

Sensortek Technology Corp.

昇佳電子股份有限公司

論壇簡報



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昇佳電子股份有限公司

免責聲明

- This presentation includes forward-looking statements. All statements, other than statements of historical facts, that address activities, events or developments that Sensortek Technology Corp. expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates and business plans) are forward-looking statements.
- Sensortek's actual results or developments may differ materially from those indicated by these forward-looking statements as a result of various factors and uncertainties, including but not limited to material cost increase, market demand, change in legal, financial and regulatory frameworks, government policies, financial market conditions, and other risks and factors beyond our control.
- Sensortek does not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

議程

- I. 公司簡介
- II. 經營實績
- III. 市場概況
- IV. 公司產品
- V. 未來發展

I. 公司簡介

關於我們

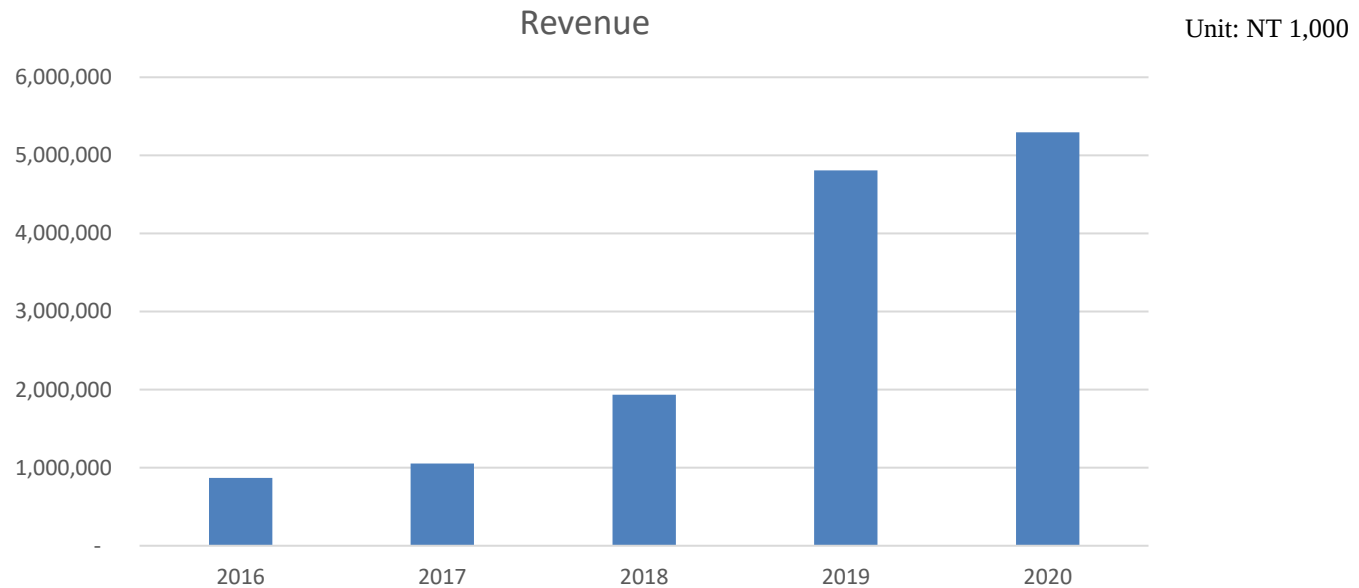
Company Name	Sensortek Technology Corp.	
Founded	December 1, 2009	
Capitalization	NT 489,126,180	
Chairman and CEO	Sheng-Su Lee	
Number of Employees	163	
Location	Tai Yuen Hi-Tech Industrial Park, Jhubei City, Hsinchu County	
Products	• 光學感測晶片 Optical Sensor - 近接感測晶片 Proximity Sensor (PS) - 環境光感測晶片 Ambient Light Sensor (ALS) - 色彩感測晶片 Color Temperature Sensor (RGB) • 微機電感測晶片 MEMS Sensor - 加速度感測晶片 Accelerometer Sensor (GS)	
Listing	上櫃 Taipei Exchange Market (TPEX) 06/08/2020 興櫃 Emerging Stock Market (TESM) 06/18/2019	

