

**Power Integrations Second Quarter 2023 Earnings Conference Call – August 3, 2023**  
***Corrected Transcript***

**Joe Shiffler**

Thank you, Maria. Good afternoon everyone. Thanks for joining us. With me on the call today are Balu Balakrishnan, Chairman, and CEO of Power Integrations; and Sandeep Nayyar, our Chief Financial Officer. During this call, we will refer to financial measures not calculated according to GAAP. Non-GAAP measures for the second quarter of 2023 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 today's 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, plan, forecast, anticipate, prospects, 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 most recent Form 10-K filed with the SEC on February seven 2023.

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**Balu Balakrishnan**

Thanks Joe and good afternoon. As expected, our Q2 results mark the start of a recovery from the cyclical trough reached in the prior quarter. While the pace of the recovery reflects a soft demand environment, especially in China, we do expect meaningful revenue growth in the second half of the year compared to the first half as inventories continue to improve and new designs go into production.

We also expect significantly higher gross margins -- significantly higher gross margins and operating margins in the second half. Most importantly, our products are winning in the market and secular trends like energy efficiency, renewable energy, and electrification are going strong regardless of the industry cycles.

Each of these trends contributes to a lower carbon future and we are participating in all of them through our presence in renewable energy and electric transportation, energy-efficient drivers for brushless DC motors and LED lights, our leading position in GaN, and our expertise in reducing standby power waste.

Low-standby technology remains as relevant today as ever thanks to the ever-increasing number of electronic devices drawing power from the grid, and it remains a priority for policymakers who recognize that the cleanest energy is the energy we never use in the first place. With that in mind, the EU has recently revised its EcoDesign standards for standby consumption, and I'll talk more about that in a moment.

Second quarter revenues were in line with our guidance at \$123 million, up 16% from the prior quarter. Industrial, the last category to enter the cyclical correction, declined slightly. All other categories showed strong sequential growth led by consumer which grew 35%, driven by appliances and air conditioning.

Channel inventories associated with the consumer market fell significantly in Q2 and are approaching normal levels. The computer category was up more than 20% sequentially, driven by tablets, desktops, and aftermarket GaN chargers.

Revenues from the communications category were up high teens sequentially, despite continued softness in the Android market. While revenues from Android customers were essentially flat from the prior quarter, channel inventories continue to be well below normal and we have received a number of rush orders in recent months from distributors serving Chinese OEMs.

Overall, distributor inventories ended the quarter at 10 weeks, down more than a week and a half from the prior quarter and down about three and a half weeks since the beginning of the year. We expect further reductions in channel inventory in the September quarter.

Lower channel inventories should enable continued sequential growth in Q3 though our expectations for the September quarter do reflect a weaker near-term demand environment, especially in China.

Nevertheless, we are pleased to be past the bottom of the cycle and we look forward to a resumption of year-over-year growth in the fourth quarter. We believe we are well-positioned for growth in 2024, driven not just by cyclical recovery, but also the strength of our product portfolio and an expanding pipeline of design activity.

In Q2, we achieved an all-time high in terms of potential revenue value of design opportunities created during the quarter. This reflects the increased breadth of applications we are addressing, rising dollar content in chargers and appliances, and the superior performance and ease of use of our products.

Our flagship InnoSwitch™ ICs, now in their fourth generation, continue to set the state of the art in power supply technology with the highest level of integration available, including primary- and secondary-side control and FluxLink™ isolation technology, which eliminates opto-couplers. InnoSwitch ICs offer a choice of silicon, GaN or silicon-carbide switches as well as an integrated USB PD interface for mobile applications, removing the need for a separate protocol chip. One of our largest cellphone customers has recently taken advantage of this capability, designing out the USB PD protocol chip in a high-volume charger and upgrading to the PD version of InnoSwitch, driving a substantial increase in our dollar content.

We won a wide range of other advanced charger designs in Q2 with GaN InnoSwitch products as well as our HiperPFS-5 GaN power-factor-correction ICs, including two aftermarket USB PD chargers with 140 watts of output. GaN InnoSwitch devices also won designs in a number of non-mobile applications in Q2 including air conditioners, industrial controls, medical equipment, USB wall receptacles and surge protectors. Overall, we expect about half of our GaN revenues this year to come from non-cellphone applications.

In automotive, we are seeing strong interest in our new 900-volt GaN InnoSwitch products for power supplies in 400-volt passenger cars. In 800-volt vehicles we are racking up wins with our silicon carbide InnoSwitch products, which are far and away the best solution for 12-volt battery replacement and emergency power supplies in drivetrain inverters. A recent tier-1 design win for emergency power supplies is now ramping with a major European car brand, and we have significant follow-on design activity at the same Tier-1 customer. Two Chinese customers are beginning production with us in Q3 and we expect to be in production with a total of four Chinese car models by the end of this year.

