国泰君安证券 GUOTAI JUNAN SECURITIES

## Sector Report: Electronics Sector

行业报告： 电子行业

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29 December 2022

# Bi-Weekly Wrap: In the Middle of Challenges Lies Opportunities Amid De-globalization Tide

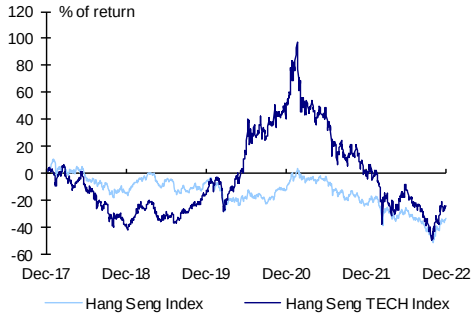
双周报：逆全球化大潮下危中有机

- **The progress of domestic semiconductors product replacement will take place at a faster pace amid more export restrictions from the U.S. and its allies.** Recently, BIS, under U.S. Department of Commerce, decided to add 36 Chinese companies into the entity list, including Yangtze Memory Technology and Cambricon. BIS also removed 25 Chinese entities from the UVL this time, including Naura Magnetoelectric Technology, several universities and research facilities. Prior to this, the U.S. government had already taken multiple measures in strengthening its own semiconductors supply chain, including (1) establishing SIAC and Chip 4 Alliance (U.S./ Japan/ Korea/ Taiwan Province), (2) passing the "2022 Chips and Science Act", providing US$52.7 bn government subsidies to semiconductors enterprises in the U.S. (those who received subsidies shall not construct or expand advanced semiconductor fabs in mainland China for one decade). The Brookings Institution recently suggested that the current Chip 4 Alliance should be expanded into Chip X Alliance (adding E.U., India and Singapore).
- **TSMC is transferring partial N3 and N4 technology production capacity to the U.S., alongside the Biden administration's national security and manufacturing reshoring strategy.** In early Dec. 2022, TSMC announced that in addition to its first fab in Arizona (scheduled to begin production of N4 process technology in 2024), TSMC also started the construction of a second fab (scheduled to begin production of 3nm process technology in 2026). At present, TSMC's main production base for its most advanced N3 technology is Fab 18 in Tainan City.
- **We reiterate three key investment thesis for electronics sector in 2023.** (1) Apple's revolutionary MR product will lead a new innovation cycle for consumer electronics; (2) accelerated penetration in NEV and intelligent vehicle is likely to benefit auto electronics supply chain; and (3) escalated sanctions from the U.S. and its allies will strengthen China's determination of implementing self-controllable strategy in IC manufacturing, and the market is likely to see an increaseing presence of domestic equipment and products.
- **Risk:** Uncertainties related to Sino-U.S. tensions; slower-than-expected breakthrough in key semiconductors technologies.
- **美国及其盟友的出口管制升级将加速半导体国产替代进程。**近期，美商务部下属工业与安全局（BIS）将 36 家中国企业列入实体清单，包括长江存储以及寒武纪。BIS 此次也将 25 家中国实体移出待核实名单，包括北方华创以及一些大学和科研机构。在此之前，美国政府已经采取多个措施来加强自身的半导体产业链，包括（1）建立"美国半导体联盟"以及"芯片四方联盟"，（2）通过《2022 年芯片与科学法案》，为美国半导体企业提供 527 亿美元的政府补贴（受补贴企业 10 年内不允许在中国大陆新建或者扩建先进制程工艺半导体厂）。美国布鲁金斯学会日前建议当前的芯片四方联盟应当扩容，可纳入欧盟、印度以及新加坡。
- **在拜登政府的国家安全和制造业回流战略下，台积电正将部分 N3 以及 N4 制程工艺产能转移至美国。**本月早些时候，台积电宣布在其位于亚利桑那州的首个晶圆厂（计划 2024 年量产 N4 制程工艺）之后，还将在该州建设第二个晶圆厂（计划 2026 年量产 3 纳米制程工艺）。当前，台积电最先进的 N3 工艺产能主要由位于台南市的晶圆十八厂提供。
- **我们重申电子行业 2023 年的三大投资主线。**（1）苹果革命性的 MR 设备将引领新一轮的消费电子创新周期；（2）新能源汽车和智能化汽车渗透率的进一步提升将利好汽车电子供应链；（3）来自美国及其盟友的制裁升级将强化中国在集成电路制造领域的自主可控战略，市场或将迎来更多产品和设备的国产替代。
- **风险：**中美局势的不确定性；半导体关键技术突破慢于预期。