里程碑

- 2009: Founded
- 2010: Proximity (PS) & ambient light sensors (ALS)
- 2012: Accelerometers (g-sensors)
- 2013: Spinoff
- 2017: Invisible PS+ALS solution
- 2018: Under display & slit type PS+ALS solution
Low-power g-sensors
- 2019: RGB sensors for smartphone screens
- Listed at the Emerging Stock Market (TESM) 興櫃
- 2020: Listed at the Taipei Exchange Market (TPEX) 上櫃
RGB + flicker sensors for smartphone cameras

II. 經營實績

經營實績



Item	2016	2017	2018	2019	2020
Revenue	869,687	1,053,451	1,935,513	4,806,152	5,296,054
Gross margin	137,375	158,184	649,442	2,018,872	2,127,828
Margin %	15.80%	15.02%	33.55%	42.00%	40.18%
Operating income	4,931	8,751	366,646	1,497,236	1,537,189
Net income	5,169	5,309	326,275	1,322,900	1,365,454
EPS (NT\$)	0.14	0.14	8.64	35.01	28.81

Note: The EPS values listed here are based on the capital of 37,781 thousand shares.

合併損益表

Item	Q4 2020		2020		Q4 2019		2019	
	Results	% of sales	Results	% of sales	Results	% of sales	Results	% of sales
Net Sales	1,420,526	100%	5,296,054	100%	1,392,299	100%	4,806,152	100%
Gross Profit	531,783	37%	2,127,828	40%	547,146	39%	2,018,872	42%
Operating Expense	158,969	11%	590,639	11%	133,392	10%	521,636	11%
Operating Income	372,814	26%	1,537,189	29%	413,755	30%	1,497,236	31%
Income before Tax	372,919	26%	1,550,117	30%	414,454	30%	1,508,063	32%
Net Income*	328,954	23%	1,365,454	26%	365,655	26%	1,322,900	28%
EPS	6.73	-	28.81	-	9.68	-	35.10	-

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

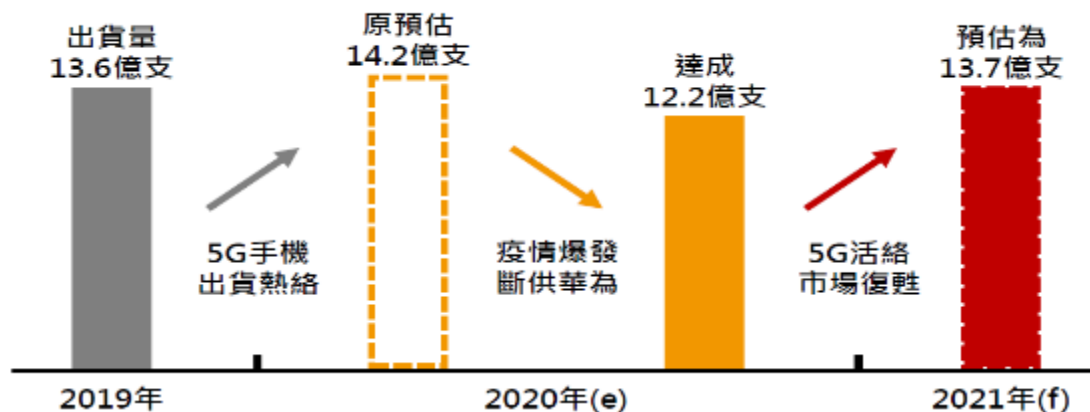
Item	2020/12/31	2020/9/30	2020/6/30	2020/3/31	2019/12/31	2019/6/30	2019/3/31	2018/12/31	2018/6/30
Total Assets	6,213,228	5,665,950	5,920,992	3,937,918	3,257,565	2,060,175	1,445,506	1,270,100	669,384
Current Assets	5,718,727	5,500,709	5,785,995	3,824,883	3,140,188	1,992,040	1,374,119	1,216,409	613,482
Cash & Equivalents	3,086,052	1,743,561	1,895,897	1,471,630	909,984	491,204	705,679	539,578	151,555
AR	452,893	489,647	470,727	542,826	539,062	592,915	365,712	284,387	189,257
Inventory	320,395	382,448	605,743	595,547	439,684	355,887	279,904	329,718	259,659
Total Liability	1,665,215	1,459,386	2,121,747	2,581,779	1,434,311	1,029,386	774,592	688,453	403,396
AP	759,395	616,844	527,754	816,834	669,038	586,899	285,319	401,143	306,236
Shareholder Eqt.	4,548,013	4,206,564	3,799,245	1,356,139	1,823,254	1,031,329	670,914	581,647	265,988

