

## CORPORATE PARTICIPANTS

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**Joe Shiffler** Power Integrations, Inc. - Director of IR & Corporate Communications

## CONFERENCE CALL PARTICIPANTS

**Christopher Rolland**

**Gus Richard**

**Karl Ackerman**

**Ross Clark Seymore**

**Tore Svanberg**

## PRESENTATION

### Operator

Welcome to the Power Integrations Second Quarter Earnings Call. (Operator Instructions) I would now like to hand the conference over to your speaker today, Mr. Joe Shiffler. Sir, please go ahead.

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**Joe Shiffler** - Power Integrations, Inc. - Director of IR & Corporate Communications

Thank you, Mel, and good afternoon, everyone. Thanks for joining us. With me on the call today are Balu Balakrishnan, President and CEO of Power Integrations; and Sandeep Nayyar, our Chief Financial Officer. During the call today, we will refer to financial measures not calculated according to GAAP. Non-GAAP measures exclude stock-based compensation expenses, amortization of acquisition-related intangible assets and the tax effects of these items. A reconciliation of non-GAAP measures to our GAAP results is included in our press release. Our discussion today, including the Q&A session, will include forward-looking statements denoted by words like will, would, believe, should, expect, outlook, forecast, anticipate, and similar expressions that look toward future events or performance. Such statements are subject to risks and uncertainties that may cause actual results to differ materially from those projected or implied. Such risks and uncertainties are discussed in today's press release and in our Form 10-K filed with the SEC on February 5, 2021. This call is the property of Power Integrations and any recording or rebroadcast is expressly prohibited without the written consent of Power Integrations. Now I'll turn the call over to Balu.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Thanks, Joe, and good afternoon, everybody. This was another record quarter for Power Integrations with revenues of \$180 million, up 69% from a year ago. Demonstrating the leverage in our model, our non-GAAP operating margin surpassed 30% for the quarter and we increased our non-GAAP EPS by more than 2.5x year-over-year. For the first half of 2021, the revenues grew 63% from the prior year. We are growing well above the growth rate of the analog industry, thanks to broad market share gains and secular trends that will endure even as demand normalizes over the coming quarters. One such trend is energy efficiency, which has been a key part of our story since the introduction of our EcoSmart technology over two decades ago. Energy efficiency has provided a tailwind ever since, driving OEMs to redesign their products in response to regulatory standards and consumer demand. At times, these tailwinds have been boosted by highly impactful standards like the 2007 California regulations on external power supplies, which quickly drove linear power supplies out of that market. Power Integrations won an outsized share of that opportunity because our LinkSwitch ICs were an ideal replacement for linears.

A similar transition has now taken place in the air conditioning market due to China's mandatory standards for room AC units, which were announced in late 2019 and have been phased in over the past year. China's updated minimum efficiency performance standards, essentially rule out fixed-frequency AC units, which accounted for nearly half of China's production before the standards took effect. In response to the standards, manufacturers have transitioned most of their production to variable speed brushless DC motors and have also converted from

linear to switched-mode power supplies to drive the electronics. Power Integrations is a market leader in switched-mode power supplies for air conditioners, and our incumbent position has allowed us to capture much of the volume transitioning away from linears. It has also created opportunities for our BridgeSwitch motor drive chips, which drive brushless DC motors such as those used in variable speed AC units. In fact, we won one of our largest BridgeSwitch designs to date in Q2 at a major customer in the air conditioning market.

We are also gaining share in major appliances, where we are already the leader in AC-DC power supplies, thanks to the efficiency and reliability benefits of our products. Our share gains have accelerated as competitors with capacity constraints have prioritized other products ahead of power supply chips and other competitors have deemphasized or exited the power supply market altogether. These gains are compounding the revenue benefit of rising dollar content in appliances, driven by tighter efficiency standards and the increasing penetration of electronic features such as network connectivity, electronically controlled motors, and LED lighting. We also expect meaningful revenues from motor drive applications next year as BridgeSwitch begins to ramp in earnest.