Rating: **Outperform** Maintained

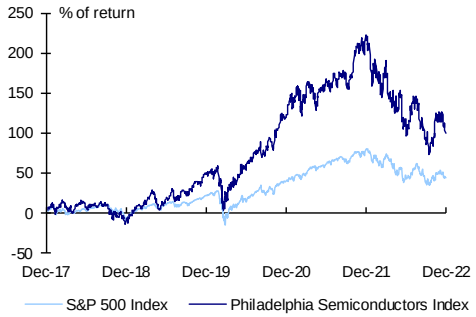
评级： **跑赢大市** （维持）

Hang Seng TECH Index vs. Hang Seng Index
恒生科技指数 vs.恒生指数




*Source: Hang Seng Indexes.*

Philadelphia Semiconductors Index vs. S&P 500 Index
费城半导体指数 vs.标普 500 指数




*Source: Bloomberg.*

**New changes in Dec. 2022 BIS entity list indicates targeted sanctions against semiconductors/ information technology sector in China.** According to a document released by the Bureau of Industry and Security (BIS) under the U.S. Department of Commerce, 36 Chinese companies have been newly-added into the entity list, including 35 companies located in mainland China and one company located in Japan. In particular, BIS disclosed that the reason for putting sanctions on Yangtze Memory Technologies and Hefei Core Storage Electronic was that these companies have close business ties with Huawei and HiKvision.

**Table 1: A total of 36 Chinese business entities were newly-added into the BIS entity list, in which most of them are semiconductors/ information technology companies in China**

| No. | Name | Category |
|---|---|---|
| 1 | Anhui Cambricon Information Technology Co. Ltd | A-1 |
| 2 | AVIC Research Institute for Special Structures of Aeronautical Composites | A-2 |
| 3 | AZUP International Group Co. Ltd | A-2 |
| 4 | Beijing HiFar Technology Co. Ltd | A-2 |
| 5 | Beijing Machinery Industry Automation Research Institute Co. Ltd | A-2 |
| 6 | Beijing UniStrong Science & Technology Co. Ltd | C |
| 7 | Beijing Vision Strategy Technology Co. Ltd | A-2 |
| 8 | Cambricon (Hong Kong) Co. Ltd | A-1 |
| 9 | Cambricon (Kunshan) Information Technology Co. Ltd | A-1 |
| 10 | Cambricon Jixingge (Nanjing) Technology Co. Ltd | A-1 |
| 11 | Cambricon (Nanjing) Information Technology Co. Ltd | A-1 |
| 12 | Cambricon Technologies Corporation Limited | A-1 |
| 13 | Cambricon (Xi'an) Integrated Circuit Co. Ltd | A-1 |
| 14 | CETC Cloud (Beijing) Technology Co. Ltd | A-1 |
| 15 | CETC LES Information System Group Co. Ltd | A-1 |
| 16 | China Electronics Technology Group Corporation No. 28 Institute | A-1 |
| 17 | Chinese Academy of Sciences Institute of Computing Technology | A-1 |
| 18 | Guangdong Qinzhi Technology Research Institute Co. Ltd | A-1 |
| 19 | Hefei Core Storage Electronic Ltd | B-2 |
| 20 | Key Laboratory of Information Systems Engineering | A-1 |
| 21 | Nanjing Aixi Information Technology Co. Ltd | A-1 |
| 22 | Nanjing LES Cybersecurity and Information Technology Research Institute Co. Ltd | A-1 |
| 23 | Nanjing LES Electronic Equipment Co. Ltd | A-1 |
| 24 | Nanjing LES Information Technology Co. Ltd | A-1 |
| 25 | PXW Semiconductor Manufactory Co. Ltd | B-1 |
| 26 | Shanghai Cambricon Information Technology Co. Ltd | A-1 |
| 27 | Shanghai Integrated Circuit Research and Development Center | A-2 |
| 28 | Shanghai Micro Electronics Equipment (Group) Co. Ltd | A-2 |
| 29 | Shanghai Suowei Information Technology Co. Ltd | A-2 |
| 30 | Suzhou Cambricon Information Technology Co. Ltd | A-1 |
| 31 | System Equipment Co., Ltd. of the 28th Research Institute (Liyang) | A-1 |
| 32 | Tianjin Tiandi Weiye Technologies Co. Ltd | D |
| 33 | Xiong'an Cambricon Technology Co. Ltd | A-1 |
| 34 | Yangtze Memory Technologies Co. Ltd | B-2 |
| 35 | Zhongke Xinliang (Beijing) Technology Co. Ltd | A-2 |
| 36 | Yangtze Memory Technologies (Japan) Inc | B-2 |

