

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 09, 2023

DIODES INCORPORATED

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

002-25577
(Commission File Number)

95-2039518
(IRS Employer
Identification No.)

4949 Hedgcoxe Road, Suite 200
Plano, Texas
(Address of Principal Executive Offices)

75024
(Zip Code)

Registrant's Telephone Number, Including Area Code: 972 987-3900

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value \$0.66 2/3	DIOD	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02 Results of Operations and Financial Condition.

On May 9, 2023, Dr. Keh-Shew Lu, Chairman, President and Chief Executive Officer of Diodes Incorporated, (the “Company”), as well as Brett R. Whitmire, Chief Financial Officer, Emily Yang, Senior Vice President, Worldwide Sales and Marketing, Gary Yu, Chief Operating Officer and Gurmeet Dhaliwal, Director of Investor Relations, participated in a conference call to discuss the Company’s first quarter 2023 financial results. A recording of the conference call has been posted on the Company’s website at www.diodes.com, and copy of a transcript of the conference call is furnished as Exhibit 99.1 to this report.

In the earnings conference call, the Company utilizes financial measures and terms not calculated in accordance with generally accepted accounting principles in the United States (“GAAP”) in order to provide investors with an alternative method for assessing the Company’s operating results in a manner that enables investors to more thoroughly evaluate its current performance as compared to past performance. The Company also believes these non-GAAP measures provide investors with a more informed baseline for modeling the Company’s future financial performance. Management uses these non-GAAP measures for the same purpose. The Company believes that investors should have access to the same set of tools that management uses in analyzing results. These non-GAAP measures should be considered in addition to results prepared in accordance with GAAP, but should not be considered a substitute for or superior to GAAP results and may differ from similar measures used by other companies. For a description, and reconciliation with GAAP, of these non-GAAP measures see the Company’s press release dated May 9, 2023, announcing the Company’s first quarter 2023 financial results, a copy of which was furnished as Exhibit 99.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission on May 9, 2023. The information furnished in this Item 2.02, including the exhibit incorporated by reference, will not be treated as “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section. This information will not be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended (the “Securities Act”), or into another filing under the Exchange Act, unless that filing expressly refers to specific information in this Report.

Item 7.01 Regulation FD Disclosure.

The transcript of the earnings conference call furnished as Exhibit 99.1 also provides an update on the Company’s business outlook, that is intended to be within the safe harbor provided by the Private Securities Litigation Reform Act of 1995 (the “Act”) as comprising forward looking statements within the meaning of the Act.

The information furnished in this Item 7.01, including the exhibit incorporated by reference, will not be treated as “filed” for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section. This information will not be deemed incorporated by reference into any filing under the Securities Act, or into another filing under the Exchange Act, unless that filing expressly refers to specific information in this Report.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
99.1	Transcript of earnings conference call held on May 9, 2023.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

DIODES INCORPORATED

Date: May 16, 2023

By: /s/Brett R. Whitmire

Brett R. Whitmire
Chief Financial Officer

REFINITIV STREETEVENTS

EDITED TRANSCRIPT

DIOD.OQ - Q1 2023 Diodes Inc Earnings Call

EVENT DATE/TIME: MAY 09, 2023 / 9:00PM GMT

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CORPORATE PARTICIPANTS

Brett R. Whitmire *Diodes Incorporated - CFO*

Emily Yang *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Gary Yu *Diodes Incorporated - COO*

Keh-Shew Lu *Diodes Incorporated - Chairman, CEO & President*

CONFERENCE CALL PARTICIPANTS

David Neil Williams *The Benchmark Company, LLC, Research Division - Senior Equity Analyst*

Gary Wade Mobley *Wells Fargo Securities, LLC, Research Division - Senior Analyst*

Matthew D. Ramsay *TD Cowen, Research Division - MD & Senior Research Analyst*

Tristan Gerra *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

William Stein *Truist Securities, Inc., Research Division - MD*

Leanne K. Sievers *Shelton Group - President*

PRESENTATION

Operator

Good afternoon, everyone, and welcome to Diodes Incorporated First Quarter 2023 Financial Results Conference Call. (Operator Instructions) As a reminder, this conference call is being recorded today, Tuesday, May 9, 2023.

I would now like to turn the floor over to Leanne Sievers of Shelton Group Investor Relations. Leanne, please begin.

Leanne K. Sievers - *Shelton Group - President*

Good afternoon, and welcome to Diodes' first quarter 2023 financial results conference call. I'm Leanne Sievers, President of Shelton Group, Diodes' investor relations firm. Joining us today are Diodes' Chairman, President and CEO, Dr. Keh-Shew Lu; Chief Financial Officer, Brett Whitmire; Senior Vice President of Worldwide Sales and Marketing, Emily Yang; Chief Operating Officer, Gary Yu; and Director of Investor Relations, Gurmeet Dhaliwal.

