Management Discussion

Tanay Shah - Analyst, DAM Capital
Good afternoon, everyone, and a warm welcome to the Q1 FY '27 earnings call of Avalon Technologies. To take us through the results today, we have with us from the management: Mr. Kunhamed Bicha, Chairman and Managing Director; Mr. Suresh V R, Chief Financial Officer; Mr. Sriram Vijayaraghavan, Chief Operating Officer; and Mr. Venky Venkatesh, Chief Sales Officer. Mr. Bicha will give us an overview of the business performance, and will be followed up by Mr. Suresh's remarks on the financial performance, post which we will open up the floor for Q&A. As we move forward, it is important to bear in mind that any forward-looking statements made during the call are subject to potential risks and uncertainties, both known and unknown. Now without any further delay, I will hand over the floor to Mr. Bicha for his initial remarks. Thank you, and over to you, sir.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Tanay. Good afternoon, ladies and gentlemen. A very warm welcome to Avalon Technologies Q1 FY '27 earnings call. I want to begin by thanking our investors for your continued trust and support. Your confidence has enabled us to stay focused on what really matters: consistent execution, disciplined investment, and building a long-term profitable business. We are grateful for your trust, and our commitment to deliver has only grown stronger.Q1 FY '27 was another strong quarter. This marks our eighth consecutive quarter of improvement in performance and growth across key metrics. What stands out is the quality and the breadth of this growth. Our revenue growth is well diversified across geographies and industry verticals. Our profitability metrics have improved. ROCE has moved up to 23.4%, reflecting that we are scaling with discipline. Net working capital has improved, and our order book continues to provide good visibility on quarters ahead.Our three growth enginesour existing business, new program wins, and our expanding opportunity pipelineare all gaining momentum together. Based on this strong momentum across our business and the visibility we have on programs ramping through the year, we are revising our FY '27 revenue growth guidance upward from 24% to 27% to 26% to 30%.Moving to the financial highlights, revenue for Q1 FY '27 was INR 484 crores, up 50% year-on-year from INR 323 crores in Q1 FY '26. Q1 revenues are marginally ahead of Q4 FY '26, a positive start for FY '27. During the quarter, India contributed 41% of the revenue, and export business contributed 59%. India business grew 53% year-on-year, and export business grew 48% year-on-year, with both geographies contributing to the growth.Now on industry vertical revenue contribution: Industrial contributed 32% of our revenues, growing 52% year-on-year. Mobility contributed 25%, growing 36% year-on-year. Within Mobility, Rail accounted for approximately 15%, and Aerospace 8%, growing 37% and 47% respectively. Clean energy contributed 29%.Our gross margins for the quarter came in at 34.7%, within our guided range of 33% to 35%. EBITDA margins came in at 12%, up from 11.8% in Q4 FY '26, reflecting continued operating leverage as revenues grow. Profit after tax was INR 35 crores with a PAT margin of 7.2%, a meaningful improvement year-on-year.As of June 30, 2026, our order book grew 23.4% year-on-year to INR 2,208 crores, with an average execution period of 14 months. Long-term contracts with execution timelines ranging from 15 to 36 months stand at INR 1,256 crores. Order book growth remains well diversified across industry verticals and geographies.Net working capital days improved to 117 days in June 2026 versus 142 days in June 2025, an improvement of 25 days year-on-year. Within this, inventory days improved from 104 days to 94 days. Receivable days reduced by 13 days, and payable days improved by 2 days over the same period. Asset turns are at 9.9 times, and return on capital employed stands at