*Source: Bureau of Industry and Security under U.S. Department of Commerce, Guotai Junan International.*

**Table 2: We summarize reasons behind sanctions from the U.S. into four major categories, in which restricting China's development in AI chips is one of the major purposes**

| Category | Reasons for imposing sanctions |
|---|---|
| A-1 | Acquiring and attempting to acquire U.S.-origin items in support of China's military modernization. This entity is mainly engaged in research and development, manufacturing and sales of artificial intelligence (AI) chip. |
| A-2 | Acquiring and attempting to acquire U.S.-origin items in support of China's military modernization. |
| B-1 | Posing a significant risk of becoming involved in activities contrary to the national security or foreign policy interests of the United States. This company represents a risk of diversion to a party on the BIS Entity List. |
| B-2 | Posing a significant risk of becoming involved in activities contrary to the national security or foreign policy interests of the United States. This company presents a risk of diversion to parties on the Entity List, to include Huawei Technologies Co., Ltd., and Hangzhou Hikvision Digital Technology Co., Ltd. |
| C | Illegal export of U.S.-origin electronics to Iran. |
| D | Engaging in or enabling activities contrary to U.S. foreign policy interests. |

*Source: Bureau of Industry and Security under U.S. Department of Commerce, Guotai Junan International.*

## Table 3: Peers valuation table - Mainland China

| Company | Ticker | Currency | Price | Market Cap (million) | PER 22F | PER 23F | PER 24F | PBR 22F | PBR 23F | PBR 24F | ROE (%) 22F | D/Y (%) 22F | EV/EBITDA 22F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Mainland China Listed Companies - Consumer Electronics** | | | | | | | | | | | | | |
| Luxshare Precision Industr-A | 002475 CH | CNY | 31.860 | 226,164 | 23.0 | 17.3 | 14.1 | 4.8 | 3.8 | 3.1 | 21.5 | 0.5 | 12.7 |
| Avary Holding Shenzhen Co -A | 002938 CH | CNY | 27.560 | 63,971 | 13.8 | 12.4 | 11.1 | 2.4 | 2.1 | 1.9 | 17.3 | 2.5 | 7.7 |
| Suzhou Dongshan Precision-A | 002384 CH | CNY | 24.700 | 42,234 | 17.7 | 14.3 | 11.9 | 2.5 | 2.2 | 1.9 | 14.9 | 1.0 | 9.9 |
| Universal Scientific Indus-A | 601231 CH | CNY | 16.510 | 36,380 | 12.6 | 11.6 | 9.8 | 2.4 | 2.1 | 1.8 | 20.0 | 2.9 | 8.7 |
| **Simple Average** | | | | | **16.8** | **13.9** | **11.7** | **3.0** | **2.6** | **2.2** | **18.4** | **1.7** | **9.7** |
| **Weighted Average** | | | | | **19.8** | **15.5** | **12.9** | **3.9** | **3.2** | **2.6** | **19.9** | **1.1** | **11.1** |
| **Mainland China Listed Companies - Auto Electronics** | | | | | | | | | | | | | |
| Zhejiang Crystal-Optech -A | 002273 CH | CNY | 11.820 | 16,437 | 28.4 | 22.7 | 18.4 | 1.9 | 1.8 | 1.7 | 7.0 | 1.5 | 15.3 |
| Lianchuang Electronic Tech-A | 002036 CH | CNY | 12.560 | 13,481 | 44.5 | 25.2 | 16.8 | 3.1 | 2.8 | 2.5 | 7.0 | 0.2 | 19.5 |
| Ningbo Yongxin Optics Co Ltd | 603297 CH | CNY | 84.940 | 9,384 | 35.3 | 28.4 | 21.1 | 5.6 | 4.9 | 4.1 | 16.3 | 0.8 | n.a. |