Another important secular trend in the power supply market is the adoption of advanced chargers for mobile devices, which continues to drive strong growth in our communications and computer categories. Combined revenues from these categories more than doubled year-over-year in Q2, reflecting the market share we have gained in OEM-branded chargers for smartphones, tablets, and notebooks as well as multi-purpose chargers from a wide range of aftermarket brands. We have made it a priority to win share in this market today, knowing that the revenue stream will be stickier, less volatile, and more profitable than the commodity cell phone charger business of the past. Charger designs have always had longer life cycles than the mobile devices themselves, which are refreshed every year. But while simplistic low-power chargers could easily be redesigned just to shave a few pennies of the BoM cost, today's highly sophisticated chargers are more like appliances with a greater focus on features and performance and longer design life cycles. In short, we expect many of the designs in our pipeline to be in production for a long time and we are pressing our advantage to lock in these designs today.

We won a wide assortment of advanced charger designs in Q2, including a 33 watt in-box charger that will significantly increase our penetration at a top-tier handset OEM. Another OEM recently placed the largest single order to date for our GaN-based InnoSwitch products, which they have selected for a new 67 watt in-box cellphone charger for use with high-volume phone models. We also won a 130-watt design for a leading supplier of gaming notebooks, featuring 4 charging ports and using 3 GaN-based InnoSwitches. As announced in May, we have also been designed into Anker's next generation Nano-II chargers, which come in 30, 45, and 65 watt versions. Notably, the 65-watt version is approximately the same size as the 30-watt charger from the first generation of Nano chargers.

This improved power density is enabled by our latest product, InnoSwitch4, which will be produced exclusively with GaN. GaN enables Inno4 to operate at higher frequency, resulting in a significant reduction in the size of the power supply transformer. We pair the InnoSwitch 4 device with our new ClampZero chip, which implements active clamp technology to recover losses associated with the higher switching frequency, enabling a truly exceptional level of efficiency. And combined with our MinE-Cap product, which uses GaN to enable the use of a much smaller input capacitor, we can deliver power density far superior to any solution available in the market today.

The synergy between these products demonstrates the value of our comprehensive approach to power supply technology, including proprietary process technologies, high-voltage transistor technologies, highly integrated controllers, proprietary packaging, and system-level know-how. This has always been our approach and we have continued it with our GaN technology, which we have seamlessly folded into our product offerings. In fact, a GaN InnoSwitch works exactly like a silicon-based InnoSwitch such that the customer doesn't have to know anything about GaN in order to realize its performance benefits.

Other GaN devices offered in the market, including some marketed as ICs, are essentially discrete switches that require dozens of external components and many times, even a separate circuit board, which are incorporated into a power supply using an external controller chip sourced from a third party. Engineers must learn the idiosyncrasies of GaN to design a working power supply and even when successful, they end up with a design containing 2 to 3x as many components and multiple circuit boards. This greatly complicates manufacturing and brings compromises on reliability, time to market, cost, and form factor.

While the transition to GaN is a secular trend that will lift many boats, the benefits of integration are inescapable, and we believe our approach is proving superior in the GaN world just as it has with silicon over the past three decades. In fact, based on recent design wins, we are accelerating our capacity additions for GaN to accommodate a substantially higher level of growth than previously expected. Looking ahead, we have been anticipating significantly lower revenues in the second half, reflecting reduced demand for cell phone customers after aggressive handset bills meant to capitalize on the Huawei sanctions. We now believe that a significant portion of this adjustment took place in Q2, as evidenced by a sharp reduction in sell-through as customers rapidly adjusted their charger inventories.

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With this correction largely behind us and taking into account our continuing market share gains and new design wins, we expect a more moderate reduction in the second half revenues compared to our prior expectations. For Q3, we expect a 3% sequential decline in revenues, plus or minus 5%, and we believe we are on track for a full year revenue growth in excess of 40%, compared to a projected growth rate of about 20% for the analog semiconductor industry according to WSTS. With that, I'll turn it over to Sandeep.

**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

Thanks, Balu, and good afternoon. As usual, I will focus my remarks primarily on the non-GAAP results, which are reconciled to GAAP in our press release tables. Revenues for the June quarter were \$180 million, up 4% sequentially and above the midpoint of our guidance. Consumer revenues were up about 10% sequentially, driven by broad-based growth in appliances and consumer electronics. Industrial revenues were also up about 10% sequentially, driven by a range of verticals, including home and building automation, lighting application, and broad-based industrial applications. Computer revenues increased mid-single digits, driven by share gains in notebook chargers, which offset broader softness, likely reflecting less demand related to work from home. Communications revenues were down mid-single digits, reflecting the lower demand from cell phone customer offset partially by channel replenishment. Revenue mix for the quarter was 35% communications, 31% consumer, 26% industrial, and 8% computer. We stated last quarter that March would be the low watermark for gross margin and that is proving to be the case.

