

The Huawei effect

Recently, concerns have come into play towards a potential decline in RFHIC's sales to Huawei, stemming from the US government's sanctions. However, we believe that the relevant risks have already been reflected in the firm's share price. As GaN transistors are essential components for 5G communications equipment, RFHIC is expected to benefit from the accelerating global 5G investment cycle.

Share price drop represents overreaction to Huawei concerns

On May 15, RFHIC's share price stood at W36,000, buoyed by robust 1Q19 results (driven by greater global communications equipment investment). But, amidst heightening US-China trade tensions, RFHIC's share price has fallen 34.6% since May 15 due to the US government's sanctions on Huawei, RFHIC's main customer.

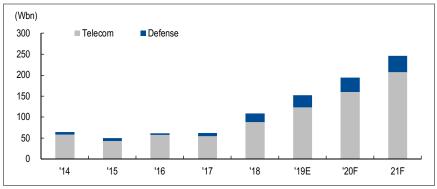
In 2019, we estimate the company's Huawei-related sales at W70bn and OP at W10.5bn (OPM of 15% for communications equipment)—figures which size Huawei's contribution to earnings at roughly 31%. Accordingly, we believe that RFHIC's share price has fallen to a level that assumes the worst-case scenario in which sales to Huawei disappear in the future.

Already supplying global communications equipment players

We note that GaN transistors boast stronger operating efficiency, higher thermal conductivity, greater power efficiency, and a smaller footprint than siliconbased LDMOS transistors. For this reason, GaN transistors are rapidly replacing silicon-based alternatives—the GaN transistor market is forecast to expand at a 2018~2022 CAGR of 26.7%.

RFHIC has already achieved sales to global communications equipment players such as Samsung Electronics (SEC) and Nokia, as well as Huawei—in 2013, the company recorded sales of W61.9bn to SEC. Even if sales to Huawei decline due to sanctions by the US government, the firm should be able to benefit from orders from other communications equipment players amidst an ongoing expansion in global 5G investment. In addition, RFHIC is anticipated to maintain an overall OPM of over 20%, helped by robust margins at its defense division, which is forecast to generate sales of more than W30bn this year.

Sales forecasts, by business



Source: RFHIC, NH I&S Research Center estimates



Company Comment | May 28, 2019

Not Rated

| CP ('19/05/27) | W23,550 |
|-----------------------------|-------------------|
| Sector | Electronics |
| Kospi/Kosdaq | 2,044.21 / 689.67 |
| Market cap (common) | US\$466.10mn |
| Outstanding shares (common) | 23.4mn |
| 52W high ('19/05/15) | W36,000 |
| low ('18/10/11) | W21,400 |
| Average trading value (60D) | US\$14.55mn |
| Dividend yield (2019E) | 0.85% |
| Foreign ownership | 13.1% |
| Major shareholders | |
| DS Cho & 9 others | 38.5% |

| Share perf | 3M | 6M | 12M |
|---------------|-------|------|------|
| Absolute (%) | -20.2 | -5.0 | -3.9 |
| Relative (%p) | -12.9 | -3.5 | 21.0 |

| | 2018 | 2019E | 2020F | 2021F |
|-------------|-------|--------|--------|--------|
| Sales | 108.1 | 152.4 | 193.5 | 246.2 |
| Chg | 74.2 | 41.0 | 27.0 | 27.2 |
| OP | 26.7 | 36.6 | 45.8 | 59.4 |
| Chg | 230.8 | 37.2 | 25.1 | 29.5 |
| OPM | 24.7 | 24.0 | 23.7 | 24.1 |
| NP | 24.1 | 33.3 | 40.7 | 51.5 |
| EPS | 1,081 | 1,436 | 1,738 | 2,197 |
| Chg | 286.0 | 32.9 | 21.0 | 26.4 |
| P/E | 22.8 | 16.4 | 13.6 | 10.7 |
| P/B | 3.5 | 3.0 | 2.5 | 2.1 |
| EV/EBITDA | 16.2 | 11.3 | 8.5 | 5.9 |
| ROE | 17.2 | 19.5 | 20.0 | 21.0 |
| Debt/equity | 43.1 | 44.3 | 43.1 | 42.1 |
| Net debt | -68.9 | -104.6 | -139.7 | -197.1 |

Unit: Wbn, %, won, x

Note 1: NP excludes minority interests

Note 2: EPS, P/E, P/B, ROE based on NP (excl minority interests)

