25th Annual Needham Growth Conference

Company Participants

- James Ricchiuti, Senior Analyst
- Thomas Edman, President and Chief Executive Officer

Presentation

James Ricchiuti {BIO 1514262 <GO>}

Okay, we're going to go ahead and start our next presentation just before we break. So, welcome to day one of the 25th annual Needham Growth Conference. My name is Jim Ricchiuti, senior analyst at Needham covering advanced industrial technologies.

I'm pleased to be hosting a fireside conversation today with the CEO of TTM technologies Tom, admin, Todd Schull, the company's CFO, is also here as well. So, Tom, thanks for joining us today.

Thomas Edman {BIO 1729364 <GO>}

Thank you for having me.

James Ricchiuti {BIO 1514262 <GO>}

Why don't we -- before we get further into the Q&A, so the company has been transforming its business over the last several years, increasing its presence in what we think are some differentiated markets, longer cycle business, which is always a good thing, and presumably, some areas with some more stability and better margins. So why don't you take us through what you've been doing? And then we'll get into the -- into the Q&A, into the story.

Thomas Edman {BIO 1729364 <GO>}

Sure, sure. So, just to start with, TTM today about a $2.3 billion company. We have a strong position in engineered systems, RF components, as well as printed circuit boards. And as Jim mentioned, we have been going through a path of transition.

In 2020, we sold our mobility business, and facilities associated with that business in China. That really removed for us the piece of the business was that was directly tied to the consumer and was relatively seasonal in nature. So, critical step for us.

At the same time, in 2020, we announced the closure of our commercial EMS facilities in China, we just simply didn't have critical mass in the on the commercial EMS side, and so

we closed down those facilities as well.

We then continued our path as a company towards moving beyond the printed circuit board, specifically in the aerospace and defense area. And we have taken a further step there last year with the acquisition of Telephonics inside of aerospace and defense, which is now a billion-dollar business for TTM.

We are supplying fully engineered systems, radar, communications, surveillance systems for into our defense customers there. And then complementing that with a strong RF sub assembly, RF component position in defense, and then with a foundation around printed circuit board technology.

So, if you look at our aerospace and defense business today, about 60% of that business is what we call integrated or electronics, or non-PCB activity for TTM, with about 40% in printed circuit boards.

If you look at the commercial side of our business, which again accounts for about 60% of revenue, we've also been moving towards differentiating our capabilities there really around the footprint that we provide to our customers. So, we announced last year, an expansion into Malaysia, in Penang, Malaysia.

We are in the process now of building that facility. We should be in operation the second half of this year. That will be sized at full capacity at about $180 million and it answers our customers, requirements for supply chain resiliency. So, really looking to spread our footprint, beyond volume capability just in China, adding that capability into Malaysia, complementing it with our North America footprint to provide prototyping and pilot capabilities for our customers.

So, as Jim said, it's for us, it's this is all a march towards transitioning the company continuing to add value to what we deliver to our customers, and therefore improving our operating margin model.

Questions And Answers

A - James Ricchiuti {BIO 1514262 <GO>}

Okay. It's still fair to say though the bulk of the business, big chunk is still PCB. Right? And the perception is there and the reality is, it's a tough business. Some people view it as a commodity business. How does TTM differentiate itself from most of the competition is Asian, right?

A - Thomas Edman {BIO 1729364 <GO>}

Yep, yep. So again, I'll talk about that 60% of commercials, that is exactly right. 60% of revenue in the commercial side of the business, largely printed circuit boards, and there the differentiation for from a TTM perspective is, first of all, around the technologies that we provide.

We have a very broad set of technologies, all focused on rigid printed circuit board supply. And that's supported by a field application engineering position or force that for us is, we take a lot of pride in, but field application engineering with our OEM partners, who are predominantly U.S. and European based customers.

So, what we provide in terms of capability for those customers, is based on what we can do technology spread, which I talked about, but then also footprint capability. So, as their engineering, their prototype requirements, early-stage requirements, they are able to go into our U.S., North America, and Canadian facilities, and work with our engineers to design product, to do the prototyping for any given program, and even to do the pilot manufacturing for that program.

But they also have the comfort that they can then move volume manufacturing into China. The program can move into China, as needed or as demanded by volume requirements. We are going to be adding Malaysia as part of that solution. And with Malaysia, again, just an indication of our differentiation, we have customers there who have signed long-term agreements with TTM.

They understand that it's more expensive for us to operate in Malaysia, they've agreed to proximately, a 15% premium in pricing Malaysia versus China production, bought into that, and most importantly, they provided deposits to TTM on that basis. So, they are actually securing production volumes for a facility that will start to ramp later this year.