23.4%.India manufacturing operations, which serve both domestic and global customers, accounted for 72% of our revenue in Q1 FY '27, delivering healthy profitability with an EBITDA margin of 16.7% and a PAT margin of 11.1%. US operations contributed the remaining 28%.Moving on to our US operations, losses in US manufacturing have continued to narrow, coming in at approximately INR 4 crores in Q1 FY '27. Our US manufacturing plant has a clear and deliberate role. It is where new customers come in, validate our capabilities, and get comfortable with Avalon as a partner. Once that comfort is established, production progressively transitions to India manufacturing, where customers benefit from our cost structure, depth of capabilities, and scale. Our manufacturing presence in both geographies gives customers the flexibility to start in the US or come directly to India, and we are well positioned to support both. As India manufacturing continues to scale over the coming years, we expect US manufacturing contribution to naturally settle at around 20% of our total revenue.On revenue guidance, we have previously committed to double revenues from FY '24 to FY '27a target of approximately INR 1,734 crores [FLAG: Officially reported FY24 full year revenue was INR 8,527 million / ~INR 853 crores; doubling target aligns with ~INR 1,706-1,734 crores, trailing 12M already crossed this]. Our trailing 12-month revenues have already crossed that milestone, nearly a year ahead of our commitment. As highlighted earlier, reflecting on the strong Q1 performance, we are now focused on the next doubling from INR 1,603 crores in FY '26 [FLAG: Officially published FY26 annual revenue was INR 16,032 million / INR 1,603.2 crores] to approximately INR 3,200 crores in FY '29.The products we manufacture and the verticals we build are long-term in nature. Program lifecycles run for years, sometimes decades. Our customer relationships deepen over time, and our revenues compound accordingly. We encourage you to evaluate our progress over a multi-year period. That is how we manage this business, and that is the lens through which our strength, performance, and value will most meaningfully be perceived.Now moving to our key growth drivers: Our existing business continues to provide a strong and steady foundation with long product lifecycles, mission-critical programs, and recurring revenues across Rail, Aerospace, Industrial, Clean Energy, and Communication. On new business wins, the programs we have been building for the last two or three years are now progressing well. Aerospace cabin sub-assemblies are moving towards volume. Production of locomotive engine sub-systems is underway. The Kavach anti-collision system is on track for commercial production.On semiconductor equipment, we have increased our allocation with one of our world's leading wafer fabrication equipment suppliers, expanding from power box sub-assemblies into other products, with production ramping over the next few quarters. In Aerospace, we have secured incremental box build business with a leading aerospace company, further strengthening our engagement in the export market.On the opportunities pipeline, we continue to see a healthy, expanding set of opportunities across geographies and verticals. Southeast Asia and Europe continue to add a new dimension to our geographical reach. All three growth engines are gaining momentum together.On our manufacturing footprint, our new manufacturing plant focused on domestic demand in Chennai is now complete and will commence commercial production from Q2 FY '27. As we deepen our presence in semiconductor equipment and advanced electronics, the need for world-class infrastructure becomes increasingly important. We are in the process of acquiring a large parcel of land in Chennai that will support Avalon's growth over the next decade, catering to both domestic and export opportunities. We shall share more details as it crystallizes.We are now building the organization for the next phase of growth. We are investing in leadership, process automation, IT systems, and AI-enabled capabilities across functions. Some of these investments are being made now, ahead of the growth.As I close, let me offer a broader perspective: Global supply chains are

being realigned; customers are looking for reliable manufacturing partners beyond traditional geographies; India is emerging as a credible and competitive destination. We are well placed in this environment.Avalon is building a global integrated electronics manufacturing services business focused on complex box build solutions for mission-critical applications across high-growth industries. Our continued goal is to build an enduring institution that customers trust, that is deep in engineering capability, and that is built to last. We remain committed to efficient capital allocation, strong governance, disciplined execution, and of course, profitable growth. With that, I hand over to our CFO, Suresh V R, for a detailed overview of our financial performance. Thank you.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Thank you, KB. Good afternoon, everyone. Let me take you through the financial performance in detail.Revenue for Q1 FY '27 was INR 484 crores, up 49.8% year-on-year from INR 323 crores in Q1 FY '26, and up 0.9% sequentially from INR 480 crores in Q4 FY '26 [FLAG: Officially published Q4 FY26 revenue was INR 4,798.9 million / ~INR 480 crores]. Our average revenue growth over the last eight quarters has been 46%. Box build contribution has increased from 44.5% in FY '22 to 59.9% in Q1 FY '27, reflecting our continued focus on complex high-value manufacturing.Gross margin for Q1 FY '27 was INR 168 crores at a margin of 34.7%, within our guided range of 33% to 35%, representing year-on-year growth of 46.3% from INR 115 crores in Q1 FY '26.EBITDA for Q1 FY '27 was INR 58 crores with a margin of 12%, up from 9.2% in Q1 FY '26 and 11.8% in Q4 FY '26, reflecting operating leverage as revenues scale. Adjusting for the tariffs pass-through impact, our EBITDA margin would have been approximately 0.9% higher.PAT for Q1 FY '27 was INR 35 crores with a margin of 7.2%, up 145.3% year-on-year from INR 14 crores in Q1 FY '26. We continue to invest in talent, capacity, and inventory to support upcoming growth in new programs. These initiatives strengthen our foundation for long-term growth and are expected to enhance operational efficiency as business volumes continue to scale.Moving on to the balance sheet: Net working capital improved to 117 days in June 2026 from 142 days in June 2025, an improvement of 25 days year-on-year. Within this, inventory days improved from 104 days to 94 days; trade receivable days reduced from 87 days to 74 days; trade payable days improved from 49 days to 51 days. On a sequential basis, net working capital moved from 112 days in March 2026 to 117 days in June 2026.Cash flow from operations was positive at INR 32 crores in Q1 FY '27, an improvement from INR 16 crores in Q4 FY '26. As of June 30, 2026, total debt was INR 196 crores, with cash and investments of INR 171 crores, resulting in a net debt position of INR 24 crores. Net debt-to-equity ratio stands at 0.03, a comfortable position.Capex for Q1 FY '27 was INR 16 crores. Asset turns remain strong at 9.9 times. Return on capital employed improved to 23.4% from approximately 10% two years agoa consistent and meaningful improvement.With improved business visibility, we have revised our FY '27 revenue growth guidance upward to 26% to 30% from the earlier guidance of 24% to 27%.To summarize, Q1 reflects continued progress across our key operating and financial metrics, demonstrating the strength of our execution. As we move forward, our focus remains on delivering sustainable, profitable growth, improving operational efficiency, and strengthening long-term customer relationships. With that, I request the moderator to open the floor for questions. Thank you.