Unit: NT\$ thousands
Accounting standard: IFRS

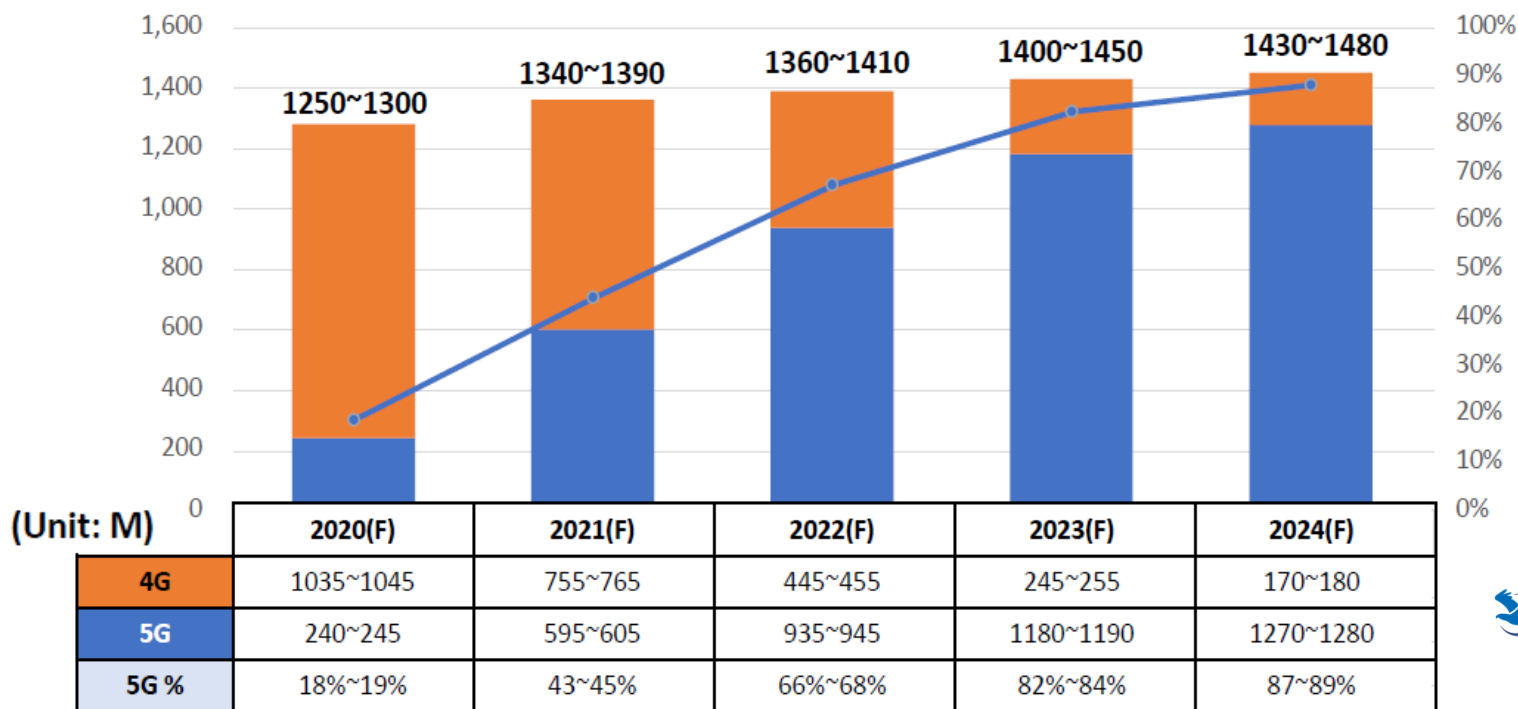
Ⅲ. 市場概況

全球智慧型手機銷量預估

2019~2021年全球智慧型手機預估出貨一覽

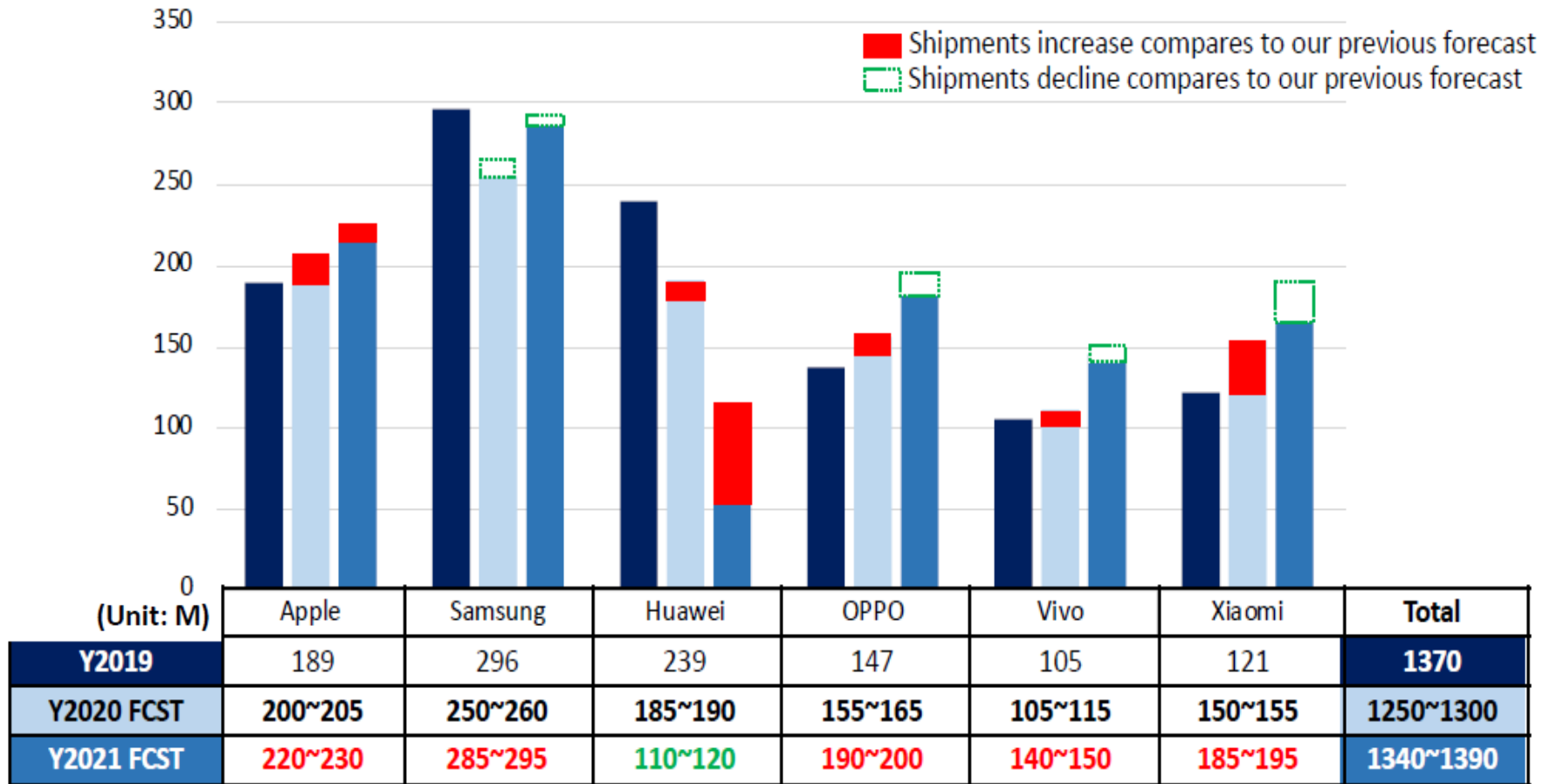


DIGITIMES



ISAIAH RESEARCH

各品牌智慧型手機銷量預估



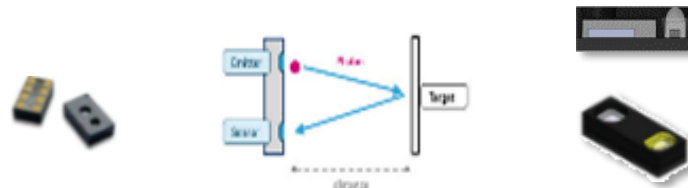
*Note: Our forecast of OPPO now includes shipments of Realme and OnePlus, Huawei includes New Honor

IV. 公司產品

光學感測晶片

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)