Before I turn the call over to Dr. Lu, I'd like to remind our listeners that the results announced today are preliminary as they are subject to the company finalizing its closing procedures and customary quarterly review by the company's independent registered public accounting firm. As such, these results are unaudited and subject to revision until the company files its Form 10-Q for its fiscal quarter ending March 31, 2023. In addition, management's prepared remarks contain forward-looking statements, which are subject to risks and uncertainties, and management may make additional forward-looking statements in response to your questions. Therefore, the company claims the protection of the safe harbor for forward-looking statements that is contained in the Private Securities Litigation Reform Act of 1995. Actual results may differ from those discussed today, and therefore, we refer you to a more detailed discussion of the risks and uncertainties in the company's filings with the Securities and Exchange Commission, including Forms 10-K and 10-Q.

In addition, any projections as to the company's future performance represent management's estimates as of today, May 9, 2023. Diodes assumes no obligation to update these projections in the future as market conditions may or may not change, except to the extent required by applicable law.

Additionally, the company's press release and management statements during this conference call will include discussions of certain measures and financial information in GAAP and non-GAAP terms. Included in the company's press release are definitions and reconciliations of GAAP to

non-GAAP items, which provide additional details. Also, throughout the company's press release and management statements during this conference call, we refer to net income attributable to common stockholders as GAAP net income.

For those of you unable to listen to the entire call at this time, a recording will be available via webcast for 90 days in the Investor Relations section of Diodes' website at www.diodes.com.

And now I'll turn the call over to Diodes' Chairman, President and CEO, Dr. Keh-Shew Lu. Dr. Lu, please go ahead.

Keh-Shew Lu - Diodes Incorporated - Chairman, CEO & President

Thank you, Leanne. Welcome, everyone, and thank you for joining us today. Our first quarter results were highlighted by continued strength in our gross margin performance which was at the high end of our guidance, despite the seasonally lower revenue and economic slowdown in the Consumer, Communication and Computing markets. In fact, gross margin has remained at over 41% of the past 4 quarters and above our target model of 40%, underscoring our execution on new product initiatives and the product mix improvements. A key contributor to our improved mix has been our success expanding into the Automotive and Industrial markets, which together represented a record 47% of total product revenue in the quarter.

Another contributing factor to our consistent margin improvements is our manufacturing cost reductions and operational efficiencies, which has also allowed us to maintain healthy margins despite the COVID-related disruptions and the Chinese New Year holiday during the quarter.

Over the past several years, we have taken significant steps to transform our business as well as our customer and the market positioning based on a total solutions sales approach, extensive pipeline of new product introductions and the design wins.

Today, Diodes has a diversified business across product groups and end markets and applications as well as geographies that are further supported by a flexible manufacturing model and team that is highly focused on consistent execution and sustainable quarterly performance. Those fundamental factors position us well to not only sustain our margin profile during the economic slowdown, but also continue driving even higher profitability and cash flow in a more favorable economic environment.

With that, let me now turn the call over to Brett to discuss our first quarter financial results and our second quarter guidance in more detail.

Brett R. Whitmire - Diodes Incorporated - CFO

Thanks, Dr. Lu, and good afternoon, everyone. Revenue for the first quarter 2023 was \$467.2 million, decreasing 3.1% from \$482.1 million in the first quarter of 2022 and down 5.8% from \$496.2 million in the fourth quarter of 2022.

Gross profit for the first quarter was \$194.5 million or 41.6% of revenue compared to \$196.7 million or 40.8% of revenue in the prior year quarter and \$206.2 million or 41.6% of revenue in the prior quarter.

GAAP operating expenses for the first quarter were \$108 million or 23.1% of revenue, and on a non-GAAP basis, were \$101.3 million or 21.7% of revenue, which excludes \$3.9 million of amortization of acquisition-related intangible asset expenses and \$2.8 million related to officer retirement. This compares to GAAP operating expenses in the first quarter 2022 of \$103.6 million or 21.5% of revenue, and in the fourth quarter 2022 of \$109.7 million or 22.1% of revenue. Non-GAAP operating expenses in the prior quarter were \$105.9 million or 21.3% of revenue.

Total other income amounted to approximately \$2.2 million for the quarter, consisting of a \$3.9 million unrealized gain on investments, \$1.8 million of interest income, \$530,000 of other income, partially offset by \$2.1 million in interest expense and a \$1.9 million foreign currency loss.

Income before taxes and noncontrolling interest in the first quarter 2023, was \$88.6 million compared to \$90.8 million in the prior year quarter and \$94.8 million in the previous quarter.