So again, that's how critical we are in terms of our relationships with our customers, our capabilities from a technology standpoint, and our ability to support those customers throughout the life of their programs. So hopefully, Jim, that gets to the answer. It really is all about that intimacy with the customer and the complexity of the work that we provide to them.

A - James Ricchiuti {BIO 1514262 <GO>}

It does. And maybe we can go a little further into that commercial business, because clearly a wide array of markets but you're not immune from economic cycles, and I think that's a topic everybody is focused on.

So, maybe if you could help break down, so you started to break down A&D and what that represents, but talk about some of the other commercial markets, auto, medical instrumentation.

A - Thomas Edman {BIO 1729364 <GO>}

Sure, I can take him through them. Yes.

A - James Ricchiuti {BIO 1514262 <GO>}

Please do.

A - Thomas Edman {BIO 1729364 <GO>}

Yes, absolutely. So, on the commercial side, if you --and I'll talk in terms of percentage of revenue, so medical industrial instrumentation for us, MII as we call it, approximately 20% of revenue.

And that market, so if you think about medical industrial instrumentation, about a third, for each in terms of revenue contribution, a very diverse market, a lot of development activity, it's a -- it's a wonderful market for TTM in terms of our ability to support customers, with a multiple number of programs that they're trying to ramp. So, very important market to us.

Automotive for us is about 15% of revenue. We're primarily selling there are two the tier ones, though we have some direct OEM relationships as well in automotive, and regionally relatively equally split between the work that we do in Europe, North America, and then Asia. So, relatively about a third each there.

Data center computing for us, again, about 15% of revenue. And most of that, about two thirds of it, is tied to data center mainly hyperscale, but other data center requirements as well. And then about a third is tied to semiconductor, directly the test and burn-in boards in the -- in the semiconductor market.

And then networking communications, again, about 15% of revenue. Networking communications for us, mainly a networking market now, we had, I would say that telecom is such now down to less than 10% of what we do in that market. Really predominantly for us networking and the -- again, good spread of customers, but enterprise driving the largest portion of that -- of that demand.

So, those are the primary markets that we're selling into. But it really is that diversity of end markets on the commercial side that, again, helps us when we start thinking about different cycles and how those are moving.

A - James Ricchiuti {BIO 1514262 <GO>}

And that's a good snapshot. Maybe let's go to automotive, because that's been a bit of a surprise to me. And there are a lot of puts and takes in what's happening in the automotive market. And maybe you can go through some of those.

There's content, which is going up. There's been supply chain. There's EV. So, this is a different market, possibly than in prior cycles. But again, talk to us about how you view that market today.

A - Thomas Edman {BIO 1729364 <GO>}

Sure. And we've talked for several years about the mega trends that are driving the automotive demand. And those are certainly at play as far as TTM is concerned. We have a particular strength in RF capability. I talked about that a little bit on the defense side, plays into automotive as well.

And so, we are supplying the ADAS [ph] or safety system requirements as automotive continues to add content around ADAS. That RF sensor requirement there is what -- is what drives our PCB demand.

Additionally, if you look at the transition into EV, again, a critical mega trend for us, not only ADAS, or not only the incorporation of safety systems, but also heavy copper content being driven there big. And if you think about the voltage, being driven into that, -- into that engine that's really record requires a particular PCB related capability and we do very well there.

So, we're in the right markets in terms of mega trends related to automotive. A second factor is overall electronics content continues to rise in automobiles, and we're looking at PCB content that was approximately, if you go back to 2017, about $80 per vehicle. In 2021, we were up to about $100 per vehicle and we're looking at projections that carry us upwards to $150 per vehicle on average by 2025. So, continued electronics content.

Now, if you cross over to an EV and look at the PCB content there, you're looking at something that's more in that above $150 already heading towards $200 in most cases, in terms of PCB content. So, that's another very positive trend.

And then we get to the unit volume, which Jim was alluding to. Unit volume, certainly a factor for us. But we're looking at a situation where our customers are still dealing with a number of shortages related to analog semiconductor supply. They are more focused on constraints right now in terms of production than they are on where the end market is, frankly.

And so, that's been driving very steady, printed circuit board demand, and ongoing -- if you look year-on-year, ongoing year-on-year growth, as we had as -- I think we all expect that that those bottlenecks will start to ease here as we go through the course of the year. It's hard to predict exactly when that will happen. But I would say that at least the first half of this year, we're going to continue to see supply constraints really dominating the conversation around that unit volume capability.

So, as we look at PCB needs going forward, it's going to be those mega trends, it's going to be overall PCB content driving growth, and then the last factor will be where the size or the unit volume continues to -- how that continues to develop.