| Castech Inc -A | 002222 CH | CNY | 15.680 | 6,703 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Zhejiang Lante Optics Co L-A | 688127 CH | CNY | 16.230 | 6,538 | 55.0 | 26.4 | 17.1 | 4.2 | 3.7 | 3.1 | 7.3 | 0.8 | 35.9 |
| Union Optech Ltd-A | 300691 CH | CNY | 12.560 | 3,365 | 50.2 | 29.2 | 17.4 | 2.1 | 1.9 | 1.8 | 4.2 | n.a. | n.a. |
| Optowide Technologies Co L-A | 688195 CH | CNY | 22.700 | 2,936 | 43.4 | 30.0 | 20.9 | 3.3 | 3.0 | 2.7 | 7.7 | 0.7 | n.a. |
| **Simple Average** | | | | | **42.8** | **27.0** | **18.6** | **3.4** | **3.0** | **2.6** | **8.2** | **0.8** | **23.6** |
| **Weighted Average** | | | | | **39.4** | **25.7** | **18.4** | **3.3** | **2.9** | **2.6** | **8.6** | **0.8** | **20.5** |
| **Mainland China Listed Companies – Integrated Circuit Self-controllable Theme** | | | | | | | | | | | | | |
| Naura Technology Group Co-A | 002371 CH | CNY | 224.800 | 118,818 | 58.8 | 43.8 | 33.2 | 6.3 | 5.6 | 4.8 | 11.0 | 0.2 | 41.1 |
| Hygon Information Technolo-A | 688041 CH | CNY | 40.480 | 94,089 | 97.8 | 61.4 | 42.0 | 5.5 | 5.7 | 5.0 | 8.9 | 0.0 | n.a. |
| Advanced Micro-Fabrication-A | 688012 CH | CNY | 99.000 | 61,008 | 56.3 | 44.5 | 35.6 | 4.1 | 3.7 | 3.3 | 7.3 | 0.0 | 54.7 |
| Loongson Technology Corp L-A | 688047 CH | CNY | 85.010 | 34,089 | 114.4 | 76.4 | 57.4 | 7.3 | 6.7 | 6.0 | 6.7 | n.a. | n.a. |
| Ingenic Semiconductor Co -A | 300223 CH | CNY | 71.750 | 34,553 | 32.7 | 25.0 | 19.4 | 3.1 | 2.8 | 2.5 | 9.5 | 0.4 | 25.9 |
| Sicc Co Ltd-A | 688234 CH | CNY | 79.800 | 34,291 | n.a. | 562.0 | 157.1 | 9.1 | 9.0 | 8.7 | (2.0) | 0.0 | n.a. |
| Hangzhou Chang Chuan Techn-A | 300604 CH | CNY | 44.730 | 27,032 | 48.9 | 32.0 | 23.2 | 11.9 | 8.9 | 6.6 | 24.1 | 0.5 | 47.1 |
| Piotech Inc-A | 688072 CH | CNY | 221.780 | 28,050 | 108.7 | 68.8 | 46.4 | 10.1 | 8.8 | 7.7 | 12.8 | 0.0 | 147.0 |
| Shanghai Anlogic Infotech -A | 688107 CH | CNY | 62.970 | 25,194 | 449.8 | 265.7 | 119.7 | 16.4 | 15.6 | 14.1 | 3.5 | 0.0 | n.a. |
| Shenyang Fortune Precision-A | 688409 CH | CNY | 112.240 | 23,464 | 104.0 | 65.1 | 44.2 | 4.9 | 4.6 | 4.1 | 5.0 | 0.0 | n.a. |
| Hebei Sinopack Electronic -A | 003031 CH | CNY | 94.990 | 19,859 | 110.5 | 83.0 | 77.4 | 15.5 | 13.5 | 11.7 | 12.5 | 0.1 | 98.3 |
| Konfoong Materials Interna-A | 300666 CH | CNY | 70.800 | 18,123 | 63.7 | 45.0 | 33.3 | 5.9 | 5.3 | 4.8 | 10.7 | 0.4 | n.a. |
| Semitronix Corp | 301095 CH | CNY | 88.080 | 17,616 | 161.6 | 89.9 | 52.7 | 5.4 | 5.1 | 4.7 | 4.2 | n.a. | n.a. |
| Kunshan Kinglai Hygienic-A | 300260 CH | CNY | 67.670 | 15,331 | 41.6 | 29.2 | 21.7 | 10.7 | 8.1 | 6.1 | 23.2 | 0.5 | n.a. |
| Kingsemi Co Ltd-A | 688037 CH | CNY | 159.660 | 14,787 | 83.2 | 62.1 | 43.5 | 9.6 | 8.3 | 7.4 | 13.9 | 0.4 | n.a. |
| Dosilicon Co Ltd-A | 688110 CH | CNY | 26.340 | 11,649 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Shanghai Gentech Co Ltd-A | 688596 CH | CNY | 33.510 | 9,045 | 35.1 | 22.4 | 15.9 | 4.1 | 3.5 | 2.9 | 11.6 | 0.4 | n.a. |
| **Simple Average** | | | | | **104.5** | **98.5** | **51.4** | **8.1** | **7.2** | **6.3** | **10.2** | **0.2** | **69.0** |
| **Weighted Average** | | | | | **94.6** | **92.2** | **49.1** | **7.2** | **6.6** | **5.8** | **9.5** | **0.2** | **56.9** |