Non-GAAP gross margin rose to 51.4% in the June quarter, up 200 basis points sequentially, driven primarily by a more favorable end market mix and manufacturing efficiencies. Non-GAAP operating expenses were \$37.6 million for the quarter, up \$1.4 million from the prior quarter, driven by annual salary increases and higher R&D investment, but slightly below our expectations, reflecting the pace of headcount additions. Non-GAAP operating margin for the quarter was 30.5%. While I expect operating margin to settle back into the high 20s over the next couple of quarters, crossing the 30% threshold in the June quarter clearly demonstrates the leverage in our financial model. This leverage can also be seen in our EPS growth. Non-GAAP earnings were \$50.8 million in the June quarter or \$0.83 per diluted share. That's an increase of more than 150% from the second quarter of 2020 on a revenue growth of 69%.

Cash flow was also strong, with \$67 million generated from operations, while CapEx was just over \$8 million. We paid out just under \$8 million in dividends and utilized \$26 million for share repurchases, buying back 335,000 shares or roughly 0.5% of our float at an average price of less than \$79 per share. Buyback activity has been ongoing since the end of the quarter and will continue to be driven by our preset price/volume matrix. Cash and investments on the balance sheet rose by \$24 million from the prior quarter and stood at \$515 million at quarter end. Internal inventories held steady at 92 days, while channel inventories recovered from the unsustainably low levels reached last quarter, ending June at 5.2 weeks, still below our expected steady state levels of about 6 to 7 weeks.

Looking ahead, we expect third quarter revenues to be down 3% sequentially, plus or minus 5%. At the midpoint of the range, that would be an increase of 44% year-over-year. While it is too early to project revenues for the fourth quarter, we believe we are on track for revenue growth in excess of 40% for 2021 and we believe we are very well positioned for growth in 2022 based on the market share gains and the secular drivers that Balu outlined in his remarks.

Our gross margin outlook for the year has improved, reflecting our expectations for end market mix and the impact of manufacturing efficiencies. I expect non-GAAP gross margin for the third quarter to be approximately 51.5% and around 51% for the full year. Operating expenses will continue to rise gradually as we add headcount in both R&D and sales and work to bring more products to market with our industry-leading technologies, such as FluxLink and GaN.

For the September quarter, non-GAAP OpEx should be between 38.5 and \$39 million. For the full year, expenses should grow about 9% to 10%, coming off a flat year in 2020. Other income for Q3 should be in the range of \$0.3 million to \$400,000, while the non-GAAP effective tax rate should remain at approximately 8%. And now operator, let's begin the Q&A session.

## QUESTIONS AND ANSWERS

### Operator

(Operator Instructions) We have a first question comes from the line of Ross Seymore from Deutsche Bank.

**Ross Clark Seymore** - Deutsche Bank AG, Research Division - MD

Hi guys. Thanks for letting me ask a question. Congrats on the solid results. I wanted to talk about the channel first and foremost and really what it means to your second half expectations being higher or less bad than you said a quarter ago. The channel looked like it got back closer to normal. Is that going to be a tailwind to get back to normal in your second half expectations or do you think that the sell-through is going to be strong enough that refilling the channel is going to take a little bit longer?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

So as we said, our normal levels are 6 to 7 weeks and here we are at 5, but the predominant growth in the channel came from the cell phone area and we believe because of the share gains that we have had and the secular drivers, we are going to have a better second half than we had previously anticipated.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

So in terms of the channel, we expect to be relatively flat for Q3. There is a possibility it could go a little bit higher in Q4, eventually it will go to normal, but that's our best guess at this point.

