4 February 2009 (No. of pages: 9)

# Realtek Semiconductor (2379 TT)

**Electronics: Taiwan**

**6-mth rating: 4 → 3**

**Target price: NT$35.00** (-2.0%)

**Share price: NT$35.70** (3 Feb)

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## Still few catalysts, but valuation is attractive in PBR terms

### Rating upgraded to 3 (*Hold*) on attractive valuation

- We have been negative about the prospects for Realtek Semiconductor (Realtek) since May 2008 when we initiated coverage of the company. Although we do not expect much change in its fundamentals over the near term, we believe the downside for the stock is limited for now as it is trading near book value.

- We have upgraded our rating for Realtek to **3** (*Hold*) from 4 (*Underperform*), due mainly to the fact that the company is now trading at a PBR of 1.1x on our FY09 BVPS forecast, while its historical eight-year low PBR is about 1x.

### Better 1Q FY09 outlook from inventory restocking

- Realtek has guided 1Q FY09 sales to be flat or up slightly quarter-on-quarter due to inventory-restocking by customers, while the market expects a decline of about 10% QoQ.

- Though the company expects margin pressure to be limited for 1Q FY09, it believes it could increase from 2Q FY09 due to aggressive pricing by its competitors as they look to increase market share for 2009.

### We see limited prospects for the 11n chip for 2009

- We are cautious on the prospects for Realtek's 11n chip as the company is a late-comer to the 11n IC market and we think the gross-profit margin on the product could be low.

Reuters code 2379.TW

**Market data**

| | | |
|---|---|---|
| TWSE Index | | 4,373 |
| Market cap | (US$m) | 495.70 |
| EV | (US$m; 08E) | 341.2 |
| 3-mth avg daily T/O | (US$m) | 6.34 |
| Shares outstanding | (m) | 469 |
| Free float | (%) | 93.9 |
| Major shareholder | | Chen Jinn Shing (1.3%) |
| Exchange rate | NT$/US$ | 33.692 |

| Performance (%)* | 1M | 3M | 6M |
|---|---|---|---|
| Absolute | 12.8 | (28.9) | (45.8) |
| Relative | 18.4 | (18.8) | (13.2) |

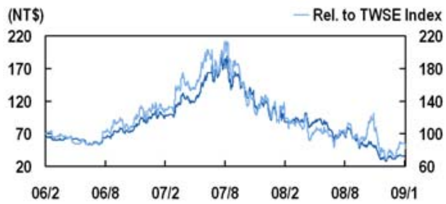
Source: Daiwa
Note: *Relative to TWSE Index

**Investment indicators**

| | | 2008E | 2009E | 2010E |
|---|---|---|---|---|
| PER | (x) | 19.0 | 15.2 | 11.5 |
| PCFR | (x) | 3.9 | 6.0 | 4.8 |
| EV/EBITDA | (x) | 3.5 | 4.3 | 3.6 |
| PBR | (x) | 1.2 | 1.1 | 1.1 |
| Dividend yield | (%) | 8.4 | 3.7 | 4.6 |
| ROE | (%) | 5.8 | 7.7 | 9.5 |
| ROA | (%) | 4.5 | 5.6 | 6.4 |
| Net debt equity | (%) | Net cash | Net cash | Net cash |

Source: Daiwa forecasts

**Price and relative performance**




Source: Bloomberg, Daiwa

**Income summary**

| | Revenue | | EBITDA | | Net profit | | EPS | | CFPS | DPS |
|---|---|---|---|---|---|---|---|---|---|---|
| Year to 31 Dec | (NT$m) | (%) | (NT$m) | (%) | (NT$m) | (%) | (NT$) | (%) | (NT$) | (NT$) |
| 2006 | 12,423 | *16.8* | 3,606 | *47.7* | 2,711.9 | *44.4* | 5.945 | *40.7* | 9.436 | 1.750 |
| 2007 | 15,709 | *26.4* | 4,343 | *20.4* | 1,876.5 | *(30.8)* | 4.147 | *(30.3)* | 10.562 | 3.500 |
| 2008E* | 16,744 | *6.6* | 3,253 | *(25.1)* | 880.8 | *(53.1)* | 1.879 | *(54.7)* | 9.124 | 3.000 |
| 2009E | 15,826 | *(5.5)* | 2,695 | *(17.2)* | 1,101.3 | *25.0* | 2.350 | *25.0* | 5.936 | 1.338 |
| 2010E | 17,038 | *7.7* | 3,216 | *19.3* | 1,454.9 | *32.1* | 3.105 | *32.1* | 7.434 | 1.655 |

Source: Company, Daiwa forecasts
Notes: The investment indicators and income summary on the front page of this report, as well as the back-page financial summary, are all based on the forex assumptions set out in the table at the back of this report, unless stated otherwise. 2008 numbers are preliminary and subject to change after auditing.

## Rating upgraded due to attractive valuation

### PBR of 1x a support level for Realtek, in our view

***Realtek upgraded to 3 (Hold) from 4 (Underperform) on attractive valuation***

We have upgraded our rating for Realtek to 3 (*Hold*) from 4 (*Underperform*). The company is trading currently at a PBR of 1.1x our FY09 BVPS forecast and we think this is attractive given that Realtek is making a profit.