In all, our design opportunity pipeline exceeds \$100 million. And as we have noted on prior calls, we are converting opportunities into design wins at a much higher rate in automotive than any other end market.

The transition to brushless DC motors in appliances and HVAC equipment is creating a broad set of opportunities for our BridgeSwitch motor-drive products, and our strong incumbent position in appliance power supplies gives us a leg up as sockets become available. In Q2, we grew our opportunity pipeline to more than \$60 million and secured our first design-in as a major supplier of circulation pumps for radiant heating systems, scheduled to begin production in early 2024.

BridgeSwitch ICs not only drive motors more efficiently than competing solutions, but also minimize power consumption of the motor when an appliance is not in use. This capability takes on greater importance in light of Europe's updated EcoDesign standards, which mandate a reduction in the allowable standby power for a wide range of electronic products beginning in 2025. This is the first major update to standby regulations since 2013 and should provide a tailwind across a broad range of applications as OEMs redesign products to meet the stricter limits.

Power Integrations has been the leader in reducing standby waste since we introduced our EcoSmart technology 25 years ago. EcoSmart technology all but eliminates standby consumption in power supplies, saving more than two million homes' worth of electricity usage every year by our estimates. It produces these savings without any loss of functionality for the end user and without added cost or design effort on the part of our customers.

In addition to saving standby power with EcoSmart technology and driving higher active-mode efficiency with GaN, we also contribute to de-carbonization with our SCALE™ gate drivers which drive IGBT and silicon-carbide modules in high-power applications. We are on track for another year of growth in this business driven mainly by renewables, where our gate drivers are key components of inverters for wind turbines and utility-scale solar installations.

Just as important as generating renewable energy is delivering it efficiently to the grid, and we have recently won a design for a high-voltage DC transmission link connecting a North Sea wind farm to the mainland. This multi-year project, worth millions of dollars in revenues, is scheduled to begin production in the second half of 2024.

And while electric passenger cars get most of the attention, we are equally well positioned to benefit from electrification in heavy vehicles and locomotives. We won a high-volume gate-driver design in Q2 for a traction inverter at Europe's largest locomotive manufacturer, and we are seeing strong interest from customers in our SCALE-EV driver boards for heavy vehicles such as trucks, buses, and construction equipment. In all our high-power business is poised to benefit tremendously in the years ahead as the world drives towards a lower-carbon future.

With that, I will turn it over to Sandeep for a review of the financials.

### **Sandeep Nayyar**

Thanks, Balu, and good afternoon. We delivered Q2 results in line with our guidance, and while the demand environment is challenging we expect the second half of 2023 to be much better than the first in all key respects with significant improvements in revenues, profitability, cash flow and inventories.

Revenues for the second quarter were \$123 million, in the middle of our guidance range and up 16% from the prior quarter. Revenues fell 33% compared to Q2 of last year, which was the peak quarter

of the cycle. The consumer and industrial categories drove the year-over-year decline with each down by roughly half compared to a year ago. However, the communication and computer categories have resumed growing on a year-over-year basis with each of them up mid-single digits in Q2.

Revenue mix for the quarter was 29% industrial, 29% consumer, 28% communication and 14% computer.

Sell-through exceeded sell-in for the third consecutive quarter, resulting in a further reduction in distribution inventory. We ended the quarter at 10.1 weeks of channel inventory compared to 11.8 weeks last quarter and 13.5 weeks at the end of December.

Non-GAAP gross margin was 51.8%, up modestly from the prior quarter as expected driven mainly by a slight benefit from the more favorable dollar-yen exchange rate that began in the second half of last year and is now beginning to affect our P&L. I expect a bigger benefit from the yen in the second half as well as a more favorable end-market mix and a benefit from higher back-end production volumes as we convert more wafers into finished goods. As indicated in our press release, this should drive our non-GAAP gross margin to around 54% in the September quarter, with a further increase to come in the fourth quarter.

Non-GAAP operating expenses for the quarter were \$43.9 million, up sequentially as expected due mainly to annual salary increases, which took effect around the start of the quarter. However, we came in below our guidance on OpEx as we slowed the pace of headcount additions and deferred some discretionary spending. Non-GAAP operating margin for the quarter was 16.1% and non-GAAP earnings were \$0.36 per diluted share.