*Source: Bloomberg.*

## Table 4: Peers valuation table - HKSAR, Taiwan Province, Korea and U.S.

| Company | Ticker | Currency | Price | Market Cap (million) | PER 22F | PER 23F | PER 24F | PBR 22F | PBR 23F | PBR 24F | ROE (%) 22F | D/Y (%) 22F | EV/EBITDA 22F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HKSAR Listed Companies** | | | | | | | | | | | | | |
| SMIC | 00981 HK | HKD | 16.920 | 190,152 | 9.7 | 13.8 | 13.5 | 0.9 | 0.8 | 0.7 | 9.8 | 0.0 | 7.6 |
| Sunny Optical Tech | 02382 HK | HKD | 97.150 | 106,559 | 31.9 | 22.8 | 17.9 | 4.3 | 3.7 | 3.2 | 13.6 | 0.8 | 17.7 |
| Shanghai Fudan Microelect-H | 01385 HK | HKD | 28.900 | 50,407 | 18.9 | 14.2 | 12.3 | n.a. | n.a. | n.a. | n.a. | n.a. | 33.6 |
| Hua Hong Semiconductor Ltd | 01347 HK | HKD | 27.500 | 35,933 | 11.7 | 12.9 | 12.3 | 1.4 | 1.3 | 1.2 | 12.8 | 0.5 | 6.0 |
| Kingboard Holdings Ltd | 00148 HK | HKD | 25.000 | 27,720 | 3.8 | 3.5 | 3.2 | n.a. | n.a. | n.a. | 11.2 | 5.6 | n.a. |
| Asmpt Ltd | 00522 HK | HKD | 55.650 | 22,976 | 8.6 | 12.2 | 10.1 | 1.5 | 1.4 | 1.2 | 17.2 | 6.2 | 5.1 |
| Aac Technologies Holdings In | 02018 HK | HKD | 17.400 | 20,963 | 22.7 | 15.6 | 12.2 | 0.8 | 0.8 | 0.8 | 3.6 | 1.0 | 5.2 |
| Fit Hon Teng Ltd | 06088 HK | HKD | 2.070 | 15,067 | 12.2 | 11.3 | 9.4 | 0.7 | 0.7 | 0.6 | 6.7 | 0.0 | 4.1 |
| Cowell E Holdings Inc | 01415 HK | HKD | 11.000 | 9,215 | 14.7 | 10.9 | 7.9 | 2.9 | 2.3 | 1.8 | 22.2 | 1.0 | 8.7 |
| Q Technology Group Co Ltd | 01478 HK | HKD | 4.260 | 5,046 | 12.3 | 7.2 | 5.3 | 0.9 | 0.8 | 0.7 | 7.1 | 0.4 | 5.2 |
| **Simple Average** | | | | | **14.6** | **12.4** | **10.4** | **1.7** | **1.5** | **1.3** | **11.6** | **1.7** | **10.4** |
| **Weighted Average** | | | | | **16.1** | **15.0** | **13.1** | **1.9** | **1.7** | **1.5** | **11.3** | **1.0** | **12.4** |
| **Taiwan Province Listed Companies** | | | | | | | | | | | | | |
| TSMC | 2330 TT | TWD | 451.00 | 11,694,602 | 11.6 | 12.1 | 10.4 | 4.0 | 3.3 | 2.7 | 39.5 | 2.5 | 7.1 |
| Hon Hai Precision Industry | 2317 TT | TWD | 100.50 | 1,393,231 | 9.7 | 8.9 | 8.0 | 0.9 | 0.9 | 0.8 | 9.8 | 5.4 | 5.1 |
| Mediatek Inc | 2454 TT | TWD | 638.00 | 1,020,440 | 8.6 | 10.5 | 9.2 | 2.4 | 2.4 | 2.5 | 28.2 | 11.7 | 6.2 |
| United Microelectronics Corp | 2303 TT | TWD | 40.80 | 510,194 | 5.7 | 8.0 | 8.4 | 1.5 | 1.5 | 1.4 | 28.6 | 10.4 | 3.0 |
| Ase Technology Holding Co Lt | 3711 TT | TWD | 93.50 | 408,054 | 6.7 | 8.0 | 7.4 | 1.4 | 1.3 | 1.2 | 22.3 | 7.8 | 3.9 |
| Largan Precision Co Ltd | 3008 TT | TWD | 2,110.00 | 281,618 | 11.9 | 15.5 | 14.5 | 1.8 | 1.7 | 1.6 | 15.5 | 3.7 | 6.8 |
| Realtek Semiconductor Corp | 2379 TT | TWD | 283.00 | 145,140 | 8.8 | 12.3 | 10.3 | 3.4 | 3.5 | 3.1 | 41.6 | 9.1 | 6.1 |