Turning to income taxes. Our effective income tax rate for the first quarter was approximately 18.8%.

GAAP net income for the first quarter of 2023 was \$71.2 million or \$1.54 per diluted share compared to \$72.7 million or \$1.59 per diluted share in the first quarter of 2022 and \$92.1 million or \$2 per diluted share in the fourth quarter of 2022. The share count used to compute GAAP diluted EPS for the first quarter of 2023 was 46.2 million shares.

Non-GAAP adjusted net income in the first quarter was \$73.4 million or \$1.59 per diluted share, which excluded net of tax, \$3.1 million of acquisition-related intangible asset costs, \$2.3 million in officer retirement expenses and a \$3.1 million gain related to an LSC investment. This compares to \$80.3 million or \$1.75 per diluted share in the first quarter of 2022 and \$79.6 million or \$1.73 per diluted share in the prior quarter.

Excluding noncash share-based compensation expense of \$7.7 million, net of tax, for the first quarter, both GAAP earnings per share and non-GAAP adjusted EPS would have increased by \$0.17 per diluted share.

EBITDA for the first quarter was \$121.8 million or 26.1% of revenue compared to \$118.1 million or 24.5% of revenue in the first quarter of 2022 and \$129.6 million or 26.1% of revenue in the prior quarter.

We have included in our earnings release a reconciliation of GAAP net income to non-GAAP adjusted net income and GAAP net income to EBITDA, which provides additional details.

Cash flow generated from operations was \$99.8 million for the first quarter. Free cash flow was \$51.8 million, which included \$48 million for capital expenditures. Net cash flow was a negative \$15.2 million, including the paydown of \$60.8 million in total debt.

Turning to the balance sheet. At the end of first quarter, cash, cash equivalents, restricted cash plus short-term investments totaled approximately \$335 million. Working capital was \$731 million and total debt, including long term and short term was \$125 million.

In terms of inventory, at the end of first quarter, total inventory days were approximately 116 compared to 117 last quarter. Finished goods inventory days were 31 compared to 33 last quarter. Total inventory dollars decreased \$18.3 million from the prior quarter to approximately \$341.9 million. Total inventory in the quarter consisted of a \$13.7 million decrease in raw materials, a \$3.1 million decrease in finished goods and a \$1.5 million decrease in work in process.

Capital expenditures on a cash basis were \$48 million for the first quarter or 10.3% of revenue. First quarter CapEx was higher than our target model due to the strategic expansion of our JK Wafer Fab in Hsinchu Science Park in Taiwan. Without this investment, we would have been within our target model of 5% to 9%, and we expect to be in that range for the full year 2023.

Now turning to our outlook. For the second quarter 2023, we expect revenue to be approximately \$467 million, plus or minus 3%. With a slower-than-expected recovery in the Consumer, Computing and Communications markets, we are guiding flat sequentially at the midpoint to reduce 3C channel inventory. The Automotive and Industrial markets are expected to remain strong. We also expect to continue driving our strategy of improved product mix and are guiding GAAP gross margin to be a record 41.8%, plus or minus 1%. Non-GAAP operating expenses, which are GAAP operating expenses adjusted for amortization of acquisition-related intangible assets, are expected to be approximately 22% of revenue, plus or minus 1%. We expect net interest expense to be approximately \$1 million. Our income tax rate is expected to be 20%, plus or minus 3%, and shares used to calculate EPS for the second quarter are anticipated to be approximately 46.5 million.

Not included in these non-GAAP estimates is amortization of \$3.1 million after tax for previous acquisitions. With that said, I will now turn the call over to Emily Yang.

Emily Yang - Diodes Incorporated - SVP of Worldwide Sales & Marketing

Thank you, Brett, and good afternoon. In the first quarter, revenue decreased 5.8% quarter-over-quarter due to typical seasonality related to the Chinese New Year holiday, combined with a slowdown in the 3C market. Looking more closely at the first quarter revenue, POS was a record in Europe.

Distributor inventory in terms of weeks increased sequentially and is higher than our defined normal range of 11 to 14 weeks. This increase is mainly due to slower-than-expected recovery in China and in the 3C market segment. The good news is that we've started to see signs of recovery in the Computing and Consumer markets. Our plan is to deplete some channel inventory in the second quarter, which is reflected in our guidance. We believe our channel inventory positions us strategically for the expectation of our continuous recovery so that we can address dynamic demand and fast-turns business. Automotive Industrial market segment are expected to remain strong in the second quarter.

Looking at the Global Sales in the first quarter. Asia represented 68% of revenue, Europe, 17%; and North America, 15%.