Questions & Answers

Operator
Thank you very much. We will now begin with the question and answer session. Anyone who wishes

to ask a question may press star and one on their touchtone telephone. If you wish to remove yourself from the question queue, you may press star and two. Participants are requested to use handsets while asking a question. Ladies and gentlemen, we will wait for a moment while the question queue assembles.The first question comes from the line of Santosh Seshadri from Avendus Spark. Please go ahead.

Santosh Seshadri - Analyst, Avendus Spark
Yeah, hi. Good evening, sir. Congratulations for a great set of numbers. My first question is on long-term steady-state gross margin. You know, we have been historically talking about 33% to 35% kind of margins. And just as we think about some of these newer businesses like semiconductor equipment, power modules, and Kavach that we are working on, at scale, how should we think about the structural impact of these businesses on margin profile? Do you think these businesses are inherently higher on the margin curve, and is there any scope for margin improvement? So that's my first question. I have a follow-up.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Santosh. That's an interesting question. So if you look at the last five years or so, we've always maintained this range. Sometimes we are a little bit higher, and sometimes a little bit lower, but this is a comfortable range. Saying this, a certain set of our industries and products have much higher margins, and certain industries have lower margins. So what you're seeing is a blended rate. So as you see the higher margin business kicking in, you will see some difference, but as of now, this range stays at 33% to 35%, with a few quarters being up or down.[Foreign Speech]

Santosh Seshadri - Analyst, Avendus Spark
Got it. So there is scope for improvement in the long run, but as of now, you are maintaining at 33% to 35%. So is that the takeaway?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
That's our aspiration, as you very well know it.

Santosh Seshadri - Analyst, Avendus Spark
Got it. My second question is on the cost structure below the gross margin line items. Here, we have been talking about roughly 50-50 split between fixed and variable costs. So, my question here is, given the strong revenue growth and the kind of ongoing investments that we have in the manufacturing footprint that you mentioned in the opening remarks, at what stage do you think some of these fixed costs become semi-variable in nature, and what would be the implication on operating leverage over the medium term, maybe for FY27 and FY28?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Hi, Santhosh. Suresh here. We have always maintained that between 45% and 50% of the expenses below the gross margin are semi-fixed or fixed in nature. What we believe is, with scale in revenue and growth in revenue, we believe the operating leverage will continue to play out. If you look at our India manufacturing business, it has delivered an EBITDA of 16.7%, and it is a continuing delivery in terms of profitability over the last few quarters. So, we expect the operating leverage to play out. We do not give any particular guidance per se for EBITDA margins, but otherwise, I would add to what KB said, that we have consistently maintained our gross margin percentage in the range of 33% to 35%, and we believe we can continue to do that.

Santosh Seshadri - Analyst, Avendus Spark
Thank you. And just one last question. Some of your peers have recently spoken about opportunities in the data center space and ramping up business starting from FY '27. Could you share your perspective on this particular opportunity? Are you currently in talks with any of the potential customers? And also, where do you see yourself positioning within this value chain? Will it be mostly in servers or rack systems or power management? Any thoughts on that?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
So as you know, Santosh, one piece is the world is going through a super cycle in power, where the HVDC systems and all that. So we are playing with some of the leaders, and we have started production with a couple of them. So that's going to be a part of that. But saying that, we are also working with multiple customers who supply power, off-grid power into the data centers, and that is bound to grow. And also, now into the future, you will see us work more towards the rack and the cooling systems, which we have not won the business yet, but we are still working towards that. And of course, all this growth comes with the semiconductor equipment industry, where we are well positioned for that in the near future. So we're not going to make server boards as of now. I'm not saying that we won't do that in the future, but anything around it, which is probably the fastest-growing element, we intend to play, and we are playing in some of those areas. Did that answer your question, Santosh?