| **Simple Average** | | | | | **9.0** | **10.8** | **9.7** | **2.2** | **2.1** | **1.9** | **26.5** | **7.2** | **5.5** |
| **Weighted Average** | | | | | **10.9** | **11.6** | **10.0** | **3.4** | **2.9** | **2.4** | **34.9** | **3.9** | **6.6** |
| **South Korea Listed Companies** | | | | | | | | | | | | | |
| Samsung Electronics Co Ltd | 005930 KS | KRW | 56,600.00 | 337,889,692 | 10.2 | 15.1 | 10.2 | 1.2 | 1.1 | 1.0 | 11.7 | 2.6 | 2.7 |
| Sk Hynix Inc | 000660 KS | KRW | 76,000.00 | 55,328,180 | 9.4 | n.a. | 9.7 | 0.8 | 0.8 | 0.8 | 9.1 | 1.9 | 3.1 |
| Leeno Industrial Inc | 058470 KS | KRW | 159,600.00 | 2,432,682 | 20.6 | 18.2 | 15.5 | 5.1 | 4.3 | 3.6 | 26.0 | 1.8 | n.a. |
| Lx Semicon Co Ltd | 108320 KS | KRW | 74,300.00 | 1,208,437 | 4.1 | 4.6 | 4.0 | 1.2 | 1.0 | 0.8 | 33.0 | 5.7 | 1.2 |
| **Simple Average** | | | | | **11.1** | **12.6** | **9.9** | **2.1** | **1.8** | **1.6** | **20.0** | **3.0** | **2.3** |
| **Weighted Average** | | | | | **10.1** | **15.1** | **10.2** | **1.1** | **1.1** | **1.0** | **11.5** | **2.5** | **2.7** |
| **US Listed Companies** | | | | | | | | | | | | | |
| Taiwan Semiconductor-Sp Adr* | TSM US | USD | 73.060 | 378,895 | 11.5 | 12.1 | 10.3 | 3.9 | 3.3 | 2.7 | 39.5 | 2.5 | 7.1 |
| Nvidia Corp | NVDA US | USD | 140.360 | 345,286 | 35.9 | 43.0 | 32.4 | 13.2 | 16.2 | 14.5 | 44.8 | 0.1 | 49.5 |
| Asml Holding Nv-Ny Reg Shs* | ASML US | USD | 531.640 | 214,324 | 36.1 | 26.9 | 21.6 | 23.2 | 19.3 | 15.2 | 58.6 | 1.2 | 28.8 |
| Texas Instruments Inc | TXN US | USD | 161.190 | 146,291 | 17.2 | 20.1 | 18.5 | 10.1 | 9.3 | 8.1 | 61.4 | 2.9 | 13.1 |
| Qualcomm Inc | QCOM US | USD | 106.970 | 119,913 | 9.3 | 10.4 | 8.7 | 6.7 | 5.3 | 4.1 | 92.5 | 2.4 | 8.2 |
| Intel Corp | INTC US | USD | 25.540 | 105,404 | 13.1 | 14.2 | 10.3 | 1.1 | 1.0 | 0.9 | 7.9 | 5.7 | 6.4 |
| Advanced Micro Devices | AMD US | USD | 62.570 | 100,885 | 17.8 | 17.1 | 13.7 | 1.8 | 1.8 | 1.6 | 11.8 | 0.0 | 14.3 |
| Micron Technology Inc | MU US | USD | 49.120 | 53,599 | 6.3 | n.a. | 23.6 | 1.1 | 1.1 | 1.1 | 18.5 | 0.8 | 3.5 |
| Nxp Semiconductors Nv | NXPI US | USD | 151.700 | 39,311 | 10.4 | 11.8 | 10.5 | 4.9 | 4.2 | 3.4 | 47.0 | 2.2 | 8.6 |
| Infineon Technologies-Adr* | IFNNY US | USD | 29.560 | 38,603 | 15.2 | 13.3 | 12.4 | 2.8 | 2.2 | 1.9 | 18.2 | 1.4 | 7.2 |
| Stmicroelectronics Nv-Ny Shs* | STM US | USD | 34.780 | 31,669 | 8.8 | 9.4 | 9.0 | 2.6 | 2.1 | 1.7 | 34.0 | 0.7 | 5.5 |
| Lattice Semiconductor Corp | LSCC US | USD | 62.500 | 8,566 | 35.7 | 31.0 | 26.3 | 17.9 | n.a. | n.a. | 57.8 | n.a. | n.a. |
| **Simple Average** | | | | | **18.1** | **19.0** | **16.5** | **7.4** | **6.0** | **5.0** | **41.0** | **1.8** | **13.8** |
| **Weighted Average** | | | | | **21.0** | **22.3** | **18.1** | **9.0** | **8.6** | **7.3** | **44.4** | **1.7** | **20.3** |