Source: NH I&S Research Center estimates



Hyundong Lee, Analyst 822)768-7423, hyundong.lee@nhgv.com

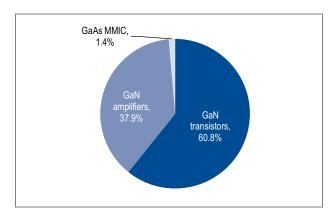
Jaeho Jang, RA 822)768-7083, jangjaeho@nhqv.com

Company overview

- Founded in 1999, RFHIC specializes in the production/sale of GaN transistors and amplifiers for use in wireless communications and defense.
- On Sep 1, 2017, the firm went public on the Kosdaq via a merger with NH SPAC No. 8.
- As RFHIC's major shareholders, CEO DS Cho & related parties together hold a 44.0% stake. Meanwhile, we note that with STIC PEF III L.P.'s stake falling below the 5.0%-level, overhang issues have eased significantly.
- To stabilize its share price and enhance shareholder value, RFHIC purchased W15.0bn worth of treasury shares (2.7% of market cap) on May 27.

Sales breakdown

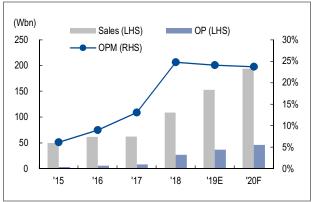
- By product, RFHIC's 1Q19 sales broke down as: GaN transistors (60.8%), GaN amplifiers (37.9%), and GaAs MMICs (1.4%)
- Supplied to domestic and overseas telecom equipment and defense companies, RFHIC's GaN-based products represent more than 90% of the firms overall sales
- By region, the firm's 1Q19 sales broke down as: 1) domestic 21.5%; and 2) exports 78.5%, with most of the firm's exports bound for Huawei, a leading global telecom solutions provider



Note: As of 1Q19; Source: RFHIC

Earnings estimates

- RFHIC posted 1Q19 sales of W34.7bn (+57.7% y-y) and OP of W7.7bn (+59.4% y-y; OPM of 22.2%)
- On a consolidated basis, the firm's 2018 sales came in at W108.1bn (+74.2% y-y) and OP at W26.7bn (+230.8% y-y; OPM of 25%)
- Going forward, OPM at RFHIC is projected to remain solid on higher orders for GaN transistors and greater sales at the high-margin defense business
- Increasing 5G-related sales should justify upwards revisions to earnings forecasts and a stronger valuation



Source: RFHIC, NH I&S Research Center estimates

Share performance and major events



Source: DataGuide, NH I&S Research Center

NH Investment & Securities stock ratings

- 1. Rating based on a stock's forecasted absolute return over a period of 12 months from the date of publication.
 - Buy: Greater than +15%
 - Hold: -15% to +15%
 - Sell: Less than -15%
- 2. Regarding listed companies under NH I&S' coverage, our stock ratings break down as follows (as of May 24, 2019).

| INTERCO STOCK FAILING CISTINGUION | | | | | | |
|-----------------------------------|-------|-------|------|--|--|--|
| | Buy | Hold | Sell | | | |
| | 76.8% | 23.2% | 0.0% | | | |

- The stock rating on an individual company can change at irregular intervals. Our stock rating distribution is calculated on a weekly basis.

Compliance notice

- NH I&S does not have a stake greater than or equal to 1% in 'RFHIC' as of the preparation date.
 NH I&S has not provided this material to any institutional investor or other third party in advance.

- The analyst and his/her spouse do not own any securities of 'RFHIC' as of the preparation date.

 'RFHIC' is not under coverage at NH I&S. Thus, NH I&S does not present a rating and target price on the counter. This material is for reference purpose only.

 NH I&S has been designated as an underwriter for 'RFHIC' tender offer for upcoming share buyback, and is thus barred from providing investing ratings or target prices for the counter during the share buyback period

 This report correctly reflects the analyst's opinion and was written without any external influence or intervention.

Disclosures

The research is based on current public information that NH I&S considers reliable, but NH I&S does not represent it as accurate or complete and it should not be relied on as such. Furthermore, the research does not take into account particular investment objectives, financial situations or individual client needs, and NH I&S is in no way legally responsible for future returns or loss of original capital. All materials in this report are the intellectual property of NH I&S. Copying, distributing, transforming or lending of this material without NH I&S' consent is prohibited.