Santosh Seshadri - Analyst, Avendus Spark
Absolutely. Thank you very much, sir, and all the very best.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Santhosh.

Operator
Thank you. The next question comes from the line of Siddharth Bera from Nomura. Please go ahead.

Siddharth Bera - Analyst, Nomura
Yeah, hi sir. Thanks for the opportunity and congrats on a great set of numbers. Sir, first question is on the two segments, HVDC and semi WFE. Where are we in terms of the order win cycle? When should we expect that to come to for us this year? And second is on the clean energy side, we did see a very strong growth in this quarter on a year-on-year basis. So is there any new customer addition or it is more from higher share of business from existing customers? If you can throw some more light on this.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Yeah, on the first piece, full revenue has not started, but revenue has started for both the sectors, for HVDC as well as semiconductor equipment. Revenue has started, but it will gradually grow. It is not a switch on and off, because you have multiple systems and multiple products. So it started this quarter, and we'll see the ramp in the following quarters. On your second part of your question, Clean Energy has been fluctuating for us over the years, and this has been a great quarter for that. And we will continue to see the growth, but certain quarters you may see Clean Energy upthat's why we are diversifiedcertain quarters you may see Mobility up, certain quarters IndustrialIndustrial has always been up. So since everything is growing and certain cut-ins in certain production happen at various timeframes, so you will continue to see growth in all sectors. What we are happy is that every sector is growing, except communication where we had a dip.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Got it. And would you be able to share the US loss for this quarter? Have we already turned around, or here where are we in terms of the plant?

Siddharth Bera - Analyst, Nomura
Got it. And would you be able to share the US loss for this quarter? Have you already turned around, or Uh, here, uh, where are we in terms of the plan?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
In terms of US manufacturing, we have reported a PAT loss of approximately INR 4 crores in Q1 FY '27. It has largely narrowed down. Two years ago, it was approximately around INR 14 crores; one year ago, it was around INR 9 crores loss, and now it has narrowed down to INR 4 crores loss at the PAT level.

Siddharth Bera - Analyst, Nomura
Got it. Thanks a lot, sir. I'll come back in the queue.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Siddharth.

Operator
Thank you. The next question comes from the line of Sumit Sinha from Macquarie. Please go ahead.

Sumit Sinha (Macquarie) - Analyst
Yes, thank you very much, and congratulations on another incredible quarter. A couple of questions here. So, KB, I was really happy to see about how you spoke about bolstering your operations and leadership, because usually when smaller companies grow at this pace, they do a great job with the execution, but at some point things start to fall by the wayside. So if you can just talk a little more, provide a little more color about what you're doing, what sort of leadership positions you're hiring for, I think that would be really helpful. Secondly, historically most of your products have been PCBAs and box builds. Do you think you have an opportunity to go into new product categories, or you'd rather just service with these products because demand obviously is there and you're executing on the pipeline? Or maybe you'll tell me that Kavach and Aerospace and all have different new products, so I'd like to know more about the SKUs that you have. And third question is, generally, your business in the second half of the year does better than the first half. So with 50% growth in Q1, how should we think about the second half? I know the guidance implies kind of 25% growth in the next three quarters, but if you can provide some clarity around the second half versus first half dynamics. Thank you.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Hi, Sumit. Nice to talk to you again. So if I miss out any part of your questions, just remind me. The first part was leadership. See, as we grow, each of our divisions and capabilities and verticals, we need leadership. These are growing from $20 to $100 million, however you want to look at it. So we have taken a dedicated or a very focused approach to get leadership. I believe the first level of leadership is there already, with our CEO, CFO, CSO, and we're adding probably five or six new candidates at the VP level to either lead a BU or lead a capability. And that work has already started. So we're trying to plan for the next three years of growth at least, on who are the right leaders. The same thing we did three years back when we started with the C-levels to get the company going in

the right direction. And so we are looking for the right candidates. We're not going to rush through it because that candidate is very important to us.

Shriram Vijayaraghavan - Chief Operating Officer, Avalon Technologies Limited
Yes, thanks KB. Hey Sumit, so covering three pieces of fundamental building blocks to growth: one is people; second, I think what KB touched upon, processes internally; and third is automation. So the focus is to build the capability in all three areas, and that's work that's underway. I think KB's given you the highlights on the leadership, I just wanted to make sure that it's across all three areas.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
And the second question, if you could remind me, Sumit?

