



## Apple Research

### Sunrex is a new supplier of light guide plates for MacBook scissor switch keyboards, and its profitability will benefit significantly from the change in business model and growth in MacBook shipments

According to our latest industry survey, Sunrex's light guides for scissor switch keyboards had passed Apple's qualification, and it will begin mass production and shipments in 2H21, breaking GLT's exclusive supply position in the past two years. We forecast that Sunrex's shipment allocation of light guides will reach approximately 35% and 50% in 2H21 and 2022, respectively. Thanks to the new business contribution, we estimate that high-GPM light guides will contribute NT\$0.3-0.5 and NT\$1.2-1.5 to Sunrex's EPS in 2H21 and 2022, respectively, and that Sunrex's EPS will reach approximately NT\$8 and NT\$9-10 in 2021 and 2022, respectively.

**We predict that Sunrex will begin mass production of light guides for MacBook keyboards for the two new 2H21 MacBook Pro models and the existing MacBook models in 2H21. It will break GLT's two-year exclusive supply position of light guides.**

1. We believe that in general cases, Apple will avoid having only one supplier for components. We think that the initiation of a second supplier of light guides will help Apple reduce supply risk and increase bargaining power.
2. Sunrex has been involved in developing light guides for two years, so we believe that Sunrex has a strong motivation to obtain light guide orders. In addition, our latest industry survey indicates that Sunrex's light guides have recently passed Apple's qualification and have a similar quality to GLT's.
3. If Sunrex's shipments of light guides go smoothly, we expect Sunrex's supply ratio of light guides to reach approximately 35% and 50% in 2H21 and 2022, respectively.

**Sunrex's revenue and profitability will grow in 2H21. The GPM of light guides is approximately 30-40% higher than that of keyboards, so entering the supply chain of light guides will significantly increase Sunrex's profitability.**

1. Although the ASP for the light guide (USD\$10-12) is 30-40% of that for the keyboard, the GPM for the light guide is 30-40% higher than that for the keyboard, so Sunrex's profitability/EPS will benefit significantly from light guide orders.
2. We estimate that high-GPM light guides will contribute NT\$0.3-0.5 and NT\$1.2-1.5 to Sunrex's EPS in 2H21 and 2022, respectively. Benefiting from this new business contribution, Sunrex's EPS will reach approximately NT\$8 and NT\$9-10 in 2021 and 2022, respectively.
3. We estimate that MacBook shipments will grow 40-45% HoH in 2H21 and that the component shortage will improve in 2H21, so Sunrex's shipment momentum will be significantly stronger in 2H21..

**Sunrex's future growth will be driven by orders for light guides of MacBook scissor switch keyboards, increased penetration rate of iPad Magic Keyboards, the new MacBook Air in 2022, assembly of MacBook scissor switch keyboards and light guides, and structural changes in demand for laptops from working from home (WFH).**

#### Updated forecast:

Sunrex's changes of orders and business model, MacBook's contribution to Sunrex's sales and EPS in 2021 and 2022

#### Major companies in this report:

Sunrex (2387.TW)

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1. Sunrex's EPS growth drivers in 2H21 and 2022 will be light guide orders.
2. iPad's Magic Keyboard supports scissor mechanism backlit designs. We believe that the iPad's increasingly complete support for productivity software will also help increase Magic Keyboard penetration rate and Sunrex's shipment momentum. We predict that the penetration rate of the Magic Keyboard will grow from the current 5-15% to 30-40% in the next 2-3 years.
3. We expect Apple to release a new MacBook Air with a 13.3" mini LED display around mid-2022. Suppose component shortages continue to improve in 2022. In that case, we expect MacBook shipments to grow to approximately 20-22 million units in 2022 (vs. 17-18 million units in 2021) thanks to the new MacBook Air and continued Apple Silicon upgrades.
4. Sunrex's growth in the MacBook supply chain has three phases, including entry into the MacBook keyboard supply chain (2019), shipping both keyboards and light guides (2021), and assembling MacBook scissor switch keyboards and light guides. We expect that Sunrex will assemble the MacBook scissor switch keyboard and light guides (currently assembled by Quanta) in two years. This change will help Apple reduce the complexity of supply chain management and further increase Sunrex's profitability through vertical integration. We believe that once Apple decides to have Sunrex and Wistron assemble the keyboard and the light guide, Sunrex will become the leading supplier of the light guide as it is the main supplier of the keyboard (60% market share).
5. We believe that WFH's structural change in demand for laptops will contribute to Sunrex's long-term growth.

**Stock for actions:**

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**Risk:**

New product shipment delays; lower-than-expected demand due to US-China trade war and COVID-19.

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		Accumulate	Expected relative return over stock price between 10% and 20%
		Neutral	Expected relative return over stock price between -10% and 10%
		Sell	Expected relative return over stock price below -10%
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		Underperform	Expected increase of industry index below -5%

Jurisdictions	Index Used for Ratings Definitions
China Mainland	CSI 300 Index
China-Hong Kong	Hang Seng Index
China-Marco	Hang Seng Index
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