*Source: Bloomberg.*
*Note *: American Depositary Receipt (ADR).*

**Company Rating Definition**

The Benchmark: Hong Kong Hang Seng Index

Time Horizon: 6 to 18 months

| Rating | | Definition |
|---|---|---|
| Buy | 买入 | Relative Performance >15%;<br>or the fundamental outlook of the company or sector is favorable. |
| Accumulate | 收集 | Relative Performance is 5% to 15%;<br>or the fundamental outlook of the company or sector is favorable. |
| Neutral | 中性 | Relative Performance is -5% to 5%;<br>or the fundamental outlook of the company or sector is neutral. |
| Reduce | 减持 | Relative Performance is -5% to -15%;<br>or the fundamental outlook of the company or sector is unfavorable. |
| Sell | 卖出 | Relative Performance <-15%;<br>or the fundamental outlook of the company or sector is unfavorable. |

**Sector Rating Definition**

The Benchmark: Hong Kong Hang Seng Index

Time Horizon: 6 to 18 months

| Rating | | Definition |
|---|---|---|
| Outperform | 跑赢大市 | Relative Performance >5%;<br>or the fundamental outlook of the sector is favorable. |
| Neutral | 中性 | Relative Performance is -5% to 5%;<br>or the fundamental outlook of the sector is neutral. |
| Underperform | 跑输大市 | Relative Performance <-5%;<br>or the fundamental outlook of the sector is unfavorable. |

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