Sumit Sinha (Macquarie) - Analyst
Yeah, it was more around products. So historically you've done PCBA and box build...

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Okay, got it, got it. So we are vertically integrated. So that's why you see our box build move from 43% to 59.9% in a year or two. So we are building a lot more metal, we're building a lot more cables, we're building a lot more plastics, we're building a lot more magnetics to get into our own final product, and that's why you see our box build ratio going up. Saying that, there's one or two areas, actually one which we may announcel don't want to preset thatwe will enter into one area which is well within our capability, and that I think in the next two quarters we'll make that announcement. So there's one area we'll add, because we see a lot of opportunity in that and it'll add to our box build capability, Sumit.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Just to add to that, we are getting into newer industrial verticals as well as newer geographies like Europe, Southeast Asia. So in terms of increasing our target market, the work is already underway, and we will start seeing the results of that in the coming quarters.

Sumit Sinha (Macquarie) - Analyst
Got it. And the last question about guidance?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Sumit, you know we are conservative. The problem we have, to be honest, is when we get into these large programs, for example, it may cut in in February of next year or customer may delay to April. So we're trying to be conservative, so if it cuts in in February, everything is well and good. If it cuts in in April, it's a next year thing. But look at us from a three-year lens, right? Like we said, our business is not quarter-to-quarter because our customers look at us over a multi-year period, and are we a good partner over the next 10 years, right? So we're trying to kind of get that all together and try to give you a feel of what we can be. But in a three-year period, as we've done last time, we said we'll double, instead of three years we did it in two years. But aspiration is always to do it faster. So you need to look at us from that rather than what's going to happen next quarter or the following quarter.

Sumit Sinha (Macquarie) - Analyst
Got it. Thank you very much, all the best.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
You're welcome, Samit. Thank you.

Operator
Thank you. The next question comes from the line of Bala Subrahmanyan from Arihant Capital. Please go ahead.

Bala Subramanian - Analyst, Arihant Capital
Good evening, sir. Thank you so much for the opportunity. Follow-up on the previous participant on the guidance side. Sir, we are doing INR 50 to 60 crore annual capex, with 10x asset turn. Is it a right way to understand every year INR 500 to 600 crore additional revenue? I think if you are adding that, it will come near INR 3,200 to 3,400 crore top line range by FY '29. And secondly, this sunrise sectors like Clean Energy and Aerospace and Defence, are these also same kind of 10x asset turn?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Hi Bala, Suresh here. Firstly, on the capex side, last year we did a capex of INR 56 crores, and in Q1 it is INR 16 crores. But like what KB highlighted in his opening remarks, we are looking at expanding our manufacturing footprint in Chennai. So whenever that happens, we will do it in a modular fashion, and that will involve incurring additional capex to an extent. Having said that, we are focused on capital efficiency. If you look at our ROCE couple of years back, approximately two to two-and-a-half years back, it was around 10%. Today it is 23.4%. Our goal is to improve that even further. But every new asset, new plant that comes into the picture, will take its own time frame for it to reach its optimal capacity in terms of utilization. So it will gradually get to that, but our focus is to improve our ROCE.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
And I will add to this, as we go into these bigger box build solutions, space is at a premium. So we are building up land and buildings before we actually put machines, so that we're comfortable with that, and then we'll add the machines when required.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Did that answer your question, Mr. Subrahmanyan?

Bala Subramanian - Analyst, Arihant Capital
Yes, sir. Answered the qualitative perspective. And sir, my second question: in Q1, nearly 50% top line growth, order book also increased nearly 23%. But if you look at our working capital days, it came down to 117 from 142. So generally with growing order book and revenue, it leads to working capital strain, for example, building inventory for new programs. So I'm just trying to understand how we managed to improve the working capital days, and how do you look at it in coming quarters?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Thank you for that, Bala. So that was a consistent and continuous effort over the last two, three years on each bucket: inventory, receivables, and payables. Inventory days actually improved to 94 days from 104 days. Same is the case with receivable and payable. But like again what we said in the opening remarks and in the previous quarters, we are also having some new programs going parallelly. So for new programs, we may have higher net working capital at the start, and we will find our efficiency over a period of time. For existing businesses, we would have already found our efficiency in net working capital. But overall, what was our guided range in the previous quarters

were around 120 to 130 days, so we are well within that range.