In terms of our end markets, Industrial was a record 29% of Diodes product revenue, Automotive was also a record at 18%, Computing 22%; Consumer 18% and Communication 13% of product revenue. Our Automotive and Industrial end markets combined reached a record 47% of the product revenue, which is the fifth consecutive quarter above 40% and is 7 percentage points above our 2025 target. This achievement underscores the ongoing success of our content expansion strategy and market share gain.

Now let me review the end market in greater detail. Starting with our Automotive end market. As I mentioned, revenue reached a record 18% of product revenue and represented a growth of 33% year-over-year.

In our first focus area of Connected Driving, our PCI Express 3.0 packet switches, PCI Express clock generators, clock buffers, crystal oscillators, USB switches, USB power delivery controllers, voltage level shifters and IO extenders are being designed into ADAS, infotainment, telematics, domain control units and electric control units applications. We are also seeing strong demand for DC-DC bus converters, LDOs, ideal diode controllers, bipolar transistors and TVS products in the same end application.

In the Comfort, Style and Safety, we continue to gain traction for ReDrivers and crossbar switches as USB Type C adoption continues to increase in the vehicles. Our solution selling approach is a key driver to this momentum. Additionally, we have been winning designs for our power delivery solution that includes Power Delivery Protocol Decoder along with our USB MUX ReDrivers and TVS for the in-vehicle USB charging devices.

We're also seeing an increasing number of design wins in wireless chargers, fan, blower, thermal management systems with our current monitor products, regulator transistors and SBR products. And our linear LED drivers, ideal diode controllers, bipolar junction transistors and LDOs are being designed in several stoplight, taillight, headlight and cluster lighting systems.

In the Powertrain, which covers conventional hybrid and electric vehicles, our switching diode product helps support conventional applications such as drivetrain electronics and towing/trailer and cargo management system. SBR in IntellifET products are also seeing traction in battery management system and in production control applications for battery electric vehicles as well as plug-in hybrid electric vehicles. We also recently introduced a number of new automotive-compliant, SBR, IntellifET, MOSFETs and NPN transistors that have been designed into battery management systems.

In the first quarter, we introduced 68 new automotive-compliant products. This is a good demonstration of our focus on various automotive applications and product mix improvement.

In our Industrial market, revenue grew 7% year-over-year to also reach a record percentage of total product revenue at 29%. Our buck converters, LDOs and sensors continue to see strong demand for applications such as DC fans, power tools, power supplies, circuit breakers, e-meters, embedded systems and precision control systems. Additionally, our newly released industrial latch switches are gaining traction from low-voltage to high-voltage applications required in the harsh environments.

Our SBR products are also being widely used in Power-over Ethernet and embedded applications, while our 36-channel linear LED drivers are being adopted in the robotic applications. Our gate driver ICs have won new sockets in power supply units for servers and energy storage as well as in lighting for the Digital Addressable Lighting Interface control boards. Our high-performance transistors and high-voltage switching diodes have also won designs in solar inverters for green residential energy generation and transmission systems. Additionally, we're gaining increased traction for our switching diodes and functional array products that are utilized in numerous control systems for applications including HVAC controls, LED lighting, digital printing press machines, printed circuit boards, assembly test systems and imaging circuits for medical and aviation security system.

Early in the first quarter, we were pleased to release our first set of Silicon Carbide Schottky barrier diodes that includes a series of 11 products rated at 650 volt and another series of 8 products rated at 1,200 volts. We also released our first silicon carbide MOSFET to address the demand for higher efficiency and high-power density applications such as Industrial motor drivers, solar inverters, data center and telecom power supplies, DC-DC converters as well as electric vehicle battery chargers.

Despite the softness in global Computing market, our design-in momentum continues across our portfolio of products. This includes wins for our USB Type C charging detectors, high-speed switches, ReDrivers, retimers, MOSFET, SBRs and TVS products in the broad applications, including servers, desktops, notebooks, graphic cards, add-in cards and USB-C data line protection.

New design win activities continue for our content image sensors in multifunction printers and with our adoption of HDMI 2.0 12 gigabits per second ReDrivers, eMMC markers in gaming consoles as well as 8.0 and 10 gigabits per second bi-directional retimers in active cable, docking and bundle application.

In the Communication market, we continue to win new designs in 5G applications for audio switches, IO expanders, USB switches, high PSRR LDOs and Schottky products. Additionally, our small signal diode products gained traction in the rapid-growing field of Industrial Communication systems and cybersecurity, while bipolar transistor gained new design wins in IP cameras, GPON and router applications.

Lastly in the Consumer market, we've been securing new design wins for USB switches, MOSFET, current limit power switches, bridge rectifier in sports camera, adapters, gaming consoles and power over internet devices. Manufacturers of panels of TV and displays continue to adapt our bipolar transistor in their new models. We also continue to see solid growth for our SBR LED drivers, Piezo sounder drivers, USB power delivery sink controllers, switching diodes and TVS products in the tracker applications, displays, wearables, personal care, healthcare devices and the health and safety monitoring systems as well as in fire and carbon monoxide sensors.