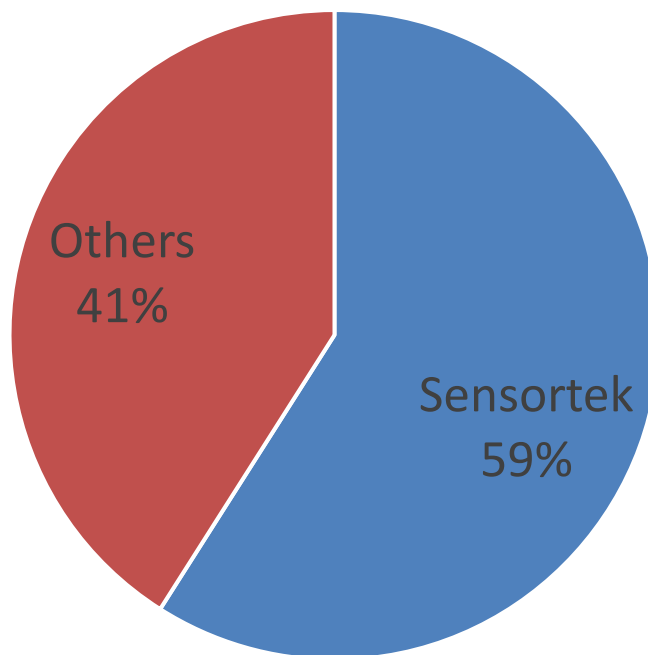
Bezel-less Screen

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



近接感測晶片 & 環境光感測晶片 出貨量及市占率

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



感度提升 → 平均價格提升

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...

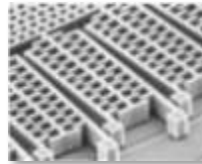
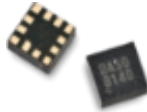
1. Display resolution
2. PPI density
(resulting in a decrease in light transmittance)
3. AMOLED penetration rate