We have been negative on Realtek's prospects since May 2008 when we initiated coverage of the company with a 4 (*Underperform*) rating. Although we expect there to be little change in the company's fundamentals over the near term, we believe the downside risk for Realtek's valuation is limited for now in terms of PBR.

We have used a PBR rather than a PER to arrive at our six-month target price for Realtek, because in the current economic environment we do not think it is appropriate to use the latter for the company's valuation. Its historical PBR low over the past eight years was about 1x. As a result, we have lowered our target price to NT$35.00 based on a PBR of 1.1x our FY09 BVPS forecast (from NT$47.00, based on a PER of 10x on our previous FY09 EPS forecast).

However, we still can not see any catalysts that would drive the company's long-term growth (we are more cautious than the market about the prospects for and contribution from Realtek's 11n chip), and so cannot justify giving it a higher rating. We expect the share price to rise in the near term due to better-than-expected inventory restocking momentum. However, we think the share price might retreat once the restocking process has been completed.

### 1Q FY09 guidance surprises the market on the upside

***Upside surprise from 1Q FY09 sales guidance, but the company expects pricing pressure from 2Q FY09***

At the 4Q FY08 results-announcement conference, the company guided that 1Q FY09 sales would be flat or up slightly quarter-on-quarter due to aggressive inventory-restocking by customers, while the market expects a decline of about 10% QoQ.

The company also guided that the 1Q FY09 gross margin would fall quarter-on-quarter (to about 41%) and indicated that the gross margin for FY09 would remain above 40% (42.3% for 2008) as Realtek had prepared lower-cost IC solutions by the end of 4Q FY08.

The company expects pricing pressure in 1Q FY09 to be limited as most shipments will comprise old products. However, the company expects significant pricing pressure to emerge after March/April once inventory on hand has diminished, and believes most of its competitors will use aggressive pricing to gain market share and secure sales growth for 2009.

At the end of 4Q FY08, the value of inventory at the company amounted to NT$1.9bn, while days of inventory (DOI) was about 100, a high level compared with DOI levels of 60-70 for the four previous quarters. The company expects its end-1Q FY09 inventory level to be NT$1.5bn (or a DOI level of 70-75).

### 11n the company's main hope for 2009, but we remain cautious

***We remain cautious on the prospects and contribution from the 11n IC***

A major new product for 2009 is the 11n single chip (MAC/BB+RF+PA integration and 65nm CMOS manufacturing process), which is scheduled to enter mass production in 1Q09. The company will focus on 1x2 11n chips for the dongle/notebook bundle markets and 2x2 & 2x3 11n for the access-point/router markets.

As a late-comer to the 11n IC market, the company's strategy is to price its 1x2 11n chip at the level of 1x1 11n chips, so that it can take share from the major companies in the 1x1 11n market, including Ralink (3545 TT, Not rated) and Atheros.

However, we are cautious about the prospects for Realtek's 11n chips for two reasons. First, we doubt whether the company can price its 1x2 11n chips at the level of 1x1 11n chips, given that its manufacturing cost (using 65nm) should be higher than that of Ralink (using 90nm), particularly in the first few quarters after mass production begins. We believe the only way for Realtek to price its chips at the 1x1 11n level would be at the expense of its gross-profit margin.

Second, we have heard that clients' feedback on Realtek's 11n chip has been good. However, as 11n chips are a new product for Realtek, we think more customer tests will be necessary, and this could delay mass production.

We expect the 11n chip business to account for less than 5% of Realtek's total sales for 2009, and therefore think that this single product line will not be strong enough to lead the company's sales growth.

## 4Q FY08 results much worse than we forecast

EPS for 4Q FY08 was -NT$0.24, substantially below our forecast of NT$1.06, mainly due to lower sales (affected by inventory adjustments by customers) and the booking of an inventory loss of more than NT$200m.

**Realtek: 4Q08 results review (NT$m)**

| | 4Q08P | 4Q08E | Change (%) | 3Q08 | QoQ | 4Q07 | YoY |
|---|---|---|---|---|---|---|---|
| Sales | 3,080 | 3,794 | (18.8) | 4,790 | (35.7) | 3,715 | (17.1) |
| Gross profit | 1,350 | 1,586 | (14.9) | 1,983 | (31.9) | 1,714 | (21.2) |
| Operating income | 361 | 546 | (33.9) | 624 | (42.1) | 672 | (46.3) |
| Pre-tax income | (98) | 516 | n.m. | 543 | n.m. | (959) | n.m. |
| Net profit | (113) | 497 | n.m. | 530 | n.m. | (968) | n.m. |
| EPS (NT$) | (0.24) | 1.06 | n.m. | 1.13 | n.m. | (2.14) | n.m. |
| | | | | | | | |
| Gross-profit margin (%) | 43.8 | 41.8 | 2.0 p.p. | 41.4 | | 46.1 | |
| Operating-profit margin (%) | 11.7 | 14.4 | (2.7) p.p. | 13.0 | | 18.1 | |
| Net-profit margin (%) | (3.7) | 13.1 | (16.8) p.p. | 11.1 | | (26.1) | |