Cash flow from operations for the quarter was \$6.2 million reflecting unfavorable working capital flows which should reverse over the next several quarters. Inventory dollars on the balance sheet peaked in the June quarter and should begin declining in Q3. March was the peak in terms of inventory days and we ended Q2 at 226 days, down 22 days from the prior quarter.

Uses of cash during the quarter included \$3 million for CapEx, \$11 million for dividends and \$4 million for share repurchases. We bought back 57,000 shares during the quarter at an average price of about \$75 per share.

Turning to the outlook, we expect revenues for the third quarter to be \$130 million plus or minus \$5 million. Sell-through should once again be higher than reported revenues as channel inventories continue to fall. As noted earlier, I expect non-GAAP gross margin to be around 54%. Non-GAAP operating expenses for the third quarter should be about \$43.5 million, down slightly from Q2 as we continue to manage headcount growth and discretionary spending in light of the soft demand environment. Finally, I expect non-GAAP effective tax rate for the third quarter and the year to be between 7% and 8%.

And now, operator, let's begin the Q&A.

### **Operator**

Thank you. Your first question comes from Mr. Christopher Rolland with Susquehanna. Please go ahead.

## **Christopher Rolland**

I guess looking forward in terms of your segments here perhaps you can give us some clues as to the better and worse performers. It sounds like industrial is dragging a little bit here maybe even force rank those if you could for us.

## **Sandeep Nayyar**

So basically, if you look at it – if you look at the beginning of the year, what we had talked about was the communication and computer are going to do well, and the biggest drag this year would be in the consumer and industrial segment, and especially the consumer segment, if you remember we had talked about during COVID, there was a significant amount of pull-in of demand. And that is getting normalized and that was reflected in the channel inventories.

Now, the channel inventories have normalized in the consumer segment and are actually below in the communication, whereas industrial is still higher, but that's where I think it's a timing issue.

As we move in the second half we do expect industrial to come back. And we are seeing that even in appliances because in the third quarter it's typically the -- where the air conditioning comes down. And there was some demand which we were expecting like from our Korean customer, which has got pushed into Q4. But I think as the year goes by the mix is going to get more favorable, which is reflected in our margins along with the yen benefit and the higher volume benefit coming from the revenue growth in the second half.

## **Christopher Rolland**

Great. Thank you, Sandeep. And you talked about higher gross margins in the second half. You just alluded to the yen. But, I think, you called out yen, rising production volumes and a more favorable end mix. Maybe talk about gross margin progression through the year how we might end the year and then what we would attribute to each of those kind of three factors? Thanks.

## **Sandeep Nayyar**

Yes. So if you look at it we had talked about it that the first half as you know in Q1 we were around 51.5%. We inched up a bit to 51.8% in Q2. And if you remember we talked about how the yen had moved in the second half of last year. And it takes typically about six months, to move into our P&L. But now with the inventory levels it's taking a little longer – about nine months.

So in Q3, we will see our gross margin non-GAAP at around 54% and then it will inch up from there. As I have talked about in the past, we are going to be in our model, but more towards the higher end of our model. And I think as the revenue starts coming back in the second half it is more reflective of what I have discussed. But I think the benefit in both those quarters come from mix, volumes and the yen benefit.

## **Christopher Rolland**

Thanks so much, guys.

## **Operator**

The next question comes from Mr. Ross Seymore from Deutsche Bank. Please go ahead.

## **Ross Seymore**

Hi, guys. Thanks for letting me ask a question. Just wondering, you guys have done a great job on the channel inventory and being very clear on that. It seems like coming out the other side that the rub to the situation is that true end demand is just weaker than you might have otherwise hoped. You still express the confidence in the second half being bigger and the fourth quarter being up year-over-year. Any sort of even just directional color on the magnitude of the fourth quarter because the third quarter is up, you set the bottom but it's not up quite as much as you might have hoped earlier this year?

## **Balu Balakrishnan**

Hi Ross. This is Balu. If you look at the last 10 years or 12 years, the seasonality for the Q4 is slightly down about 2% down. And this year because of the inventory depletion and hopefully some of the areas coming back, we think that the best we can estimate it will be an incrementally higher revenue quarter compared to Q3. What we don't know is exactly how much higher it's going to be because it will really depend upon whether the demand comes back on a number of these end markets by the end of this year whether some of it will come into Q4. So we feel comfortable that it's going to be an increase from Q3 to Q4 but we don't know how much.

## **Ross Seymore**

Got you. That seems fair. And while I know visibility is limited. To the extent you guys have that over \$100 [million] pipeline, you know the kind of different design wins diversifying with again a number of different end markets in general. If you talk just about the stuff you can control for the company-specific design wins that you think generally speaking will layer in next year how would you look at the puts and takes macro might be a negative or an uncertainty, but for the stuff you can control walk us through what those incremental drivers could be for 2024?