微機電感測晶片

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

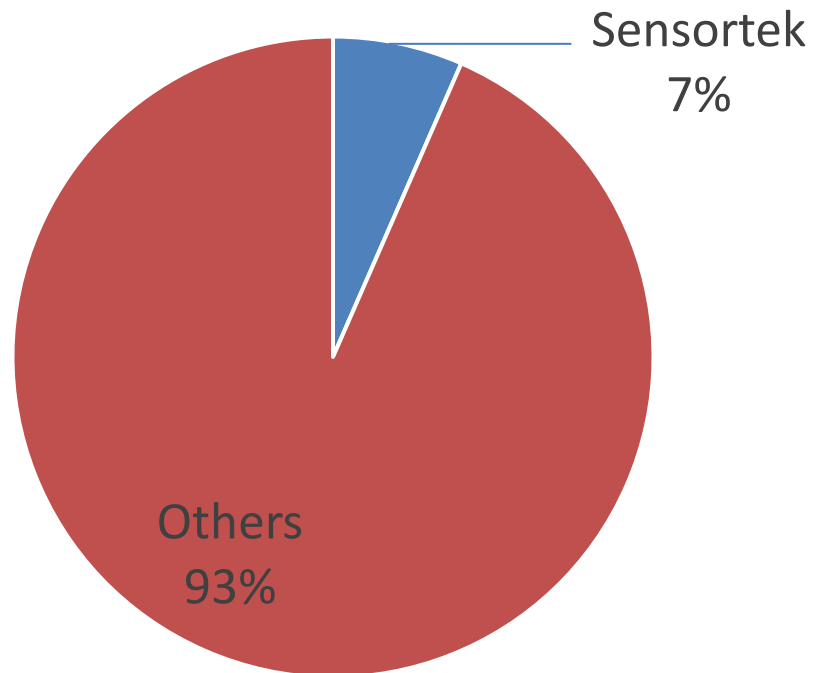


自動靜音
Automatic mute



微機電感測晶片 出貨量及市占率

2018: >30M pcs
2019: >55M pcs
2020: >80M pcs

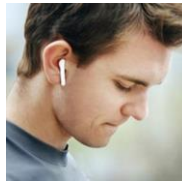


光學感測晶片 + 微機電感測晶片 穿戴裝置與非手機領域應用

True wireless stereo (TWS) earbuds

Accelerometers → click detection 敲擊偵測

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



FreeBuds 3

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

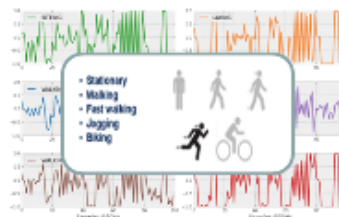
Smart watches & fitness trackers

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



V. 未來發展

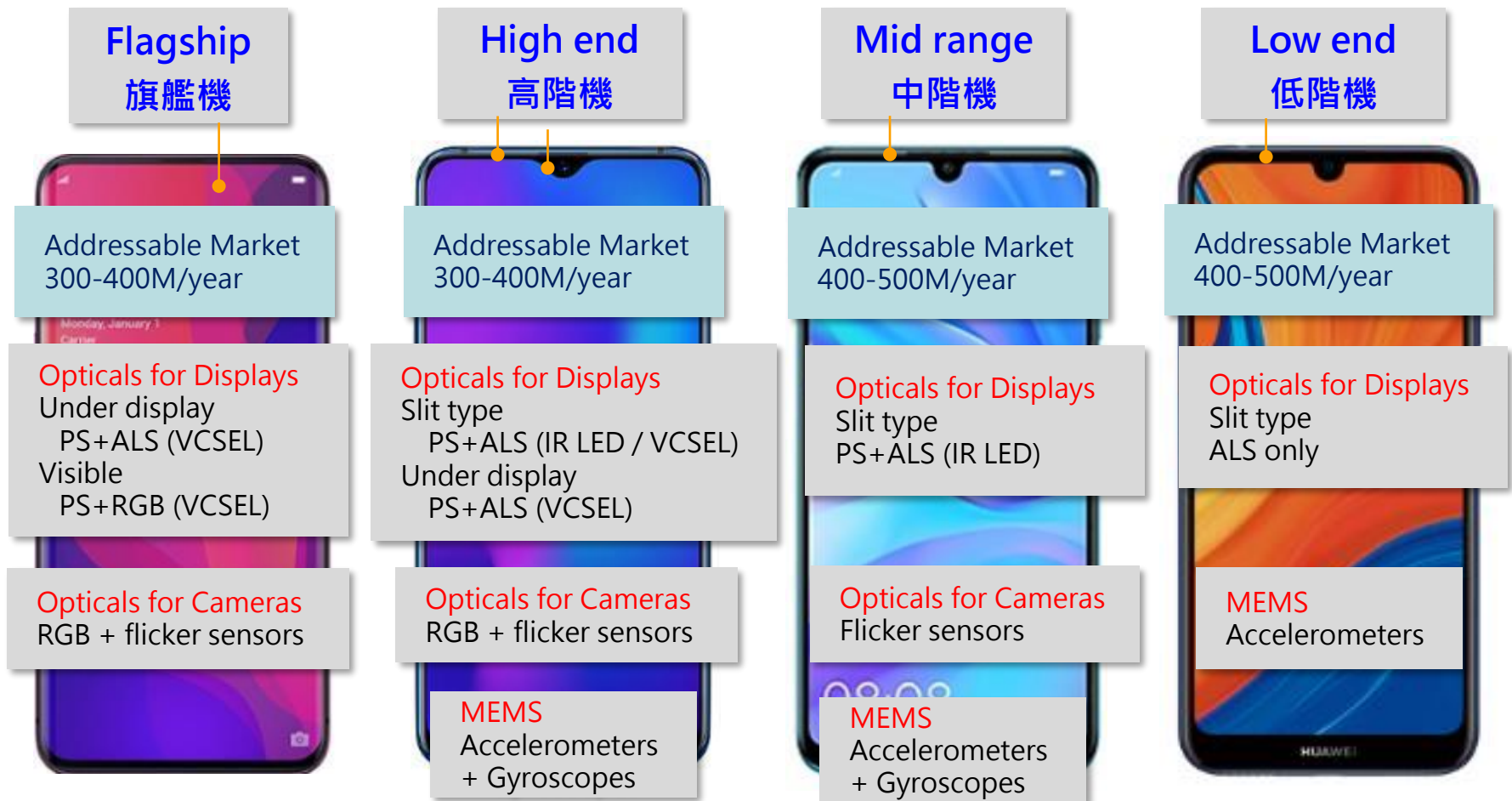
未來研發計畫

1. Optical sensors for smartphone screens 前螢幕應用
 - PS + ALS visible solution 調整顯示亮度
 - High-sensitivity PS + ALS invisible solution → 3x → 6x → 10x sensitivity
 - PS + RGB visible solution 調整顯示色溫 → invisible solution (coming soon!)
2. Optical sensors for smartphone cameras 後相機應用 white balance correction 白平衡校正
 - 3-channel RGB sensors → 6-channel for better color detection (coming soon!)
 - Flicker sensors 閃頻偵測
3. MEMS: Gyroscope 加速MEMS陀螺儀感測器開發
 - Accelerometers + Gyroscopes (2 in 1) for high-end smartphones (coming soon!)
4. Other applications 其他非手機之應用
 - TWS: proximity sensors & accelerometers
 - Smart watches: ambient light + UV, heartbeat sensors, accelerometers
 - Smart speakers: ambient light sensors
 - ...and more (e.g. auto & industrial)

