股票代號:6568

宏觀微電子股份有限公司



Safe Harbor Statement

Except for historical information contained herein, the matters set forth in this presentation are forward looking statements that are subject to risks and uncertainties that could cause actual results to differ materially, including the impact of competitive products and pricing, timely design acceptance by our customers, timely introduction of new technologies, ability to ramp new products into volume, industry wide shifts in supply and demand for semiconductor products, industry overcapacity, availability of manufacturing capacity, financial stability in end markets, and other risks.



公司簡介

- Founded in Y2006, a publicly traded company in Taiwan (TPEX 6568)
- Focus on high frequency broadband RF IC design
- Largest broadband silicon tuner IC creator & manufacturer in Asia
- 120 employees, 80% are R&D engineers
- Headquarters in HsinChu/Taiwan, branch offices in Seoul/Korea and SenZen/China.









4K/8KTV/STB	Satellite	loT	Optical
4K/8K TV Receiver	Satellite Multi-switch	BT5.0/BLE/Zigbee RF	Data Center XCVR
4K/8K TV Tuner	Satellite LNB RF IC	Sub-Ghz RF	Telecom 5G/PON XCVR
STB Receiver	LEO Beamformer	ASIC Design Services	Consumer AOC



2021年營運說明

- Expecting high gross margin due to new business products and product mix optimization.
- Revenue may slightly decline caused by supply chain disruption.
- Overall Broadband RF demand remains strong. Demand vs supply mis-match is improving.
- Continuing growth in new business segments (IOT, Fiber Optics) regardless of COVID-19.



2021年1月-11月營收-產品線別

The increased cost of sea freight and higher TV panel prices influence TV signal IC shipments.

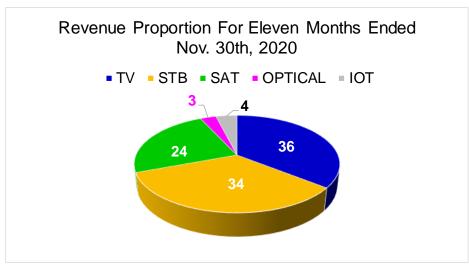
Unit:NT\$K; %

Revenue	For Eleven Months	YOY(%)	
	2020	2021	101(%)
TV	340,376	228,191	(33)
STB	322,815	383,031	19
SAT	230,826	208,207	(10)
OPTICAL	26,544	50,120	89
IOT	35,579	72,240	103
Total	956,140	941,789	(2)

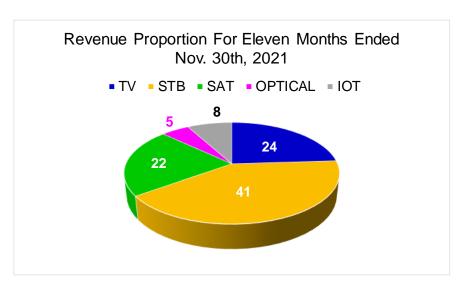


2021年1月-11月營收-產品線別(續)

New business (Optical + IOT) generates 13% revenue during Y2021 Jan. ~ Nov. revenue percentage will continue to increase in 2022



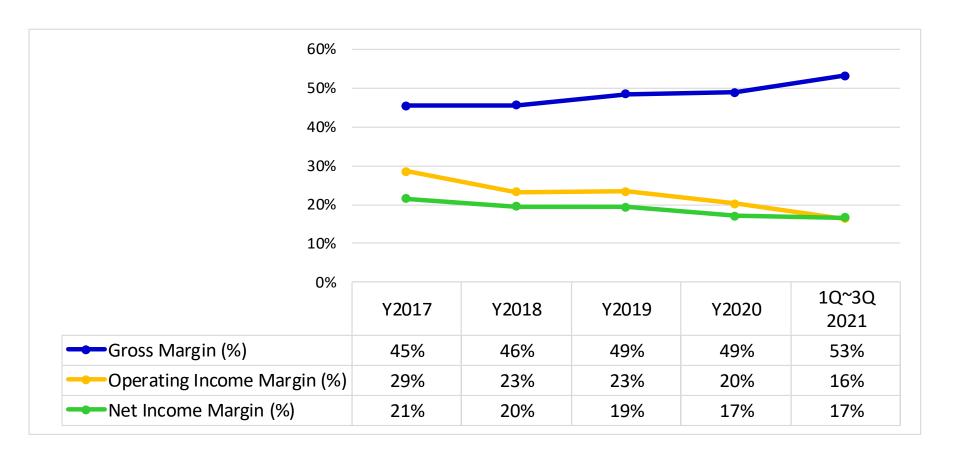
Total Revenue for Eleven Months Ended Nov. 30th, 2020=NT\$956,140K