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**Ross Clark Seymore** - Deutsche Bank AG, Research Division - MD

Got it and thanks for the color on that and I guess as my follow-up, next performance on the gross margin side of things. Sandeep, you talked about the two reasons mix, I think we can see a little bit of that mix and why that would happen, but the manufacturing side a little bit more of a surprise to you? That you're usually pretty accurate on that. It's always good to be surprised to the upside more than the downside, but I just want to get a little bit more color on the drivers, especially on the manufacturing side, what happened there, and how sustainable it is?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

Well, the volumes are going up and you know we've had the yield improvements, test time reductions and also, as the mix in communication moves to aftermarket chargers, that helps our margin also because the volumes are lower and it has a favorable contribution. And the environment where we are, where costs have gone up, we do value pricing. And as a result of that, when you're competing against the discretely and you're doing value pricing, that also helps a bit.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yeah, utilization and also test cost improvements are probably the biggest manufacturing cost improvements. In the test, we have migrated to a new test platform, which is more cost effective and that happened over the last 12 months or so. So that has helped us. But as Sandeep said, even in communications, we are seeing improving gross margins for the reasons you mentioned, like the aftermarket and the fact that everybody is going to very high-end chargers.

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**Ross Clark Seymore** - Deutsche Bank AG, Research Division - MD

Got it. Congrats again. Thanks guys.

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

Thanks Ross.

**Operator**

Next question, we have the line of Christopher Rolland from SIG.

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**Christopher Rolland**

Thanks guys and congrats on the quarter. So I actually wanted to talk about the Non-GAAP operating margin for a second here. I think your long-term model is 20 plus. And I know you guys had an outstanding quarter of plus 30 this quarter and I know you said it was going to go back into the high 20s, but I was wondering if you had any plans on updating that long-term OP margin target and where that might go over time?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

You know our long-term model continues to grow our top line, low double-digit for revenue growth with OpEx growing at about 60% and we have always talked about this to be at a 3 to 5-year period on an average. We have had a step function increase in the revenues that has caused our operating margin to move up and our goal has always been there to maximize our operating margin over a period of time and not in a particular given year.

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**Christopher Rolland**

Yeah. Would you say that 30% plus could be a stretch goal for you guys over time?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

Well, I really think if you remember, I talked about 20% and again, you have to look over a 3 to 5-year period, could be -- we had talked about this mid-20% goal. We are not ready to again state it, but I think being in the mid-20's plus seems to be definitely in the direction where we are and obviously, you know, our goal as we move forward will be to keep enhancing that towards the number that you indicated. But at this point, what we want to do is talk in terms of 3 to 5 years, but I think we have achieved the mid-20's and hopefully, can sustain that and we start going in a north direction from there.

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**Christopher Rolland**

Yeah. Okay, great. And then it does seem like there are 1 or 2 newer GaN companies out there looking to go public and maybe you can talk about that market, you know, how you see shares shaking out? And then ultimately, pricing dynamics moving forward as we have some more newer entrants into the market?

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Sure. Just to be clear, all other GaN companies offer discrete devices. They don't provide a system-level solution and I think that's where we have a huge advantage. GaN is very difficult to use, it's a very fast device, a lot of customers struggle with it, whereas when they use our product, GaN is embedded within our product, so we take care of all of the idiosyncrasies of the GaN, we deal with that. As far as the customer is concerned, they can't even tell the difference from a design point of view. Of course, they can tell the difference in terms of performance. And that's how easy we made GaN to our customers. As far as the other side of it is that the number of components required to implement our solution is far less. We typically have anywhere from 1/2 to 1/3 the number of components, which is really needed to make the power supply small. It's not just a question of using GaN. You have to be able to reduce the size of the power supply for that, you have to reduce the component count. We also have to implement features like current limit inside our product in a lossless way. Otherwise, you end up having additional losses outside, which really negates the use of GaN. So talking about GaN as a device is not very useful. You have to look at the system. And that's why GaN has had the challenges for many, many years now, and we are able to break through that. Lastly, I would say that in terms of the technology, we believe we have the most cost-effective technology in the world in GaN. And that's because our structure is very different from everybody else's and it's uniquely different because we wanted the most cost-effective technology for our switched-mode power supplies and that's where we are now. I think we are in a fantastic position compared to any of the other competitors.

**Christopher Rolland**

Awesome. Thanks guys.

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**Operator**

The next question comes from the line of Tore Svanberg from Stifel.