## **Balu Balakrishnan**

2024, I am optimistic that we'll have a strong growth [year]. Now this is based on our -- just our previous experience that whenever we come out of a downcycle, we actually do better than in the industry because of the share gains we have during the downturn. So we expect all markets to grow next year. If you look at it this year a lot of the revenue growth you're seeing in Q2 and Q3 are coming from just inventory depletion the inventory replenishment -- the inventory replenishment, I should say.

The real demand is still very weak, but it has to turn around at some point. Now whether it happens in Q4 or Q1, I don't know. But the magnitude of growth next year will depend upon when that turnaround happens.

Let's say, it happens by the end of this year. Q4 could be a pretty strong growth [quarter] just based on our history and based on the fact that we have significant design wins in consumer, in industrial, in automotive, but automotive will not have a big impact next year but it's -- it will have incremental increase, and computers. So -- and even in cellphones we are gaining ASP the market itself is not growing, but we are gaining ASP increase because of higher level of integration as we just mentioned.

## **Sandeep Nayyar**

Ross, the other thing as we had talked about is if you really look at it, the pull-in in the demand during COVID. And if you remember, we talked about that how that is going to get adjusted if you took a year and the anniversary was at the end of this Q2, which has an impact on the full year. So if you really look at that segment. The other area is that we are continuing to have content share gains in communication as Balu alluded, when he was talking about it, the high-power business continues to do well and so we really believe, if you look at an analogy what happened back in 2018 and before and then the three years that came after, we came back and came back much stronger than the market. So considering, depending on when this thing turns, so typically if you look at historically when it does, we come back and we do much better. So that's why the hope for 2024, the issue is when does the ramp? Is it Q4 Q1 and that's the part that I think it will be a timing issue.

## **Ross Seymore**

Got it. Thank you.

## **Operator**

Our next call is Mr. David Williams from The Benchmark Company. Please go ahead.

## **David Williams**

Thanks, good afternoon, gentlemen and thanks for taking my question. I guess, Sandeep you had talked last quarter just about the strength of the second half and had expected more replenishment and talk about some expedited orders as well. Just kind of curious to get some color on maybe what changed dramatically versus where it's soft around the edges. Just any color I guess on the magnitude of what you might have changed during the quarter?

## **Balu Balakrishnan**

Hi, David, this is Balu. Let me take this question. Last quarter when we talked on the earnings call, we declared Q1 was a bottom and the second half should be significantly better than first half, but the slope of the recovery will depend on the demand. All of that is still true, but what has changed is our short-term view of the demand environment. And that has significantly weakened over the last six to eight weeks.

Now, a lot of people in the last quarter were thinking about a V-shaped recovery and we believed in that based on strong bookings we had in March, April, and May. And then the orders fell off the cliff in June. June was very low in orders. And I was actually in China visiting customers, and it was clear, they were very pessimistic. And the reason being they thought after the COVID restrictions was lifted the demand would come back strongly and that's why they placed the orders not just in Q2 but also Q3 and Q4. That's what gave us the confidence that second half will be much stronger.

But what really happened was that the demand never came back and they were very pessimistic for – in terms of demand, not only for local demand but also for demand of an export demand, which is a little bit confusing because export demand should be better than local demand. We truly believe, China has a serious, genuinely serious problem in terms of demand. But I believe, Europe is better and US is actually much better than that. But I think the Chinese customers have become very pessimistic because of what they see that is going on in China and in some sense they are probably erring on the side of too much caution and they really don't want to keep any inventory.

I mean that's very evident in some cases. The inventory is way below normal but they still won't buy parts until they need them and when they need them it's always a rush order. So that's kind of the mentality in China. And I think they might have gotten too cautious and it is possible that this demand issue is only a delayed by maybe a quarter two but its hard to tell. It's more of the psychology of customers that's causing this short-term weakness.

So we're crossing our fingers and hoping that this demand will restart hopefully in Q4 of this year, which will really bodes well for 2024, because eventually the demand has to come back, even though there was a lot of pull-in during COVID times. It's more than a year now and it has to come back. It's just a question of time and fundamentally we're in a very, very good position. And so we are very confident when the demand comes back we will outperform the market.

In terms of Q3 guidance, based on what backlog we have, we will need roughly about 30% turns to meet the midpoint of our guidance. And we are very comfortable with that because July bookings have improved. Actually they are significantly improved from June, but still its below March through May, though it's better than June. But more important, we have had a very strong turns business that again tells me people are trying to minimize inventory and order parts only when they need them. And they have the luxury because our lead times are so low they are able to get the parts when they need them. So that makes the visibility of Q4 not as clear but as I said personally I'm optimistic.