Total Revenue for Eleven Months Ended Nov. 30th, 2021=NT\$941,789K



主要財務績效指標



	Y2017	Y2018	Y2019	Y2020
EPS(NT\$)	9.65	8.85	8.85	7.43
Dividend(NT\$)	5.00	6.00	6.00	7.00



以寬頻射頻晶片強攻五個主流市場

HDTV RF Receiver





Wireless Connectivity



2

Terrestrial & Cable STB





Optical Communication



3 Satellite

Satellite Broadcast

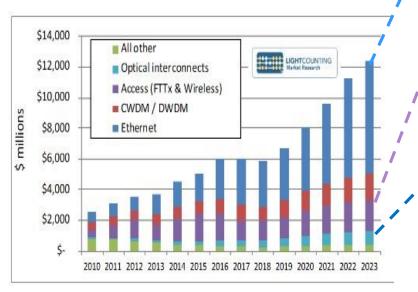




光纖產品線的應用市場 Data Center PON/FTTH and

Data Center, PON/FTTH and Commercial Optical Communication

Global sales of optical modules,



Source: LightCounting 2020

Data Center

25G SR/ 100G SR4
TIA+LA+CDR, Driver+CDR

PON/FTTH



XG PON/ XGS PON
China Optical CATV

Commercial/Display



24G/48G HDMI, DP 40G USB 4 AOC



光纖產品線的進展

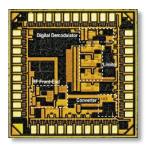
- Delivered more than 1 Million of IC's to the top 3 HDMI AOC (Active Optical Cable) vendors. Started investing in USB4 AOC IC's aiming for PC/NB/Monitor and VR/AR headset connectivity.
- Market-leading CMOS-based 25G/100G transceiver IC for data centers is now engaged in several major customers' qualification processes. Expecting volume shipments in 2Q22.
- 10G PON IC (FTTH) is engaged in several operators' approval processes. Expecting volume production in 1Q22. The XGS PON IC launch is aimed for worldwide markets.



無線裝置串接的機會 From RF IP, ASIC to IC



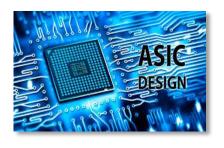








RF IP



Design Services



物聯網產品線的進展

- Shipped more than 2 Million IOT transceiver IC. Gen 2 with more powerful features will be introduced in 1Q22.
- Introducing first dual-band multi-protocol SOCs (BLE, SubG, Zigbee) to IOT market with focus on Smart Gateway and Smart Home Applications. Currently, in evaluation phase by major key accounts. Will be in volume production in 2Q22.
- RF IP/ ASIC design service continues to drive Rafael Micro's IOT roadmap and to become a long-term revenue stream (turnkey). Couple of sizable ASIC case per year is planned.



2022年營運展望

- Striving for double digit revenue growth based on sufficient wafer allocation and robust new business progress.
- Expecting high growth in new business areas (IOT and Optics) with new business contributing 20%+ of total revenue.
- Continuing the investments and delivering industry leading RF-Centric products with high performance silicon processes on Broadband RF, Wireless Connectivity, ASIC/turnkey and Optical Communication.



