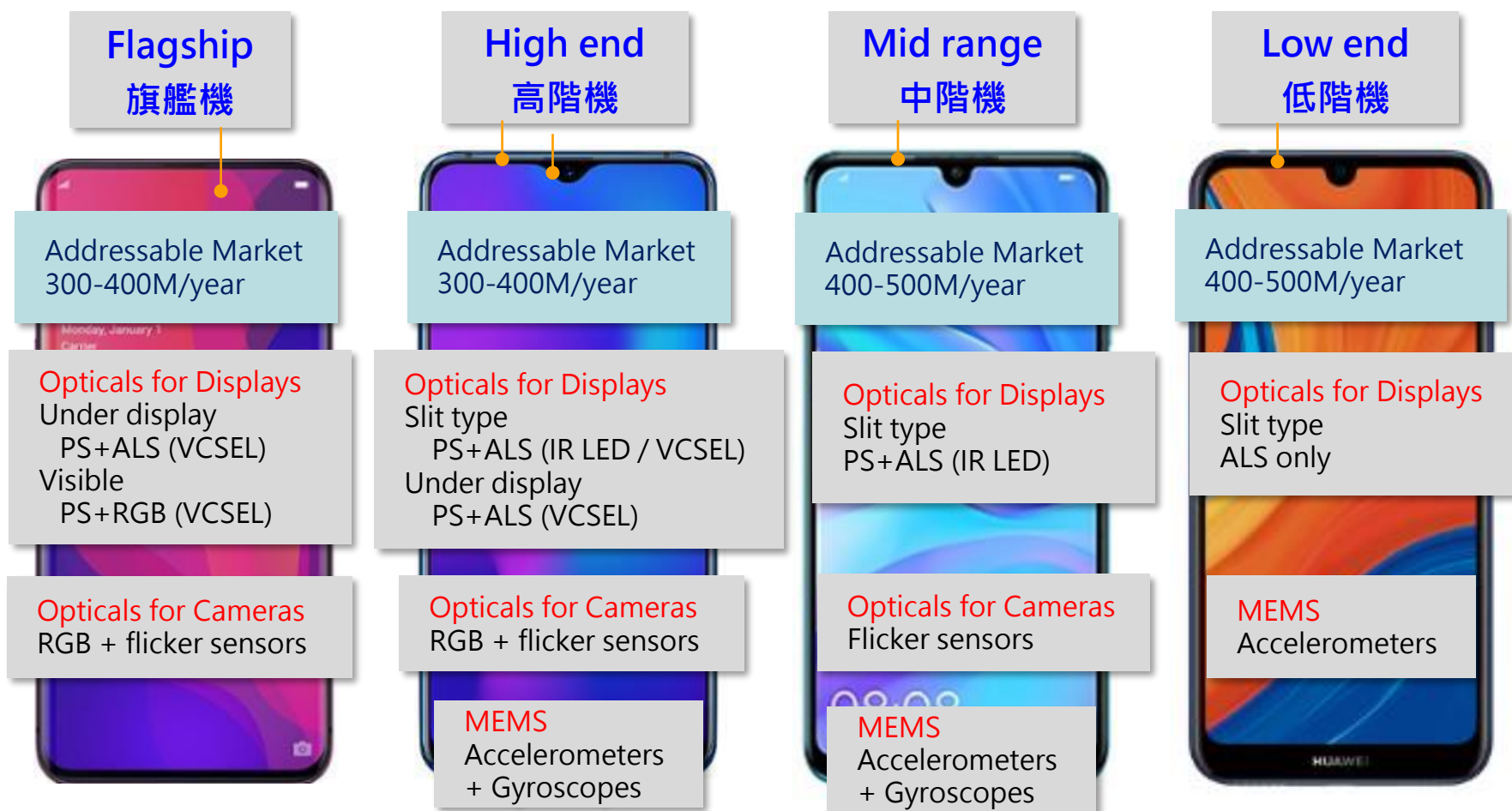
Low end 低階機

Addressable Market
400-500M/year

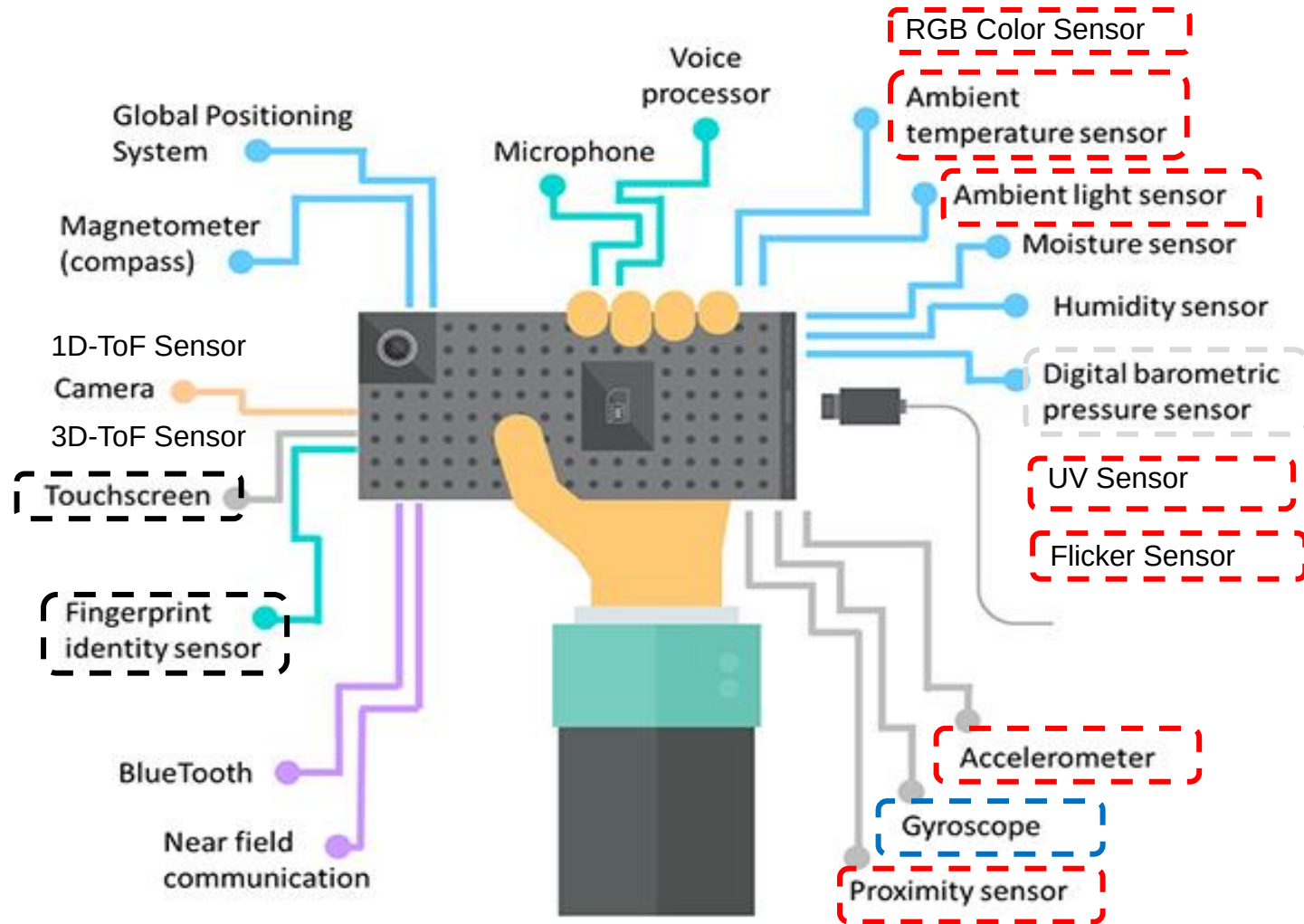
Opticals for Displays
Slit type
ALS only

MEMS
Accelerometers

展望未來



敬請期待



公司策略

多樣化 (Diversification)

提供完整產品綫, 一站式採購服務
One-stop shopping

分散應用, 分散市場, 降低風險
Risk reduction

高成長+高毛利之產品組合
Balance GM & sales growth

差異化 (Differentiation)

持續創造俱市場競爭力產品
Make existing products better

持續擴展市場滲透率
Market share gains

持續孵化新產品
Incubated new products

矽創電子

Sitronix

Display Driver IC



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sensortek
Sensor IC



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FORCELEAD



HFST
合肥創發微電子(90%)
Touch & Fingerprint IC



極創電子(64%)
INFST
Power Management IC



Consolidated

Incubator since 2009

We'd love to hear from you!

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Lighting up your life.

Sitronix