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**Tore Svanberg**

Yes, thank you, and congratulations on a few records. I think it's revenue, operating margin, and up in cash flow. So congratulations on that.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Thanks.

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**Tore Svanberg**

First question is on the communications business. It was down sequentially this quarter, that you said that the correction seems to be behind you. I assume that business is still going to be down in Q3. Is that how we should view it?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

We -- to the best, we have -- we can model to be slightly down in Q3. I think the Huawei re-distribution has completed to the best we estimate and that's why we saw a significant reduction offset by, of course, our channel replenishment. But in Q3, we think that will be slightly down, yes.

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**Tore Svanberg**

Got it. So what takes the revenues down then is the consumer business going to take it or . . .

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Well, the consumer business should be relatively flat from what we can tell. Even though it's usually seasonally down because of AC, AC is down in Q3, but we have so many new design wins that will, we believe, will offset that.

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

So that's the reason -- sorry, we have given the range as we do. It is hard to get precise from what we have guided to, if you take the 3% sequential decline, plus or minus. That's where it gets, you know -- there we know directionally communication is going to be slightly down. And typically, air conditioning goes down in Q3, but we think because of share gains, that would offset that and be flattish and you know industrial has so many moving parts that it gets a little difficult to be very precise, so that's why the range gets difficult to say, but it's the best directional answer we can give at this point.

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**Tore Svanberg**

Yes. That's great. Thanks for that comment. Moving on to the product. So BridgeSwitch, it sounds like that product line is really hitting the momentum. You talked about some big design wins there. How should we think about the margin profile of that product of that business? Is it similar to the other products?

**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Well, again, it depends on the market and in the consumer market, it will be similar to the consumer gross margin we have. And we expect it to grow very nicely next year. We have many design wins this year, we will get a few million dollars in revenue this year, but it will really start accelerating next year. The revenue growth on BridgeSwitch has been delayed because of Covid because in appliances, when they go to a totally new platform like BridgeSwitch, it takes quite a bit of design work and we were unable to physically go and help them. And so it made the design in process much longer trying to help them remotely. But the interest level always has been high, but we are finally seeing the benefit of this revolutionary product, we think it's going to do extremely well going forward.

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**Tore Svanberg**

Great. Just one last question. I know the trend that the fast charger market has been for kind of chargers moving out of the box, but you talked about several in-box design wins. I think you said even your largest single order to date for InnoSwitch for a 67 watt in-box. So is there still sort of a mixed bag as far as where the trend is between out of box and in-box?

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yes, that's still true because the Chinese OEMs are really focusing on charge time and they believe that their unique approach allows them to charge at a much faster rate. I mean you can imagine, 67 watts is a lot of power. If you're used to the 5 watt cube charger, this is substantially higher. It's about 13, 14x higher charge rate and they believe that their protocol allows them to do that, so they're not too anxious to go to a standardized protocol like USB PD because they think they'll lose their advantage. They are able to do something that other people can't do. So we don't see them transitioning in the near future. And could it happen in the long term? Yes. But is it going to happen quickly. I think it's happening slower than even we anticipated. As you already know, one of the major OEMs have switched to USB PD. Another one is switching partially to USB PD. But beyond that, we have not seen a significant move to USB PD, which is actually good for us because it's all different designs. And therefore, they -- the fact that they are focusing on fast charging means that they're going to continue to put it in-box because each generation has a much higher feature level, whether it's higher power or higher performance. So they use as a marketing tool. So they haven't transitioned out of the box.

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**Tore Svanberg**

Sounds good. Congrats again on an outstanding quarter. Thank you.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yes. Thanks, Tore.

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**Operator**

We have the next question comes from the line of Gus Richard of Northland.

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**Gus Richard**

Yes, thanks for taking my question and my congratulations on a good quarter as well. Just real quick, can you talk a little bit about channel inventory on the consumer side? You said it built up in communications, but I was wondering if that was true for a consumer as well.

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

It's not gone up as much in the consumer because the demand on the appliance side continues to be extremely strong and as we have said, you know and we have talked earlier, the normalizations in different end markets would happen at different points of time. But the demand on the consumer, especially on the major appliances, continues to be very strong. And that's an area we're waiting to see when that normalizes because it has been way above normal levels. But also, the other part, which is very good that is happening as we talked about in our remarks, is where our gains have accelerated because of people prioritizing other stuff, plus people exiting this marketing or defocusing the gains that we would have had over a period of time that actually accelerated. And that is going to be very positive even when things normalize because that will be a nice offset to that the share gain.