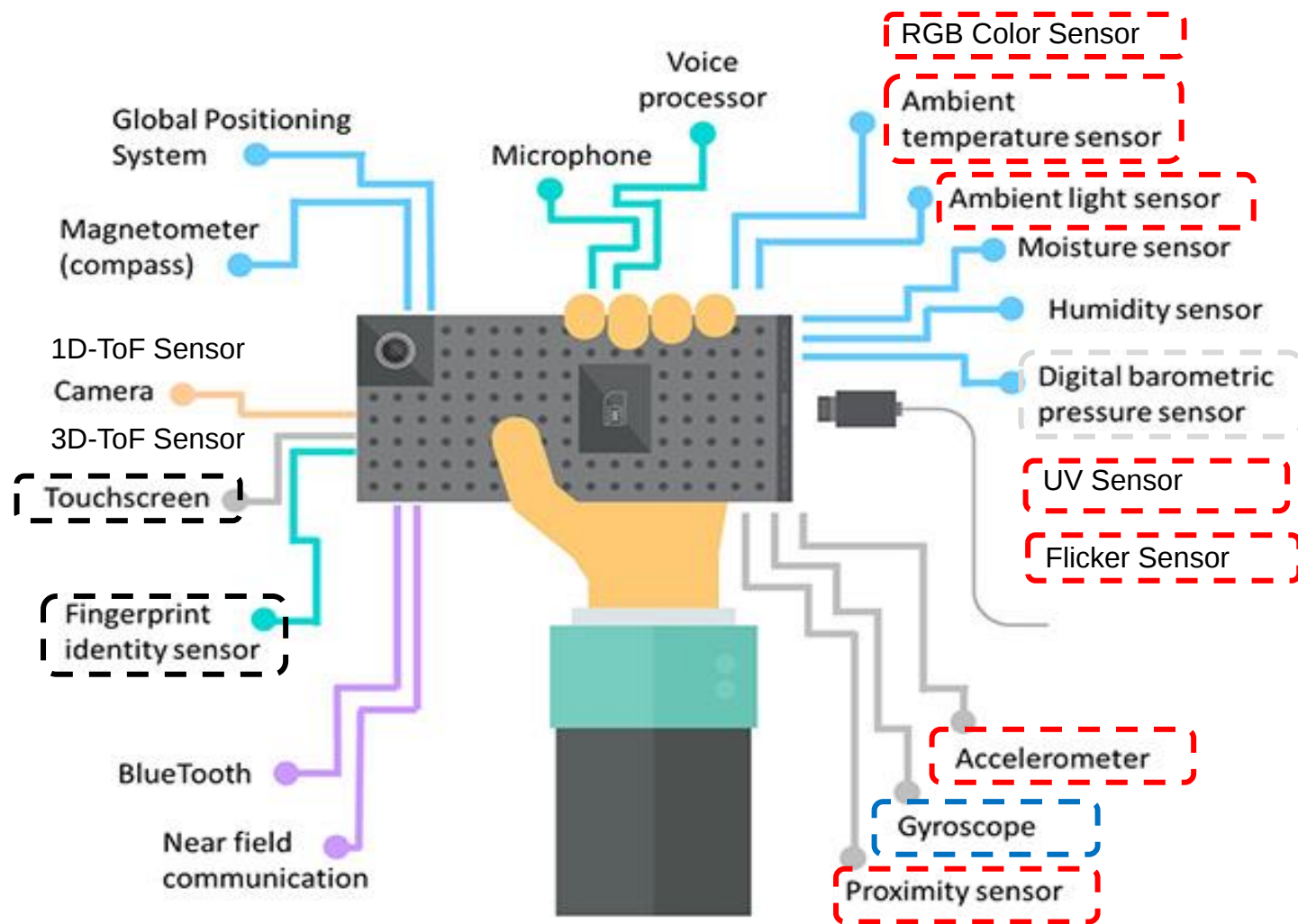
2020 之前



展望 未來



敬請期待





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