In summary, Diodes performance this quarter highlights the progress we have made increasing our content and market share gains in Automotive and Industrial markets, contributing to our overall product mix improvements. Our total solution sales approach and operating efficiencies have been a key factor to our success as we continue to drive growth and sustainable margin performance.

With that, we now open the floor to questions. Operator.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question today comes from Matt Ramsey from Cowen.

Matthew D. Ramsay - TD Cowen, Research Division - MD & Senior Research Analyst

I think for the team, my first question, obviously, there's a lot of moving parts here in the macro environment and great to hear about the auto and Industrial strength and the momentum the business has there. But I guess I'm trying to get a gauge on how you guys are seeing the potential recovery in China. I mean, it's anybody's guess as to when that happens. But is a return to year-over-year growth for your company sort of predicated on a recovery on sell-in into a lot of these Consumer markets in Asia? Or how do we think about that relative to the design win momentum and

the content growth that you're seeing across the business? I'm just trying to gauge sort of expectations for the next few quarters and the levers macro-wise versus sort of secular content wise for your company?

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Yes, Matt, this is Emily. Let me address your questions first. I think overall, like I mentioned earlier, right, we do start to see some recovery in the Computing as well as Communication area and also Consumer. It's very, I would say, slower than our expectation, but the good news is, we start to see signs of recovery. I mean usually, for Q3, it is the peak of all these market segments. So that's also part of our assumption as well.

Matthew D. Ramsay - *TD Cowen, Research Division - MD & Senior Research Analyst*

As my follow-up question, I think some of the longer-term financial model metrics that you guys have shared are a bit older now and the company has done much, much better than some of those metrics. And one of them is around getting the business mix to be 40% or more of revenue coming from Auto Industrial, and you're far past that. I think we're at 46%, 47% of the business now. And you just put up a really, really strong gross margin quarter and then guided up sequentially. I'm just trying to figure out, if the team thinks about this mix of business and this margin profile in sort of the 41%, 42% range. Is that sort of the new way that we should be thinking about the business? Or if in fact, the 3Cs markets come back at some point in the mix that the margin would move up or down with that. But great margins, I'm just trying to figure out if this is sort of the level we should think about for the foreseeable future.

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Okay. Let me just answer #1, the overall market situation. Okay. We see some recovery on the 3C market, but the Industrial and Automotive are still very strong. And therefore, we're hoping that second half of this year, after the channel inventory, or as you said, our customer is building up and their inventory of the 3C product start to decrease, then the second half, the business should be come back stronger, okay? That is in general for this year. I believe, in the first half versus second half could be more than 50-50, it should be probably somewhere much higher in the second quarter -- second half than first half. That's this year. Then after that, now next year, we should -- we begin -- would be a typical growth year for the semiconductor business. Because if you look at semiconductor business; traditionally, when it goes down, it probably won't go down more than 2 years. And since this down already started at second half of last year. So, I think by end of this year, we'll be 1.5 years, then I think next year, 2024 should be a growth year from the semiconductor total business point of view.

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

So let me maybe add one more comment related to the margin improvement that you just mentioned. So, product mix improvement has been a big initiative for Diodes for the last few years, right? And we definitely would continue to focus on the total solution sales approach as well as manufacturing efficiency. With combined of all these 3, we are confident that we'll continue to drive the margins overall improvement.

And if you look at the Q1 result, Auto plus Industrial, 47% total of our product revenue is a good demonstration of this result and as well as our guidance for Q2, 41.8%. So, I think the focus will not change for the company, and that will continue to be the direction. If we continue to execute all these initiatives and focus, we believe the margin improvement will continue.

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Yes. So, when you're talking about when the 3C market coming back up, are we able to sustain the gross margin improvement. And my answer is yes because even --- the 2 things, the Automotive and Industrial continue their growth, okay? And so, they are in the much better market. And even the Consumer or 3C market come back, I think Emily mentioned about, we are getting away from the commodity -- deep commodity type of products. So, we are carefully to grow our 3C market more concentrate on the high-end PC data center, IoT and the 5G type of Communication products. Therefore, if you look at, we intentionally get away from the commodity or deep commodity products and compete the price competition.

And we're growing the area where we do have -- we believe we have differentiation. We have premium stuff. So that is the way we have been able to continue to improve our gross margin in addition to operational excellence, okay? So, we are not that focused on the loading -- and manufacturing loading to get us to the gross margin. We are more focused on cost reduction, operational efficiency plus product mix improvement.