**Gus Richard**

Got it. Got it. And then just thinking about the model going forward, if one were to assume that you hit normal seasonality, whatever that is, going forward, would your OP margins stay above 25% to below 30, going through next year?

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

I think at this point of time because even though I haven't done my annual plan, but I'll do [from] my "stomach," I feel if you take where we will end up this year, which will be in the range -- somewhere in the range that you're telling, I think it in the middle of the range? I think it will be give and take that.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yes. I think best we can model will be similar to the whole year [operating] margin this year because we believe we are going to grow next year.

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

It's hard to tell how much, but we feel very good about growing next year.

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**Gus Richard**

Right. And is the gross margin of the consumer -- I'm sorry, communications market better because you've got more aftermarket guys that are taking smaller volume. Is that a good way to think about it?

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Exactly. Yeah. Our communication gross margin is increasing because of that.

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**Gus Richard**

Okay. Got it. And then -- all right. So I've talked to you guys have talked to your competitors and trying to suss out what topology is the best and their argument that they have better energy efficiency because they use soft switching. In other words, they don't both current and voltage don't cross over at the same time. Could you talk about that topology versus yours and why you think your topology in having -- how that relates to how you spend current, et cetera. Can you in layman's terms, explain what's going on?

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yes, absolutely. The -- this is almost strange because our InnoSwitch3 product is soft switching. It's called resonant converter. And InnoSwitch 4 is even better at zero-voltage switching, which is even more efficient by using our ClampZero products. So I don't think anybody can even come close to our efficiency at all. I mean, it's just if you want to build the smallest adapter in the world, we are it today.

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**Gus Richard**

And does that enable you to use smaller magnetics?



**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yeah. So we talked about it in my prepared remarks that our latest product, Inno 4 offers a high frequency, and that's why it only uses GaN, it doesn't have a silicon switch at all because of the higher frequency operation. And when you go to higher frequency, can reduce the size of the transformer, but you end up increasing the losses in the transformer and the switch. To recover that, we have another companion chip called ClampZero, which recovers the losses and sends it to the output, so you cannot only maintain efficiency, you can actually further increase efficiency using zero voltage switching. And so on top of that, we also have MinE-Cap that nobody else has, by the way, that will also reduce the size of the capacitor by 40%. So between MinE-Cap and ClampZero, we are able to reduce the size of the transformer and capacitor, which are the biggest components in the power supply. So in both cases, we've reduced it by about 40% of each one of them. And then to make the power supply small, even that is not sufficient because you have to have very few components so that you can actually fit it into a small enclosure. That's where we really excel because we have typically 1/3 the components of a competitor's GaN-based design.

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**Gus Richard**

I understand, thank you. And last one for me, you said you're going to add capacity for GaN products because of the demand. Is that MOCVD? Is it testing? What do you need to add?

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

We would like to add primarily on the front end. I can't go into details, but I could say that from a packaging standpoint, we already have enough capacity. We are expanding as we speak. But we'll have -- that's easier to do because of a smaller, shorter lead times, but it's the back end, I should say the front end where we're significantly expanding capacity in preparation for substantial growth, not only next year for the next several years.

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**Gus Richard**

Very good. Thank you so much.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Thanks, Gus.

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**Operator**

(Operator Instructions) Next question, we have the line of Karl Ackerman of Cowen.

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**Karl Ackerman** - Cowen and Company, LLC, Research Division - MD & Senior Research Analyst