Source: Bloomberg, Daiwa
Notes: 'P' stands for 'preliminary'; 'n.m.' stands for 'not meaningful'

## Earnings-forecast revisions

***We have revised down our 2009 and 2010 EPS forecasts by 50.3% and 37.9%, respectively***

We have revised down our 2009 and 2010 EPS forecasts by 50.3% and 37.9%, respectively. This is for two reasons. First, the outlook for PC shipments globally for 2009 is worse than we expected at the end of October – we now expect PC shipments globally to decline by 11% YoY for 2009 (from a decline of 2% YoY previously). Second, we have adjusted upwards our non-operating expenses assumptions for FY09 and FY10 – we now expect non-operating expenses of NT$700-800m for FY09 (up from less than NT$100m previously), given our view that in the tough stock market environment in 2009 Realtek may not be able to record a non-operating profit by disposing of investments. If this is the case, its main non-operating expense would be overseas R&D, which costs the company about NT$200m a quarter.

**Realtek: Daiwa earnings-forecast revisions (NT$m)**

| | FY09E | | | FY10E | | |
|---|---|---|---|---|---|---|
| | Previous | New | Change (%) | Previous | New | Change (%) |
| Sales | 17,667 | 15,826 | (10.4) | 18,837 | 17,038 | (9.6) |
| Gross profit | 7,388 | 6,362 | (13.9) | 7,855 | 7,004 | (10.8) |
| Operating income | 2,402 | 1,946 | (19.0) | 2,548 | 2,406 | (5.6) |
| Pre-tax income | 2,338 | 1,162 | (50.3) | 2,473 | 1,534 | (38.0) |
| Net profit | 2,216 | 1,101 | (50.3) | 2,345 | 1,455 | (37.9) |
| EPS (NT$) | 4.73 | 2.35 | (50.3) | 5.00 | 3.10 | (37.9) |
| | | | | | | |
| Gross margin (%) | 41.8 | 40.2 | (1.6) p.p | 41.7 | 41.1 | (0.6) p.p |
| Operating margin (%) | 13.6 | 12.3 | (1.3) p.p | 13.5 | 14.1 | 0.6 p.p |
| Net margin (%) | 12.5 | 7.0 | (5.5) p.p | 12.4 | 8.5 | (3.9) p.p |

Source: Daiwa forecasts

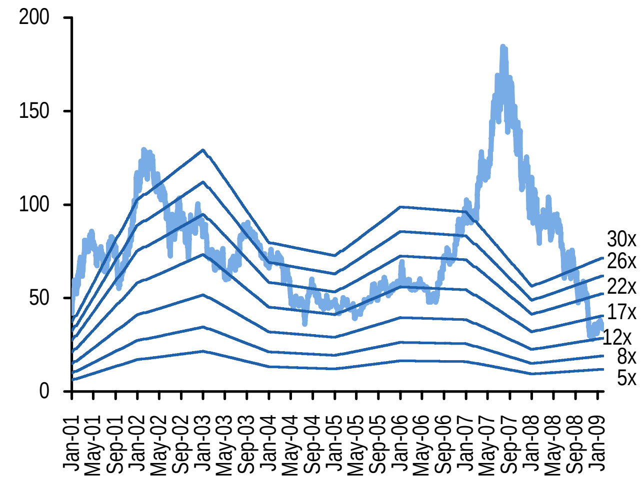
## Risks

The main potential upside risk to our forecasts is continued inventory restocking by PC customers. The major downside risk is a deteriorating global economy, which would continue to affect end demand for PCs.

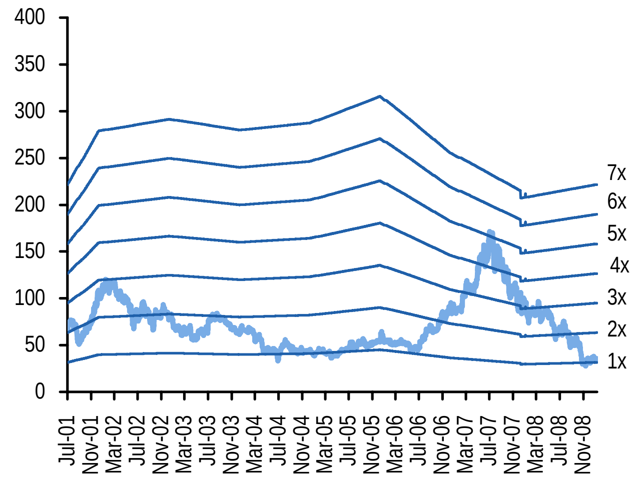
## Valuation – expensive in terms of PER but attractive in PBR terms

The stock is trading currently at a PER of 15.2x and a PBR of 1.1x on our FY09 EPS and BVPS forecasts, respectively. Although the valuation looks expensive in terms of PER, it is attractive in PBR terms, in our view. Its historical PBR low over the past eight years was about 1x.