A - James Ricchiuti {BIO 1514262 <GO>}

But have the -- have the supply chain challenges that your customers have experienced, Tom, has that caused them to alter the way they manage inventory on PCB and --

A - Thomas Edman {BIO 1729364 <GO>}

Certainly did early on. So, if you -- if you go back to as we came out of 2020, and we started to see the growth in printed circuit boards, we were seeing a lot of destocking it occurred, there was a need to build up the hub inventories and their own customer or

customer inventory, so definitely drove demand 2020 through late 2020, starting their driving into 2021, and throughout 2021.

What we started to see and really 2022, ongoing, strong growth, customers were satisfied with the inventory levels that they had in place and printed circuit boards, they were still seeing their own -- their own production demand growth and we're driving to forecasts off of that.

And I would expect, again, we're going to be in more of a normalized situation, I think this year. But good steady -- should yield some good steady printed circuit board demand this year as well.

A - James Ricchiuti {BIO 1514262 <GO>}

Okay. Let's say we end up with something other than a soft landing. Are there any other commercial markets that are a little bit more resilient?

A - Thomas Edman {BIO 1729364 <GO>}

Sure. I think we touched on automotive I view as resilient, given the mega trends. I think industrial for us, will remain a relatively resilient market. The reason for that is we're involved in downhole. We're also involved in robotics, industrial robotics, and equipment. And we're seeing a very strong overall industrial manufacturing, demand for manufacturing capacity driven by supply chain resiliency requirements out there.

And so, our customers are coming back to us and saying, yes, there may be inventory controls that they need to -- they need to keep the inventory in control, but they are seeing strong demand signals, ongoing strong demand signals. So, that's good to see there.

Another area of relative strength, medical. Again, inventory control, short term, but the medical trends are very positive. And we're very much tied to customers' innovation cycle around medical equipment, medical capability. So, still see some good strength there as well.

The two areas that I would say we have on watch to see, again, a lot of inventory control discussion, but also questions around need for digestion, if you will, would be datacenter and networking, where customers are signaling a little bit more that well, you got inventory control, one thing; I also need to digest some capacity. But good, long-term trends that they're pointing to, as well.

And then if you're looking at areas where we actually have seen demand weakness, that would be much more tied to semiconductor demand, which is, as I highlighted part of our computing market, and then semiconductor capital equipment demand, which is tied to instrumentation. (Technical difficulty).

Of course, we continue to invest in capital. 4% to 5% of revenue, sort of the traditional level, in terms of capital equipment investment, we're going to be -- we've been a little bit above that with Malaysia, because, frankly, we're funding that from our balance sheet. So, we'll continue that slightly elevated level for last year to this year going into next year, as we complete that first phase.

That that will continue. But that's well controlled. If you then go down the level M&A, of course, will continue to be a priority for us going forward. That's important to us. Next-level debt interest expense. We have -- we have a piece of our debt that is variable and so we'll continue to look at that interest expense level, use our capital to pay down debt as needed.

And then -- and then those are the critical priorities. I think you're aware we had a stock buyback program in place. We fulfilled that stock buyback program. For now, we have not renewed program with those priorities in mind, as well as the fact that hey, who knows where the economy's going to go in this next year?

So, we'll be careful in terms of our balance sheet management. But we have not been averse to stock buyback programs and will continue to look at that possibility as well.

A - James Ricchiuti {BIO 1514262 <GO>}

Future M&A. I mean, the last couple of acquisitions have had more of a -- clearly more of a defense focus. Any way to think about what would be of interest to you without being overly specific?

A - Thomas Edman {BIO 1729364 <GO>}

Yes, the commercial side. Yes, yes. So, just, three, three priority areas continuing to build that aerospace and defense presence, as you highlighted. We're going to continue to look at the right opportunities there. With Telephonics we've really added that tier one capability, and that opens up a lot of opportunities for us in that -- in that RF support space. So, we'll continue to look there.

On the commercial side, we've got a very nice RF component position there. We'll continue to look at how can we enhance that RF component position? And then from a footprint standpoint, critical gap for us, we don't have a European presence and, again, how we do it, I'm not sure, but that's a gap from a quick turn, prototyping support need, not a great -- not a big use of capital, but another area gap that we would like to fill down the road. So, those are where the priorities shake out in terms of M&A.

A - James Ricchiuti {BIO 1514262 <GO>}

Terrific, I think we've come to a close and we'll move on to lunch. Thank you.

A - Thomas Edman {BIO 1729364 <GO>}

Thank you, everyone. Appreciate it. Appreciate your time.