Yes, good afternoon gentlemen. I wanted to follow-up to last question that Gus had asked, which was -- in some of your prepared comments, you indicated that channel inventory could possibly creep higher into Q4 and maybe eventually get back to normal. I know you had invested in late 2020 and early 2021. On an additional capacity adds on the front end, which did prove fortuitous for you as other shorter capacity. But my question is, does a normalization in channel inventory dampen any plans for you to further expand capacity from here? And I have a follow-up.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Well, first of all, until the market normalizes, we want to keep as much inventory with us because that really can serve the real demand most effectively. If the if our inventory gets distributed among many customers and distributors, it makes it really hard for us to take care of upsides, like we are seeing in appliances. We are seeing a significant upside that we did not anticipate simply because our share gains have certainly accelerated for reasons that Sandeep already mentioned, so it's really important for us to have that with us. However, as things normalize, we will be able to build inventory as close to as normal as possible. Will it happen in Q3, I don't think so. I think the demand is still pretty high and in Q4, there's a likelihood that we could go up or creep up a little bit. But it's also possible that we won't be able to do that. It all depends upon how much

-- how long this normalization will take in the cell phone, the normalization has happened to a large extent in Q2. But in appliances, it's still very, very hot. I mean, the demand is very high and so it is possible to take 1, 2, or 3 quarters for it to normalize. But having said that, we are continuing to expand capacity across all of our technologies, especially in GaN. GaN is where we see the most dramatic growth in terms of capacity requirements, so we are focusing on that. But we also need silicon capacity, which we are expanding as we speak, and we'll have more capacity available next year. You can see, we are going to grow 40%, were on target to grow 40 plus percent. And the only way we could have done that is we have the capacity in place, we put the capacity in place. We have -- we built enough inventory. So we are in a much better position than almost anybody in the semiconductor industry. And we also have a very unique manufacturing model. We don't use what we call standard foundries. We use -- we use fabs that are owned by product companies who have excess capacity to give it to us and it's committed to us because we have committed through contracts, so we are able to do this much better than almost any other semiconductor company can think of.

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**Sandeep Nayyar** - Power Integrations, Inc. - CFO & VP of Finance

The other thing I'd like to add is our internal inventories are only sitting at 92 days. Our running models is 125 days, so we're well below the model that we would really like to run. And in spite of the growth that we have this year and the growth in the prior year, we feel very good because of the share gains in the secular that we will grow again very nicely next year.

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**Karl Ackerman** - Cowen and Company, LLC, Research Division - MD & Senior Research Analyst

I appreciate that followup, Sandeep. Very helpful. There's been much discussion on today's call regarding, I think, your competitive differentiation within GaN, so I don't want to belabor that point. But I think what is interesting is -- and one of the questions that I've received quite a bit intra-quarter is the growth trajectory that your peer has articulated over the next couple of years for GaN. And the question is, is that indicative of a rapidly expanding TAM that's also greatly beneficial to you or does that constrain your growth? And so as you address that question, I was hoping you could also talk about whether you are seeing new opportunities to maybe move into the server market or outside of your consumer offerings, that could also expand your TAM overtime. Thank you.

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**Balu Balakrishnan** - Power Integrations, Inc. - President, CEO & Director

Yes. Let me answer the last question first, that is that GaN will enable us to go at much higher power levels with an integrated switch. However, we don't talk about products in the higher power areas until we have them, so that's one of the reasons we don't go crazy on what this could be in the next 5 years. If you're being -- if you're going public with a SPAC, you can -- you have complete freedom to show whatever you want for the next 5 years. So we are just very, very conservative in that regard. As far as the GaN propelling other companies, yeah, GaN is a very, very important technology. So when -- as GaN gets popular, it will lift all the boats, obviously. The question is, who is going to benefit the most? And I believe the one who will benefit is the one who makes it easy for customers to use GaN. And secondly, the company that has the most cost-effective and reliable technology. And I think we have really proven that by shipping very high-volume for the last 4 years, that we have a very reliable technology and a very cost-effective technology. The proof is in the fact that we are now in a mainline in the box charger at 67 watts. This is the first large volume GaN design that we know of. We are in a very high-volume charger design with one of our OEMs.

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**Karl Ackerman** - Cowen and Company, LLC, Research Division - MD & Senior Research Analyst

Very helpful. Thank you

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**Operator**

(Operator Instructions) There no further questions at this time. Please continue presenters.

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**Joe Shiffler** - Power Integrations, Inc. - Director of IR & Corporate Communications

All right. Thanks, everyone, for listening. There will be a replay of this call available via our website, investors.power.com. Thanks again, and good afternoon.

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**Operator**

Thank you. Ladies and gentlemen, that concludes today's conference call. Thank you all for participating. You may now disconnect.