#### **David Williams**

Great. A lot of really good color there. Thank you for that. And then maybe just on the automotive side. I know that revenue is still some time out. But any updates there that would you like to share?

#### **Balu Balakrishnan**

As I said in my script, the level of interest in our products is just extraordinary. I mean, we have \$100 million or so plus in identified opportunities. But more interesting is, how many of those we are able to convert to real design wins. The conversion rate is at least twice as much as the rest of the market, and so that gives us confidence that automotive is going to be a very, very attractive business. But even though, there is a couple of years away in terms of significant ramp we are feeling better everyday. We are engaged with a large number of big OEMs that all of you would recognize, and another large number of Tier 1s that supply to the OEMs.

And the other thing, we're finding is the number of sockets that we fit keeps increasing every time we talk to the customer. In some cases, the fact that we can offer such high integration and efficiency actually changes the architecture that they want to use. For example, replacement of 12-volt batteries is really driven by the fact that we can offer a very efficient very reliable power supply directly from the main battery voltage whether it's 400 or 800 volts and totally eliminate the 12-volts supply -- the 12-volt battery.

#### **David Williams**

Great. Thanks for the color.

#### **A – Balu Balakrishnan**

You're welcome



## **Operator**

Our next call -- our next question is from Mr. Tore Svanberg, Stifel. Please go ahead.

## **Tore Svanberg**

Sandeep, do you have -- what would you expect the channel inventory to be at in the September quarter. I think this quarter was just about 10 weeks. I know your target is 8 to 9. So, what do you think it will come in at in the September quarter?

## **Sandeep Nayyar**

Yes. I think, it should come around the 9. And I'll tell you I had expected this quarter the sell-through to exceed sell-in by 12 to 15 [million] and it came in at 10 and that's why you see that is being reflected in our Q3 guidance. For the next quarter I do expect about 5 to 10 million sell-through to be higher than sell-in and that should enable the inventory to come to the nine [weeks], somewhere around nine give and take.

## **Tore Svanberg**

Got it. Perfect. Balu, sounds like BridgeSwitch is really starting to take off now. And I was just wondering is the gross margin higher for BridgeSwitch, or is it still in line with the corporate average? Because I guess eventually this could potentially be like 10% of your revenues, right?

## **Balu Balakrishnan**

Absolutely. I mean BridgeSwitch could be that level and automotive could be in the similar level remember they are similar in SAM of \$1 billion each. So we are very optimistic about both of them. In terms of design wins we have a lot of design wins. But thanks to demand being low we are not seeing the ramp as fast as we originally anticipated. But nevertheless we expect this year BridgeSwitch will be in the mid-single-digit million but next year it could have a very strong growth simply because many of these designs will go into production by that time. As far as gross margin again it's consistent with our overall gross margin for various market.

## **Tore Svanberg**

Perfect. And then my last question is, you mentioned the computing category was up because of the third or like an accessory charger. And I guess, I'm just starting to feel confused, right? Because I don't know anymore what is a PC adapter versus Cellphone adapter especially as we move to PD so how do you classify what should be in a communications accessory adapter versus in the computing accessory?

## **Balu Balakrishnan**

That's an excellent question. So let me talk about various concepts. One of the areas we have done very well in that computer is tablet. That's grown very nice for us but in terms of aftermarket charges we classify them as computer if it is above a certain power level. It's I think about 45 watts or so, plus if it's a multiport. And if its multiport we have to classify it as a notebook adapters simply because usually it's a very high power and it can charge notebooks on one port and cell phones on the other port but we have to pick a power. We have picked the power where we said okay below that it's definitely cellphones. If it is above that it's notebook. So that's how we classify it. So the growth there

came from aftermarket GaN chargers primarily. And we also had strong quarter on the desktop power supply standby power supply for that. So -- but we are actually making significant inroads in terms of design activity for notebooks. So that should help us grow even further because notebooks we still have a relatively low percentage of share and that should allow us to grow computers over time.

**Tore Svanberg**

Perfect. Thanks for clarifying that. Thank you.

**A – Balu Balakrishnan**

Thanks, Tore.

**Operator**

I will now turn the call back over to Mr. Joe Shiffler Director of Investor Relations for closing remarks.

**Joe Shiffler**

Okay. Thanks everyone for listening. We'll leave it there. There will be a replay of this call available on our website which is [investors.power.com](http://investors.power.com). Thanks again for listening on this busy earnings afternoon and have a good afternoon.