**Historical PER band**




**Historical PBR band**




Source: Bloomberg, Daiwa

## Valuation comparison

| Code | Company | Local currency | Mkt cap (US$m) | Share price (local curr.) | EPS (local curr./shr) 2007A | EPS 2008E | EPS 2009E | EPS growth (%) 2008E | EPS growth 2009E | PER (x) 2008E | PER 2009E | PBR (x) 2008E | PBR 2009E | ROE (%) 2008E | ROE 2009E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Global peers | | | | | | | | | | | | | | | |
| Pro forma | | | | | | | | | | | | | | | |
| QCOM US | Qualcomm | (US$) | 58,209 | 35.3 | 1.99 | 1.64 | 2.21 | (18.0) | 34.8 | 21.6 | 16.0 | 4.0 | 3.4 | 14.59 | 17.48 |
| BRCM US | Broadcom | (US$) | 8,198 | 16.4 | 1.15 | 0.27 | 0.70 | (77.0) | 163.8 | 61.9 | 23.5 | 2.3 | 2.3 | (4.42) | 1.57 |
| NVDA US | nVidia | (US$) | 4,501 | 8.4 | 1.53 | 0.58 | (0.14) | (62.0) | - | 14.4 | (59.0) | 2.6 | 1.8 | 10.20 | (12.67) |
| SNDK US | SanDisk | (US$) | 2,550 | 11.3 | 1.68 | (0.93) | (0.21) | - | - | (12.1) | (54.2) | 0.5 | 0.8 | (6.42) | (3.05) |
| MRVL US | Marvell | (US$) | 4,502 | 7.3 | 0.36 | 0.68 | 0.17 | 87.8 | (74.6) | 10.8 | 42.7 | 1.3 | 1.2 | 10.53 | 5.29 |
| LSI US | LSI Logic | (US$) | 2,064 | 3.2 | 0.23 | (0.05) | 0.09 | - | - | (60.4) | 34.0 | 0.6 | 1.4 | (3.99) | 5.98 |
| XLNX US | Xilinx | (US$) | 4,588 | 16.8 | 1.08 | 1.23 | 0.67 | 13.5 | (45.4) | 13.7 | 25.0 | 2.7 | 2.8 | 19.10 | 10.58 |
| ALTR US | Altera | (US$) | 4,669 | 15.7 | 0.87 | 0.60 | 0.80 | (30.4) | 32.2 | 26.0 | 19.7 | 4.6 | 5.8 | 20.45 | 32.42 |
| ZRAN US | Zoran | (US$) | 316 | 6.2 | 1.35 | (1.37) | (0.58) | - | - | (4.5) | (10.7) | 0.5 | 0.7 | (15.75) | (3.90) |
| TRID US | Trident | (US$) | 107 | 1.7 | 1.02 | (0.55) | (0.59) | - | - | (3.1) | (2.9) | 0.5 | 0.5 | (19.70) | (27.70) |
| GAAP | | | | | | | | | | | | | | | |
| QCOM US | Qualcomm | (US$) | 58,209 | 35.3 | 1.83 | 1.47 | 2.04 | (19.6) | 38.5 | 24.0 | 17.3 | 4.0 | 3.4 | 19.45 | 14.59 |
| BRCM US | Broadcom | (US$) | 8,198 | 16.4 | 0.32 | (0.78) | (0.29) | - | - | (21.1) | (56.6) | 2.3 | 2.3 | 15.32 | (4.42) |
| NVDA US | nVidia | (US$) | 4,501 | 8.4 | 1.30 | 0.02 | (0.44) | (98.5) | - | 441.1 | (19.1) | 2.6 | 1.8 | 35.54 | 10.20 |
| SNDK US | SanDisk | (US$) | 2,550 | 11.3 | 1.01 | (1.27) | (0.53) | - | - | (8.9) | (21.5) | 0.5 | 0.8 | (4.90) | (6.42) |
| MRVL US | Marvell | (US$) | 4,502 | 7.3 | (0.17) | 0.33 | (0.05) | - | - | 22.0 | (152.9) | 1.3 | 1.2 | 3.18 | 10.53 |
| LSI US | LSI Logic | (US$) | 2,064 | 3.2 | (0.31) | (0.48) | (0.23) | - | - | (6.6) | (13.7) | 0.6 | 1.4 | 10.41 | (3.99) |
| XLNX US | Xilinx | (US$) | 4,588 | 16.8 | 1.02 | 1.24 | 0.67 | 21.1 | (46.0) | 13.6 | 25.1 | 2.7 | 2.8 | 21.47 | 19.10 |
| ALTR US | Altera | (US$) | 4,669 | 15.7 | 0.82 | 0.65 | 0.90 | (20.5) | 38.7 | 24.1 | 17.4 | 4.6 | 5.8 | 39.60 | 20.45 |
| ZRAN US | Zoran | (US$) | 316 | 6.2 | 1.29 | (1.44) | (0.75) | - | - | (4.3) | (8.3) | 0.5 | 0.7 | (8.16) | (15.75) |
| TRID US | Trident | (US$) | 107 | 1.7 | 0.48 | (1.09) | (1.10) | - | - | (1.6) | (1.6) | 0.5 | 0.5 | 18.33 | (19.70) |
| Taiwan peers | | | | | | | | | | | | | | | |
| Pro forma | | | | | | | | | | | | | | | |
| 2454 TT | MediaTek | (NT$) | 7,960 | 250.0 | 32.27 | 25.46 | 23.91 | (21.1) | (6.1) | 9.8 | 10.5 | 3.5 | 3.1 | 33.76 | 31.76 |
| 3034 TT | Novatek | (NT$) | 613 | 35.3 | 14.02 | 8.22 | 5.71 | (41.3) | (30.5) | 4.3 | 6.2 | 1.1 | 1.0 | 26.68 | 17.40 |
| 2379 TT | Realtek | (NT$) | 496 | 35.7 | 4.15 | 2.46 | 3.02 | (40.7) | 22.8 | 14.5 | 11.8 | 1.2 | 1.1 | 7.58 | 9.88 |
| 6286 TT | Richtek | (NT$) | 556 | 140.0 | 14.98 | 13.32 | 13.94 | (11.1) | 4.6 | 10.5 | 10.0 | 4.4 | 3.6 | 43.39 | 39.38 |
| GAAP | | | | | | | | | | | | | | | |
| 2454 TT | MediaTek | (NT$) | 7,960 | 250.0 | 32.27 | 19.18 | 18.37 | (40.5) | (4.2) | 13.0 | 13.6 | 3.5 | 3.1 | 25.43 | 24.41 |
| 3034 TT | Novatek | (NT$) | 613 | 35.3 | 14.02 | 6.36 | 4.53 | (54.7) | (28.7) | 5.6 | 7.8 | 1.1 | 1.0 | 20.62 | 13.80 |
| 2379 TT | Realtek | (NT$) | 496 | 35.7 | 4.15 | 1.88 | 2.35 | (54.7) | 25.0 | 19.0 | 15.2 | 1.2 | 1.1 | 5.80 | 7.69 |
| 6286 TT | Richtek | (NT$) | 556 | 140.0 | 14.98 | 10.56 | 10.97 | (29.5) | 3.9 | 13.3 | 12.8 | 4.4 | 3.6 | 34.39 | 30.99 |