Operator

Our next question comes from Gary Mobley from Wells Fargo Securities.

Gary Wade Mobley - Wells Fargo Securities, LLC, Research Division - Senior Analyst

The comments by Dr. Lu that the second half of the year should be better than the first half, I guess, indicates that you're going to expect a normal seasonal uptick in the September quarter, correct me if I'm wrong there. And I wanted to get my arms around the impact on the reduction in distribution inventory. With the understanding that presumably you're above the normal 11 to 14 weeks and each week of distribution inventory is worth, what, \$22 million in revenue. So how many weeks of distribution inventory digestion or reduction are we talking about here that is influencing the sub-seasonal guide for the June quarter?

Emily Yang - Diodes Incorporated - SVP of Worldwide Sales & Marketing

Gary, let me answer that question. So, we don't really disclose the detail about the number of weeks. But in my speech, I did mention it's higher than our 11 to 14 weeks range that we define as normal. So, our goal is actually to expect the POS channel will grow in second quarter. And at the same time, we want to deplete some of the channel inventory. So, we do believe the number of weeks will come down. So that's based on what we see based on the market and the information we have so far.

Keh-Shew Lu - Diodes Incorporated - Chairman, CEO & President

Yes. And this is very difficult to just look at the overall inventory, okay, or channel -- overall channel inventory weeks, okay? Because we -- that Automotive, Industrial, they're still very strong. The channel inventory buildup is really due to the 3C business, which most is in Asia, okay? And -- we already see the signs, and we guided on this quarter is really intentionally to reduce the 3C channel inventory. We're still looking very strong on Automotive, Industrial, and that's the area we do not want to reduce the channel inventory. But at 3C, that's the area we especially, I always say those commodity, the commodity, we don't want to compete. And therefore, we intentionally want to decrease that area of the channel inventory.

Gary Wade Mobley - Wells Fargo Securities, LLC, Research Division - Senior Analyst

My follow-up, I want to ask about your operations in China. During COVID you were operating for so many years in a closed-loop environment. Can you give us an update on whether that's still the case? And if not, whether there's any anticipated or already realized cost benefit from that?

Gary Yu - Diodes Incorporated - COO

No, actually Gary, this is Gary. And the operation in our China, no matter the fab or assembly are normal right now, okay? So that's why we will say, okay, the operation for the China, we want to drive is the cost reduction and a more operational excellency, okay? So, there's not any special lockdown or closed-loop operation at this moment.

Operator

Our next question comes from David Williams from Benchmark.

David Neil Williams - *The Benchmark Company, LLC, Research Division - Senior Equity Analyst*

And congrats on the execution and navigating this challenging backdrop. I guess one of my questions is, if you kind of think about the margin and you touched on this a bit earlier, but I guess I'm kind of curious how you think about that. If we saw Automotive come down a bit or maybe back off and you start to see the 3Cs really improving, what would you expect to see from the margin impact? Do you think you'd see a significant or would that be moderate? And can you -- what leverage do you have there, I guess, to control that margin profile in an Automotive environment that's maybe a little less strong.

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Yes. So, with the Automotive, we're actually still seeing pretty strong momentum in general, right? There is a little bit inventory adjustment. But if we look at the overall growth, right, we actually have a record percentage of 18% at the end of Q1. That actually represented a 33% year-over-year growth. So, we continue to gain market share. So, we're pretty confident with the pipeline that we have in place with all the opportunities we have in place, we're in pretty good shape. With the 3Cs, I think Dr. Lu mentioned a little bit earlier, we really focus on the premium portion within the 3Cs, right? We're definitely not chasing the deep commodity or commodity business. We're really focusing on the higher end of the applications, the servers, the storage, the data center, whether it's 5G or even with the Consumer, we really focus more on the IoT block, the power block or the timing block. So, with this focus and continue to drive the product mix improvement, we're actually confident that we'll continue to drive the improvement over the margin over the years to come.

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

One more thing I want to add because people start thinking Automotive business is very hard, but it's going to be slowed down. And are you able to continue to maintain your growth? And my answer is since 2013 that is almost 10 years ago, we established Automotive business focus. We still see CAGR 30% a year of the growth. So, we are not really counting on the market growth, we're counting on additional to the market growth, we're counting on the fact that starter value for each module. And that is what our focus in the Automotive business is module starter module growth. And because of that, we are able to do much better than Automotive business growth. And therefore, I believe we will still continue to increase our Automotive revenue as a percent of Diodes' total business, okay? Emily always say, 18% in 1Q, and you go back 2013, 3% okay? So that is how we're driving the Automotive business is not just counting on volume growth. We're counting on the starter module growth.