Bala Subramanian - Analyst, Arihant Capital
Okay, sir. Sir, my last question: US loss is around INR 4 crores in this quarter. Last year it was INR 9 crores. So I'm trying to understand what is the minimum revenue run rate required to achieve a break-even, whether we can expect by Q3 or Q4?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
We have not given any particular quantum at which we will reach the break-even, but what we have highlighted in the earlier calls also is by the end of this fiscal year, we would like to see a steady-state EBITDA break-even and then following that a PAT break-even. But what I would like to highlight here, Bala, is the important way to look at our US business is that it is our plant to reel in the customers, make the customers comfortable, and then as it ramps up, transition it to India manufacturing. So it is our beachhead from that perspective. Hope that answered the question.

Bala Subramanian - Analyst, Arihant Capital
Okay, sir. Thank you.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Thank you.

Operator
Thank you. The next question comes from the line of Praveen Sahay from PL Capital. Please go ahead.

Praveen Sahai - Analyst, PL Capital
Yeah, hi. Thank you for the opportunity. My first question is related to the box build. As from the last two, four quarters, we are continuously seeing the increase in the contribution from the box build, and also you had highlighted the way forward also we will see this trend to continue. How are you seeing the gross margin profile with these box build contribution to increase the way forward?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Yeah, see we've always, our business model is through to get to the box build, right? We may start with the PCB, we may start with the metals, we may start with the cable, but our goal two to three years from where we start with the customer is to do the whole box if he doesn't give it to us in the beginning. Of course, the gross margins are better in box build, okay? And some of these, it takes time for the gross margins to improve over a period of time, it's not as soon as you start. When the program starts, the gross margin may be a little lower, okay, but over a period of time, it does increase as our processes and our quantum buys help. The other piece is, you know, with the tariffs, we still maintaining gross margins, okay? It does have an effect, though not a big effect, it does have an effect. So in spite of that, we have maintained the gross margins.

Praveen Sahai - Analyst, PL Capital
So if you'll maintain this contribution of 60%, we may see the improvement in the gross margin? Is that a fair understanding?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
The way to understand it is, if you ask do we anticipate our box build percentage to go up, the answer is yes, because that is one of our strength pointsbuilding complex boxes. But on one side,

you will have new programs which will start maybe at a lower percentage, and on another side, you will have existing business which may be at a higher percentage. What you see as a 33% to 35% is a blended mix of both of that. So I think it is best to assume an estimate a gross margin percentage of 33% to 35% to continue.

Praveen Sahai - Analyst, PL Capital
Right. Next question is related to the order book. Out of your INR 2,200-odd crore, can you give some indication that how has been mix of segments?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
It's broadly based on the segments and the growth of the percentages we have declared. It's across verticals. Some quarters, some may be higher than the other, and we always aspire to be around 25%. But Industrial right now is around 32%. Our total order book, if you look at it, we only look at a three-year window. We have orders from 3 to 15 years, we don't count that. That itself is INR 3,465 crores. And in the short term, which is the order book for the next 12 months or so, it's INR 2,208 crores. So we're very comfortable on what we need to do in the near term, and we have long-term contracts which we don't count in this.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
So it's broadly, uh, based on the segments and the growth or the, uh, the percentages we have kind of declared. It's across, uh, across verticals. Um, some certain quarters, some may be higher than the others, and we always aspire to be around 25%.%. But industrial right now is around 30, 32%. Um, our total order book, if you look at it, you know, uh, we only look at a 3-year window. We have orders from 3 to 15 years, we don't count that. That itself is 3,465 crores. And in the short term, which is the order book for the next 12 months or so, it's 2,208 crores.

So we're very comfortable on what what we need to do in the near term. And we have long-term contracts which we don't count in this.

Praveen Sahai - Analyst, PL Capital
Right. Lastly, one clarification: in the international business, which now US is 60% of your business, is that majority is from the Clean and the Mobility businesses?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
No, it's across. A lot of the Clean is done in the US, but the rest of it is done in India. A lot of it is Industrial. We don't have Rail in the US. Aero, Industrial, Communications, as well as Cleana big chunk is there because of the subsidies in the US. But again, sub-parts of these US builds are done in India, so it's a mix.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Praveen, even in US, we have a well-balanced and diversified growth across verticals.

Praveen Sahai - Analyst, PL Capital
Got it. Thank you, sir, and all the best.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Praveen.

Operator
Thank you. The next question comes from the line of Vipraw Srivastava from PhillipCapital. Please go ahead.