Source: Bloomberg, Daiwa forecasts for Novatek, MediaTek, Realtek and Richtek
Notes: share prices as at 3 February 2008; 2008 numbers for Realtek are preliminary and subject to change after auditing

## Realtek: quarterly income statement (NT$m)

| | 1Q08 | 2Q08 | 3Q08 | 4Q08P | 1Q09E | 2Q09E | 3Q09E | 4Q09E | FY06 | FY07 | FY08P | FY09E | FY10E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GAAP (NT$m)** | | | | | | | | | | | | | |
| Net sales | 4,200 | 4,674 | 4,790 | 3,080 | 3,128 | 3,826 | 4,619 | 4,253 | 12,423 | 15,709 | 16,744 | 15,826 | 17,038 |
| COGS | 2,400 | 2,731 | 2,807 | 1,730 | 1,846 | 2,296 | 2,771 | 2,552 | 6,559 | 8,299 | 9,668 | 9,464 | 10,034 |
| Gross profit | 1,800 | 1,943 | 1,983 | 1,350 | 1,283 | 1,530 | 1,848 | 1,701 | 5,864 | 7,410 | 7,076 | 6,362 | 7,004 |
| SG&A | 395 | 495 | 422 | 311 | 330 | 379 | 430 | 408 | 1,178 | 1,337 | 1,623 | 1,547 | 1,689 |
| R&D expenses | 780 | 689 | 937 | 678 | 630 | 689 | 785 | 766 | 1,900 | 2,507 | 3,084 | 2,869 | 2,908 |
| Operating income | 625 | 760 | 624 | 361 | 323 | 463 | 633 | 527 | 2,786 | 3,566 | 2,370 | 1,946 | 2,406 |
| Net non-op income | (31) | (865) | (81) | (459) | (191) | (199) | (194) | (200) | (39) | (1,597) | (1,435) | (784) | (872) |
| Pre-tax income | 594 | (105) | 543 | (98) | 132 | 264 | 439 | 327 | 2,748 | 1,969 | 934 | 1,162 | 1,534 |
| Tax expenses | 17 | 8 | 13 | 15 | 7 | 16 | 22 | 16 | 36 | 92 | 53 | 61 | 79 |
| Net income | 577 | (113) | 530 | (113) | 125 | 248 | 417 | 311 | 2,712 | 1,877 | 881 | 1,101 | 1,455 |
| EPS (NT$) | 1.23 | (0.24) | 1.13 | (0.24) | 0.27 | 0.53 | 0.89 | 0.66 | 5.95 | 4.15 | 1.88 | 2.35 | 3.10 |
| **Pro forma (NT$m)** | | | | | | | | | | | | | |
| Net sales | 4,200 | 4,674 | 4,790 | 3,080 | 3,128 | 3,826 | 4,619 | 4,253 | 12,423 | 15,709 | 16,744 | 15,826 | 17,038 |
| COGS | 2,374 | 2,731 | 2,785 | 1,730 | 1,840 | 2,284 | 2,753 | 2,538 | 6,559 | 8,299 | 9,620 | 9,415 | 9,968 |
| Gross profit | 1,826 | 1,943 | 2,005 | 1,350 | 1,288 | 1,542 | 1,866 | 1,715 | 5,864 | 7,410 | 7,124 | 6,411 | 7,069 |
| SG&A | 395 | 495 | 422 | 311 | 330 | 379 | 430 | 408 | 1,178 | 1,337 | 1,623 | 1,547 | 1,689 |
| R&D expenses | 633 | 689 | 812 | 678 | 598 | 625 | 679 | 686 | 1,900 | 2,507 | 2,812 | 2,589 | 2,537 |
| Operating income | 798 | 760 | 771 | 361 | 360 | 537 | 758 | 621 | 2,786 | 3,566 | 2,689 | 2,276 | 2,843 |
| Net non-op income | (31) | (865) | (122) | (459) | (191) | (199) | (194) | (200) | (39) | (1,597) | (1,477) | (784) | (872) |
| Pre-tax income | 767 | (105) | 649 | (98) | 169 | 338 | 564 | 421 | 2,748 | 1,969 | 1,213 | 1,492 | 1,971 |
| Tax expenses | 22 | 8 | 15 | 15 | 8 | 20 | 28 | 21 | 36 | 92 | 61 | 78 | 102 |