David Neil Williams - *The Benchmark Company, LLC, Research Division - Senior Equity Analyst*

And then maybe secondly, just Diodes has outperformed over the last several quarters. But even -- and maybe even more so over the last couple of quarters relative to peers, what do you think has given you the improved inventory dynamics where you're not seeing the same magnitude of digestion that we've heard from others. Is it more of the managing of the channel? Or is it just the growth that you're still seeing? Any color there around, why you're performing -- outperforming the market would be very helpful, I think.

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Well, I think Dr. Lu kind of mentioned earlier, right? So each of the markets we actually focus really more on the content expansion, right? So that's really the key, especially in the Automotive area. I also think the total solution sales approach help us to really sell the value and proposition to the customers, solving their problem. And then remember, we also talked about price increase for the last 2, 3 years. We actually strategically choose to build a relationship with the customers, but not to just purely gouge the price up. So, I think there's a lot of long-term strategy, including the product mix improvement initiatives, right? So of course, manufacturing efficiency has always a sweet spot for us overall. So, when you combine all these focus and initiatives and the direction overall, I think that's actually a good demonstration of the result that we delivered to you so far, right? And then with the Q2 guidance on the 41.8% margin, I think that, again, is a different way of demonstrating our confidence of the overall margin dollar or margin percentage improvement.

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Even if the revenues are flat, it tells us we -- our margin is not just pure coming from the loading, coming from the utilization. Our coming is a big portion is product mix, which is what we are focused on, okay? And another one is new products initiative -- can we do -- Emily already mentioned, just for Automotive, we announced 68 new products in 1Q. So, you can see we're driving a lot of focus on new product initiatives. We even measure the revenue cumulated by the new product, and that is the one we believe we can continue to improve our gross margin.

Operator

Our next question comes from Tristan Gerra from Baird.

Tristan Gerra - *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

Maybe a little tweak on Gary's question earlier on this call. Is it fair to assume that without the reduction of inventories in the channel that you're implementing in Q2, there's maybe a 3% impact on revenue. If I look at kind of normal seasonality, your top line normally will be up about 3% sequentially. Is that in the ballpark? And do you expect that inventory reduction dynamic to be a 1 quarter issue? Or do you expect this to linger into Q3? And finally, what's the delta with the other shipping that you previously expected into just this -- in Q2 in anticipation of a China recovery?

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Well, I think, Tristan, we did mention the good news is we start seeing some of the signs, right, in -- especially in Computing and Consumer market. So that's the good news. We also mentioned that slower-than-expected recovery in China and also, the 3C market segment kind of costing the channel inventory higher than our expectation, right? So, we definitely plan to deplete some channel inventory in the second quarter. But unfortunately, we don't really provide guidance, how many weeks or anything like that. But we're confident that with the guidance that you see a flat with the expectation of improvement in the POS in the second quarter, you will see the channel inventory start depleting some. So that's pretty much what we can share at this moment.

Tristan Gerra - *Robert W. Baird & Co. Incorporated, Research Division - Senior Research Analyst*

And then from a capacity standpoint, you've been able to gain market share as a result of having less supply constrain than your competition, notably last year. Do you think that your peers are still supply constrained? Obviously, I can't ask them the question, but just interested in your view on the whole industry supply-demand dynamic and whether you think that at some point, we get in supply-demand equilibrium in analog? And what does that mean for you guys in terms of capacity management, particularly if end-demand trends were to weaken further?

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Tristan, when you're talking about capacity, we do have enough capacity, it -- we want to grow okay? And the (inaudible) capacity is really cannot just say, I can use it for anything okay? Automotive capacity, first Consumer capacity sometimes is the same, but most of the time it's different. Then you need to spend an effort to convert. And from a strategic point of view, we already decided, we are getting away from commodity or deep commodity 3C type of product, then we gradually, when we need it, we convert our capacity from 3C or Industrial and Automotive, okay? And so, I look at the market, look at the demand and we would spend the money and gradually convert to the need, okay? We will not just keep the capacities sitting idle waiting for the 3C business to come back. We intentionally convert to support long-term strategy, higher gross margin business and our focused business, which is Automotive and Industrial. And now I say 3C, we are 3 area. We are focused on then we will support that, and we try to get away from the competition very strong, especially the China supplier. We are getting away from that. So, you can continue to see our gross margin will continue to improve even the 3C business come back.

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Yes. I think from the supply point of view, not everything at this moment. All in all, I think it's still a little bit dynamic. There's still a lot of pockets of shortage versus we mentioned deep commodity, there's more supplies, right, which is not a focus and area that we're chasing after. So, I would say not everything equal at this moment, still pretty dynamic.

Operator

Our next question comes from William Stein from Truist Securities.