Vipraw Srivastava - PhillipCapital - Analyst
Hi, sir. Good evening. Great set of results. Just two quick questions. Firstly, on the order book side, so for last three quarters, your order book has been hovering around INR 2,000 crores. This quarter also it's around INR 2,200. So I mean in that sense, given that your revenue growth is exceeding order book growth, any reasons for that, why this order book growth is slow, or am I missing something?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
So if you look at it, right, it's always consistent and it's growing. Year-on-year, it's grown 23.4%. So we're very well covered for the next 12 months to 36 months, in the sense of what we want to achieve if you look at it. We are saying we're going to do INR 3,200 crores in three years. More or less that order book is covered, right? If you look at it from INR 2,208 crores in 12 months and INR 1,256 crores in 12 months to 36 months14 months to 36 months. And again, we have 5-year contracts, we have 10-year contracts. It's easy to add them, but it's not the right message to give that these orders are there for years, right? So we like to keep it in this range, which is 14 months to 36 months, so that you get a realistic perspective rather than a hyped perspective of orders worth so much. Because if you multiply this into 10 years, what we do in one year, it's a huge number. We don't want to put that out.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
And another important perspective to have on this is, some of the new programs may be on pilot stage, and so whenever they move from pilot stage to ramp-up production, the larger set of orders will come and fall there. But for us, the benefit and advantage what we see in our business is the annuity style of orders what we receive, the long-term nature of the lifecycle of the products as well as the customer relationships that we have. Hope that answers the question, Vipraw.

Vipraw Srivastava - PhillipCapital - Analyst
Sure, sir. Just a quick follow-up on this. Given that your current order book is around INR 2,200 crores and your average execution period is 14 months, so that is very close to what the guidance you have given. So is this understanding correct?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
The way to look at it is, our order book is executable over an average period of 14 months. So for some customers it may be 3 months, some customers 6 months, some customers 12 months. So it's not a straightforward straight-line number over there, but yeah, you can have that fair assumption over there.

Vipraw Srivastava - PhillipCapital - Analyst
Fair enough, sir. Last question from my end on the Clean Energy side. So obviously that has seen a very rapid growth in quarter one. Going forward for FY '27 and '28, obviously since the IRA incentives for solar projects in US ends on December 31, 2027, do you expect such growth to continue for next couple of years, or you plan to offset that by onboarding new clients, new projects? Any thoughts on that?

Shriram Vijayaraghavan - Chief Operating Officer, Avalon Technologies Limited
Sriram here. Just a quick point here: the subsidies or the support continues until 2032 because this is storage solutions. So these have a longer subsidy support in the US at this point.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Vipraw, like we have discussed in the last four, five quarters, we are not in a solar panel business; we are in the energy storage solutions business, that is number one. And number two, if you look at the growth across verticals, Industrials has grown by 52%, Aero has grown by 47%, Rail has grown by 37%, Medical has grown by 15%. So the growth is across verticals. It's just that in some quarters one vertical may have a lumpy growth and it goes on like that. But for us, the comfort where we derive is the long-term annuity style of business, so that's the kind of business what we are targeting.

Vipraw Srivastava - PhillipCapital - Analyst
Sure, sir. Just a quick follow-up on what Sriram sir said. So you rightly mentioned that battery energy storage incentives are till 2032, but as far as I know, majority of battery installations in US happen along with solar, it's not in isolation. That's what the data says. So even if the incentives continue till 2032, if a panel is not being installed, what are the comments on the future of the battery energy storage industry?

Shriram Vijayaraghavan - Chief Operating Officer, Avalon Technologies Limited
We're happy to answer this offline. There's a method to this situation. We're happy to take this offline and answer you.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
For us, over the last two years, even this vertical has grown along with all the other verticals.

Vipraw Srivastava - PhillipCapital - Analyst
Sure, sir. Thank you. No worries.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Thank you, Vipraw.

Operator
Thank you. The next question comes from the line of Bhavik Mehta from JP Morgan. Please go ahead.

Bhavik Mehta - Analyst, JP Morgan
Hi, thank you. Just one question again going back to the guidance. Obviously after a very strong 1Q, one would have assumed that the guidance could have been upgraded to at least more than 30%. But given the range you've moved to 26% to 30% right now, just trying to understand what are the various scenarios you're baking into the guide. Is this new guide like the worst possible outcome, even if everything goes wrong, you could still deliver on this guidance, and this is like the worst-case scenario, and there could be some upside to it if other projects what you're hoping to convert comes through?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Bhavik, this is Kunhamed. The way we look at this, I know everybody loves quarter-to-quarter, but as a business, when we plan, we plan on a three-year horizon, and that's what we try to deliver.