| Net income | 745 | (113) | 633 | (113) | 161 | 318 | 536 | 400 | 2,712 | 1,877 | 1,152 | 1,414 | 1,869 |
| EPS (NT$) | 1.59 | (0.24) | 1.35 | (0.24) | 0.34 | 0.68 | 1.14 | 0.85 | 5.95 | 4.15 | 2.46 | 3.02 | 3.99 |
| **Profitability (%)** | | | | | | | | | | | | | |
| GAAP | | | | | | | | | | | | | |
| Gross margin | 42.9 | 41.6 | 41.4 | 43.8 | 41.0 | 40.0 | 40.0 | 40.0 | 47.2 | 47.2 | 42.3 | 40.2 | 41.1 |
| Operating margin | 14.9 | 16.2 | 13.0 | 11.7 | 10.3 | 12.1 | 13.7 | 12.4 | 22.4 | 22.7 | 14.2 | 12.3 | 14.1 |
| PBT margin | 14.1 | -2.2 | 11.3 | -3.2 | 4.2 | 6.9 | 9.5 | 7.7 | 22.1 | 12.5 | 5.6 | 7.3 | 9.0 |
| Net margin | 13.7 | -2.4 | 11.1 | -3.7 | 4.0 | 6.5 | 9.0 | 7.3 | 21.8 | 11.9 | 5.3 | 7.0 | 8.5 |
| Pro forma | | | | | | | | | | | | | |
| Gross margin | 43.5 | 41.6 | 41.9 | 43.8 | 41.2 | 40.3 | 40.4 | 40.3 | 47.2 | 47.2 | 42.5 | 40.5 | 41.5 |
| Operating margin | 19.0 | 16.2 | 16.1 | 11.7 | 11.5 | 14.0 | 16.4 | 14.6 | 22.4 | 22.7 | 16.1 | 14.4 | 16.7 |
| PBT margin | 18.3 | (2.2) | 13.5 | (3.2) | 5.4 | 8.8 | 12.2 | 9.9 | 22.1 | 12.5 | 7.2 | 9.4 | 11.6 |
| Net margin | 17.7 | (2.4) | 13.2 | (3.7) | 5.1 | 8.3 | 11.6 | 9.4 | 21.8 | 11.9 | 6.9 | 8.9 | 11.0 |
| **YoY (%)** | | | | | | | | | | | | | |
| GAAP | | | | | | | | | | | | | |
| Sales | 29 | 23 | (3) | (17) | (26) | (18) | (4) | 38 | 17 | 26 | 7 | (5) | 8 |
| Gross profit | 17 | 8 | (16) | (21) | (29) | (21) | (7) | 26 | 24 | 26 | (5) | (10) | 10 |
| Operating profit | (10) | (14) | (52) | (46) | (48) | (39) | 1 | 46 | 31 | 28 | (34) | (18) | 24 |
| Net profit | (16) | (113) | (59) | - | (78) | - | (21) | - | 44 | (31) | (53) | 25 | 32 |
| Pro forma | | | | | | | | | | | | | |
| Sales | 29 | 23 | (3) | (17) | (26) | (18) | (4) | 38 | 17 | 26 | 7 | (5) | 8 |
| Gross profit | 18 | 8 | (15) | (21) | (29) | (21) | (7) | 27 | 24 | 26 | (4) | (10) | 10 |
| Operating profit | 15 | (14) | (41) | (46) | (55) | (29) | (2) | 72 | 31 | 28 | (25) | (15) | 25 |
| Net profit | 8 | - | (51) | - | (78) | (381) | (15) | (453) | 44 | (31) | (39) | 23 | 32 |
| **QoQ (%)** | | | | | | | | | | | | | |
| GAAP | | | | | | | | | | | | | |
| Sales | 13 | 11 | 2 | (36) | 2 | 22 | 21 | (8) | | | | | |
| Gross profit | 5 | 8 | 2 | (32) | (5) | 19 | 21 | (8) | | | | | |
| Operating income | (7) | 22 | (18) | (42) | (11) | 43 | 37 | (17) | | | | | |
| Net income | (160) | - | (569) | - | (211) | 98 | 68 | (25) | | | | | |
| Pro forma | | | | | | | | | | | | | |
| Sales | 13 | 11 | 2 | (36) | 2 | 22 | 21 | (8) | | | | | |
| Gross profit | 6 | 6 | 3 | (33) | (5) | 20 | 21 | (8) | | | | | |
| Operating income | 19 | (5) | 1 | (53) | (0) | 49 | 41 | (18) | | | | | |
| Net income | (177) | - | (660) | - | (242) | 98 | 68 | (25) | | | | | |

