# Diodes Incorporated (DIOD)

## Baird Facts

Please refer to Appendix - Important Disclosures and Analyst Certification.

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</tr>
</thead>
<tbody>
<tr>
<td>52WK H-L ($) :</td>
<td>60 - 31</td>
<td>Suitability:</td>
<td>Higher Risk</td>
<td>50 Q1</td>
<td>0.69A</td>
<td>0.46A</td>
<td>0.54E</td>
</tr>
<tr>
<td>Market Cap (mil):</td>
<td>2,614</td>
<td>L-Term Rev. Gr Rate Est:</td>
<td></td>
<td>Q2</td>
<td>0.77A</td>
<td>0.50E</td>
<td>0.71E</td>
</tr>
<tr>
<td>Shares Out (mil):</td>
<td>52.4</td>
<td>L-Term EPS Gr Rate Est:</td>
<td></td>
<td>Q3</td>
<td>0.81A</td>
<td>0.54E</td>
<td>0.76E</td>
</tr>
<tr>
<td>Float (mil):</td>
<td>41.1</td>
<td>Debt/Cap:</td>
<td>7.7%</td>
<td>Q4</td>
<td>0.65A</td>
<td>0.55E</td>
<td>0.70E</td>
</tr>
<tr>
<td>Avg. Daily Vol (mil):</td>
<td>0.39</td>
<td>ROE:</td>
<td>7.2%</td>
<td>Total</td>
<td>2.91A</td>
<td>2.05E</td>
<td>2.70E</td>
</tr>
<tr>
<td>Dividend ($) :</td>
<td>0.00</td>
<td>Fiscal Year</td>
<td>December</td>
<td>FY P/E</td>
<td>17.1x</td>
<td>24.3x</td>
<td>18.5x</td>
</tr>
<tr>
<td>Yield (%):</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
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**EPS (Net):** Our estimates above are on a pro forma including stock-comp basis. Our 2019 actual and 2020-2021 PF EPS estimates ex stock comp. are $3.23, $2.33, and $3.01, respectively.

<table>
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<tr>
<th>Headquartered IPO/Founded</th>
<th>Dec</th>
<th>2019A</th>
<th>2020E</th>
<th>2021E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas, TX 1992/1959</td>
<td>Revenue (Mil)</td>
<td>1,249.1</td>
<td>1,141.0</td>
<td>1,225.7</td>
</tr>
<tr>
<td>Management</td>
<td>% Growth</td>
<td>2.9%</td>
<td>(8.7)%</td>
<td>7.4%</td>
</tr>
<tr>
<td>President, CEO Dr. Keh-Shew Lu</td>
<td>Operating Margin</td>
<td>16.1%</td>
<td>10.6%</td>
<td>13.6%</td>
</tr>
<tr>
<td>CFO Brett Whitmire</td>
<td>Gross Margin</td>
<td>37.3%</td>
<td>35.0%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Investor Relations Laura Mehr</td>
<td></td>
<td></td>
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</tbody>
</table>

## Company Description

Diodes designs, manufactures, and sells discrete products and analog ICs into a variety of markets including computing, consumer, industrial, and communication goods. Headquartered in Plano, Texas, Diodes has over 7,000 employees. The company has assembly and test facilities in China and Germany, and wafer fabs in China, the U.K., and Scotland. Diodes’ product line consists of over 25,000 products.

## Revenue Profile

![Revenue by End Market ($ in Thousands)](Image)

**Source:** Diodes, Baird

## Competition

Main competitors include Infineon, NXP, ON Semi, Rohm Electronics, Toshiba, and Vishay.

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Quick Summary

Recent Investment Highlights
■ Better revenue guidance than peers highlights continued market share gains, and some of Diodes' peers were supply constrained. Notably, Automotive revenue increased both QoQ and YoY in 1Q.
■ North America and Europe bookings have inflected downward since mid April due to factory closures.
■ Management expects POS to continue to increase in 3Q, which could result in further supply chain tightening. 1Q represented both a revenue and gross margin trough.
■ Quarter Results. Diodes reported 1Q20 PF EPS (including stock comp) of $0.46, below our $0.53 estimate and slightly below consensus of $0.48. GAAP EPS was $0.38.
■ 1Q20 revenue of $281 million was at the low end of the $281-$299 million guidance range, down 7% sequentially.
■ 1Q20 GAAP gross margin was 34.1%, at the low end of the guidance range of 34.0%-36.0%.
■ Guidance. The midpoint of 2Q20 revenue guidance of $275-$292 million is well below our previous estimate of $309 million and consensus of $298 million.
■ The midpoint of 2Q20 GAAP gross margin guidance of 34.0%-36.0% is below our previous 36.6% estimate and consensus of 37.6%.
■ Reiterated Outperform rating and $50 price target.

Investment Thesis
Better revenue guidance than peers highlights continued market share gains, driven by design wins as well as supply disruptions at some peers. Notably, Diodes revenue in Automotive increased both QoQ and YoY in 1Q. North America and Europe bookings have inflected downward since mid April due to factory closures. 1Q represented both a revenue and gross margin trough. While visibility remains low, management expects POS to continue to increase in 3Q, which could result in further supply chain tightening. Lite-On remains expected to close this second half, bringing accretion along with revenue and manufacturing synergies. Outperform-rated

Risks & Caveats
Excess capacity. As a fabbed company, Diodes bears the burden of managing excess capacity in times of weak end demand. Sub-optimal utilization rates can impact gross margin for many quarters as bringing supply and demand into equilibrium is usually a lengthy process.

Pricing. Discrete products are highly commoditized with low ASPs. Commodity pricing is a risk to revenue and gross margin, especially in a downturn, as sub-par utilization rates trigger overcapacity and the potential for inventory unloading.

Packaging. Diodes' main competitive advantage is its packaging techniques, which are enabled by state-of-the-art equipment. As competing companies, including ON Semiconductor and Fairchild, increase insourcing, there is a risk they could replicate Diodes' packaging model.

Slowdown of standalone new products. As products mature, Diodes expects the percentage of its stand-alone new products to decline. This could impact top-line growth and gross margin as new products typically carry higher margins.

Growth through acquisition. Diodes expects to continue to grow its business through acquisitions. The company completed its acquisition of BCD Semiconductor recently. The failure to properly integrate an acquired company could materially impact the company's top-line growth.

Supplemental Information
Valuation. Our $50 price target for DIOD shares is based on a ~19x P/E to our 2021 PF EPS including stock comp estimate of $2.70. The multiple we use in the determination of our price target is above the five-year median peer multiple of 16x and reflects Diodes' rising gross margin profile and synergies from the Pericom acquisition.

Customers. Diodes' customers include: Apple, Cisco, Continental, Delta Electronics, Dell, EMC, Emerson, Hella, Intel, LG, Microsoft, Quanta, Sagem Communication, Samsung, Thompson, and Roche Diagnostics, among others.
Appendix - Important Disclosures and Analyst Certification

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Rating and Price Target History for: Diodes Incorporated (DIOD) as of 05-11-2020

1 Robert W. Baird & Co. Incorporated makes a market in the securities of DIOD.

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