William Stein - *Truist Securities, Inc., Research Division - MD*

I had a question about your inventory management. You've done certainly very well on your own balance sheet, but you've taken -- it seems to be a different approach from what many others have taken in this regard. What we've seen most of semis in the last couple of quarters is pretty significant balance sheet inventory builds and a real restraint at shipping anything into the channel. And Diodes seems to have done -- I don't know if it's exactly the opposite, but you've managed on balance sheet very conservatively, but you've built in the channel. Certainly, I recall last quarter, that was a change. And I think this quarter, it sounds like you built a little bit again. I'm sure there's a great reason for this approach, but I'm hoping you can explain it to us a little bit.

Emily Yang - *Diodes Incorporated - SVP of Worldwide Sales & Marketing*

Yes. So, I think last quarter, we mentioned the reason we start building more channel inventory is the expectation of the China recovery, also the expectation of the 3C market segment recovery. I think we overestimated the recovery speed. So that's actually what we start seeing channel inventory getting increased a little this quarter as well. That's also the reason we strategically decided to really deplete some of the channel inventory in the second quarter. We still believe the channel inventory position overall for Diodes is actually in a very good position. We do actually have the good product on the shelf. And we also believe the recovery is going to happen. It just a matter of the speed. So once the recovery happens, we are confident that the channel inventory will be depleted. And also keep in mind, the market is still really dynamic. We believe having the right product on the shelf, it actually positions us better to support the dynamic demand as well as the fast turn business, right?

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Yes. But in addition, what Emily talking about, we actually intentionally to doing that, right? And I think one of the reasons I look at it, okay? If we want to maintain our operations very smoothly, because if you are way underloaded your cost, your gross margin is going to be -- get hit quite a bit. But if you build it and then build another inventory, internal inventory, then again, your cost, inventory cost is there, too. And therefore, a best way is building consistently, you don't get the revenue up, down so much. You get your manufacturing smoothly produced intentionally the number and you get your gross margin -- what, okay? Because you don't want to be the other people, you don't want to be spent so much time overtime, and you don't want to have depreciation hitting your gross margin. Therefore, we carefully manage the operation. That's why I keep the saying operation excellence, our execution because that way, we have a very smooth margin or very smooth revenue; don't get up and down so much. At the same time, we are able to maintain our gross margin; the fourth quarter above 41%. And even this quarter, we guide for manufacturing, but we still have the record gross margin, okay? So, this is really an excellent of operational control to make the output, the loading very smoothly such that you have the best cost reduction and balance the cost of the manufacturing cost to the inventory cost, you try to balance that cost to get the best growth market. And we continue to do that.

David Neil Williams - *The Benchmark Company, LLC, Research Division - Senior Equity Analyst*

If I could follow up with one. I think there have been a few questions about this. I just want to make sure I understand what's going on. Historically, I think we've sort of been trained to think about 2 major drivers of the margin -- well, maybe 3 drivers of the margin improvement. Operational excellence, I'll acknowledge is one of them. But I think the 2 that we've been more focused on is end market mix shifting more towards Industrial and Automotive and then product mix, which is a lot harder for us to measure, but we know that you're leaning into more unique specialized higher end, however you want to describe it, products and less in what Emily calls deep commodity. It sounds like on this call, what you're trying to communicate is that the end market mix will matter less going forward because operational excellence continues and there's more room to go and perhaps the product mix is maybe a bigger driver. Am I over-interpreting what you're saying? Or is that...

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Yes, you're over interpreting. What I'm trying to explain it, the last 4 quarters, perhaps the second quarter this year guidance, you can see it go through up and down in the revenue -- but we are able to maintain very steady and even a record of the gross margin. And so that is coming from product mix and operational excellence. It's coming from both. So, when the revenue go down, we have maintained. That is a product mix keep up, okay? But when we had a better loading which is going up and like we said now, okay, assume when 3C start going up, we are able to continue to maintain or improve, then is coming from operations. And so, I think -- what we want to do is focus on how to continue to improve the gross margin regardless of the market up and down. And we proved we can do that due to -- we already know the first 2 quarters of last year, this is good, very good. Then second half of last year, business starts slow down. Even this year, first quarter and second quarter business is slow down, but we are able to continue maintain the gross margin even setting a real new record. It tell us that's the right thing for us to do, and that's what we are doing.

Operator

And ladies and gentlemen, with that, we'll be concluding today's question-and-answer session. I'd like to turn the floor back over to Dr. Lu for any closing remarks.

Keh-Shew Lu - *Diodes Incorporated - Chairman, CEO & President*

Thank you for your participation on today's call. Operator, you may now disconnect.

Operator

Ladies and gentlemen, with that, we'll conclude today's conference call. We thank you for joining today's call and presentation. Please have a great evening.

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