Source: Company, Daiwa forecasts
Note: 2008 numbers are preliminary and subject to change after auditing

### Company background

Realtek Semiconductor is a fabless IC design company that was established in 1987. The company listed on the Taiwan Exchange in 1998. It has 1,500 employees, 80% of which are R&D engineers. The company competes with international chip-design companies such as Broadcom, Atheros, Conexant, IDT, and ADI in different segments.

## Realtek Semiconductor– financial summary

### Profit and loss (NT$m)

| Year to 31 Dec | 2006 | 2007 | 2008P | 2009E | 2010E |
|---|---|---|---|---|---|
| Sales | 12,423 | 15,709 | 16,744 | 15,826 | 17,038 |
| Cost of goods sold | 6,559 | 8,299 | 9,668 | 9,464 | 10,034 |
| Gross profit | 5,864 | 7,410 | 7,076 | 6,362 | 7,004 |
| Operating expenses | 3,078 | 3,844 | 4,707 | 4,416 | 4,597 |
| Operating profit | 2,786 | 3,566 | 2,370 | 1,946 | 2,406 |
| Net other non-op. income | (39) | (1,597) | (1,435) | (784) | (872) |
| Pre-tax income | 2,748 | 1,969 | 934 | 1,162 | 1,534 |
| Tax currently payable | 36 | 92 | 53 | 61 | 79 |
| Net profit | 2,712 | 1,877 | 881 | 1,101 | 1,455 |
| EBITDA | 3,606 | 4,343 | 3,253 | 2,695 | 3,216 |
| EPS (NT$) | 5.95 | 4.15 | 1.88 | 2.35 | 3.10 |

### Ratios (%)

| Year to 31 Dec | 2006 | 2007 | 2008P | 2009E | 2010E |
|---|---|---|---|---|---|
| Growth (% YoY) | | | | | |
| Sales | 16.8 | 26.4 | 6.6 | (5.5) | 7.7 |
| Operating profit | 31.2 | 28.0 | (33.5) | (17.9) | 23.7 |
| EBITDA | 47.7 | 20.4 | (25.1) | (17.2) | 19.3 |
| Net profit | 44.4 | (30.8) | (53.1) | 25.0 | 32.1 |
| EPS | 40.7 | (30.3) | (54.7) | 25.0 | 32.1 |
| Profitability | | | | | |
| Net income/sales | 21.8 | 11.9 | 5.3 | 7.0 | 8.5 |
| Net income/total assets (ROA) | 12.6 | 8.6 | 4.5 | 5.6 | 6.4 |
| Net income/total net worth (ROE) | 14.0 | 10.1 | 5.8 | 7.7 | 9.5 |
| Operating profit/sales | 22.4 | 22.7 | 14.2 | 12.3 | 14.1 |
| Effective income tax rate | 1.31 | 4.69 | 5.72 | 5.23 | 5.17 |
| Stability | | | | | |
| Long-term debt/equity (%) | 0.76 | 0.89 | 1.04 | 7.00 | 15.56 |
| Current ratio (x) | 6.53 | 2.52 | 2.16 | 2.21 | 2.52 |
| Quick ratio (x) | 5.86 | 2.18 | 1.73 | 1.88 | 2.20 |
| Per-share data (NT$) | | | | | |
| EPS | 5.95 | 4.15 | 1.88 | 2.35 | 3.10 |
| CFPS | 9.44 | 10.56 | 9.12 | 5.94 | 7.43 |
| BVPS | 45.12 | 36.50 | 29.60 | 31.52 | 33.78 |
| Activity | | | | | |
| Asset turnover (x) | 0.58 | 0.72 | 0.85 | 0.80 | 0.75 |
| Days receivable (days) | 50.72 | 48.57 | 32.84 | 53.31 | 52.51 |
| Days inventory (days) | 76.34 | 65.12 | 71.73 | 69.10 | 66.44 |
| Days payable (days) | 71.41 | 77.12 | 63.80 | 93.78 | 90.17 |
| Cash cycle (days) | 55.64 | 36.56 | 40.77 | 28.63 | 28.79 |

### Balance sheet (NT$m)

| As at 31 Dec | 2006 | 2007 | 2008P | 2009E | 2010E |
|---|---|---|---|---|---|
| Total assets | 22,771 | 21,033 | 18,458 | 21,216 | 23,999 |
| Current assets | 13,266 | 11,024 | 9,607 | 11,987 | 14,376 |
| Cash and equivalent | 7,647 | 5,204 | 5,214 | 6,852 | 9,016 |
| Short-term investment | 2,376 | 1,943 | 727 | 741 | 755 |
| Inventories | 1,372 | 1,481 | 1,900 | 1,792 | 1,826 |
| Accounts receivable | 1,726 | 2,090 | 1,507 | 2,311 | 2,451 |
| Others | 145 | 307 | 259 | 292 | 328 |
| Non-current assets | 9,504 | 10,009 | 8,851 | 9,229 | 9,622 |
| Long-term investments | 5,808 | 6,183 | 5,139 | 5,347 | 5,564 |
| Next fixed assets | 2,156 | 2,363 | 2,846 | 2,962 | 3,082 |
| Others | 1,541 | 1,463 | 866 | 919 | 976 |
| Total liabilities | 2,188 | 4,515 | 4,587 | 6,446 | 8,169 |
| Current liabilities | 2,031 | 4,368 | 4,443 | 5,412 | 5,707 |
| Accounts payable | 1,283 | 1,754 | 1,690 | 2,432 | 2,479 |
| Short-term borrowing | 0 | 0 | 0 | 0 | 0 |
| Others | 748 | 2,614 | 2,753 | 2,981 | 3,228 |
| Long-term liabilities | 157 | 147 | 144 | 1,034 | 2,463 |
| Shareholders' equity | 20,583 | 16,518 | 13,872 | 14,770 | 15,829 |
| Common stock | 8,361 | 4,525 | 4,686 | 4,686 | 4,686 |
| Capital reserve | 6,834 | 6,949 | 7,088 | 7,215 | 7,215 |
| Retained earnings | 4,657 | 4,532 | 2,131 | 2,891 | 3,943 |
| Others | 730 | 512 | (34) | (22) | (15) |

### Cash flow (NT$m)

| Year to 31 Dec | 2006 | 2007 | 2008P | 2009E | 2010E |
|---|---|---|---|---|---|
| Operating cash flow | 4,304 | 4,780 | 4,276 | 2,781 | 3,484 |
| Net profit | 2,712 | 1,877 | 881 | 1,101 | 1,455 |
| Depreciation and amortisation | 820 | 777 | 884 | 750 | 809 |
| Change in working capital | 482 | 311 | 2,917 | 800 | 718 |
| Others | 290 | 1,815 | (406) | 130 | 501 |
| Investment cash flow | 1,121 | (1,494) | (2,842) | (489) | (504) |
| Net capex | (624) | (661) | (903) | (116) | (120) |
| Change in long-term investment | 2,141 | (641) | (1,702) | (222) | (231) |
| Change in other assets | (396) | (192) | (237) | (151) | (153) |
| Free cash flow | 5,425 | 3,286 | 1,434 | 2,292 | 2,980 |
| Financing cash flow | (1,220) | (5,732) | (1,424) | (655) | (817) |
| Borrowing/proceeds from stock issuance | 0 | 0 | 0 | 0 | 0 |
| Bonus to directors/employees | (35) | (88) | (66) | (39) | (46) |
| Cash dividend | (1,380) | (1,463) | (1,358) | (617) | (771) |
| Others | 195 | (4,181) | 0 | 0 | 0 |
| Net cash flow | 4,205 | (2,446) | 10 | 1,637 | 2,163 |

Source: Company, Daiwa forecasts
Note: 2008 numbers are preliminary and subject to change after auditing

### Daiwa forex assumptions (vs. US$)

| Year end | Rmb | HK$ | W | S$ | NT$ | A$ | Rs | Rp |
|---|---|---|---|---|---|---|---|---|
| 2006 | 7.810 | 7.780 | 929.6 | 1.534 | 32.596 | 1.294 | 44.270 | 8,994 |
| 2007 | 7.300 | 7.800 | 935.8 | 1.440 | 32.428 | 1.125 | 39.413 | 9,400 |
| 2008 | 6.828 | 7.750 | 1,259.6 | 1.430 | 32.792 | 1.423 | 48.803 | 11,120 |
| 2009E | 6.700 | 7.800 | 1,300.0 | 1.460 | 32.600 | 1.481 | 48.750 | 10,600 |
| 2010E | 6.450 | 7.800 | 1,240.0 | 1.430 | 32.400 | 1.333 | 47.700 | 9,850 |

Source: Daiwa

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"1": the security could outperform the local index by more than 15% over the next six months.
"2": the security is expected to outperform the local index by 5-15% over the next six months.
"3": the security is expected to perform within 5% of the local index (better or worse) over the next six months.
"4": the security is expected to underperform the local index by 5-15% over the next six months.
"5": the security could underperform the local index by more than 15% over the next six months.

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