Some quarters may be huge, some quarters may be lower. But saying that, we are conservative. To answer your question, we are conservative. We don't want to... because some of the reasons are when these new projects will kick in into volume, right? Like I explained before, it could be in February of this year or it could be in April of next year. It's two months, it doesn't matter to the customer, but it does matter to us. So we do have some conservatism in this, and that's what we are comfortable to be honest, rather than go out with flying numbers and chase that thing. And we have demonstrated that in the last seven, eight quarters.

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
To add to that, Bhavik, the kind of new programs what we've got in, whether it is semiconductor equipment or in the industrial sector or in the power vertical, or in terms of new geographies getting into Southeast Asia or into Europe, that is an exciting place for us because it may not be fully reflected in the P&L today, but it is there either as a pipeline or a prototype or waiting to get into a commercial ramp perspective.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
So Bhavik, just to kind of echo on what Suresh said, I think we've never been this excited on the possibilities. It may not show in the P&L, okay, the type of products which are coming in and the type of geographies that's coming in. At least in 25 years of doing this, I've not seen that. So we are very, on the long-term, mid-term and long-term, we are very, very positive.

Bhavik Mehta - Analyst, JP Morgan
Okay, got it. That's helpful. Thank you.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Bhavik.

Operator
Thank you. The next question comes from the line of Archit Shah from 360 ONE Capital. Please go ahead.

Archit Shah - Analyst, 361 Capital
Thank you for the opportunity, and congratulations for the good set of results. Sir, just one question: the growth that we are seeing, the 40% growth and the guidance that we are giving, is there any split or is there a pricing growth because of the component prices that have gone, you know, have increased so much? And let's say tomorrow if they correct or if they remain stable, will our growth remain the same? Will we still be able to beat our guidance that we are doing right now?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
Hi, Suresh here. Our last eight quarters average revenue growth is 46%, and over the quarters across verticals, across geographies, this growth has been reached. And even now if you look at this quarter, it is well diversified in both the US market as well as export market as well as India market. So if your question is if there is any one-off growth in this, the answer is no. The answer has been the same over the last past quarters also.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Just to add that, Archit, this is Kunhamed. We don't have exposure to memory as much, okay? Very limited, because we're not in the consumer space and we're not in the server space.

Archit Shah - Analyst, 361 Capital
Okay. So if let's say other components like copper and PVC and everything, if tomorrow those prices continue to rise or increase, will it show higher growth in the numbers, and what if they stay stable or maybe decline a bit? Just that I wanted to understand.

Shriram Vijayaraghavan - Chief Operating Officer, Avalon Technologies Limited
Yeah, Archit, Sriram here. All these components you talk about form a part of the bill of materials, right? So you'll have metals, you'll have cables, you'll have PCBAs, you'll have a lot of other things. So on the whole, we don't believe this is driving the increase in prices, right? Ultimately, as Suresh said, this is broad-based growth that's been driving for the last eight quarters, and the margins are holding between 33% and 35%. So this is sort of inherent business growth that you're seeing.

Archit Shah - Analyst, 361 Capital
Okay, that's what I was looking for. Thank you so much, sir. Thank you very much.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Archit.

Operator
Thank you. We have the next question from the line of Siddharth S. from Nuvama. Please go ahead.

Siddharth S - Analyst
Congrats team on a good set of numbers. So I'd just like to get some clarity on your exposure on an overall basis to the defence space. It seems to be the sunrise sector and the hottest sector at the moment. So at the moment, I think the Medical and Defence combined comes close to 10% of your revenues as per Q1 FY '27. Would you like to get some light on if you plan to foray into that space via the PCB, or the whole EMS ecosystem or the supply chain as a whole? If you have any plans to actively increase the focus there, or what's your stance on it?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Siddharth, for that question. We have nothing against the defence business, but it's a very lumpy business. It's all a feast or famine, is the right way I should say. Saying that, we do defence. We do defence in India as well as in the US, okay? And it's one of the verticals we are looking at to focus. We have done the first set of hiring for looking at defence as a segment three years from now, okay? Because that is the timeframe we need to spend to get the larger chunks in. So again, the whole world is out of ammunition, right? So the defence will grow, and I'm pretty sure we'll be a part of it, and we've taken the first steps to look at it as a vertical. Not saying that we have created a vertical, starting to look at it, how do I expand to get into this space, in a meaningful way. We are still doing quite a bit of it, but not in large numbers.

Siddharth S - Analyst
Understood, understood. Thanks for the clarity, and wish you all the best.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Siddharth.

Operator
Thank you. The next question comes from the line of Tanay Shah from DAM Capital Advisors. Please go ahead.

Tanay Shah - Analyst, DAM Capital
Yes, sir. Am I audible now?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Yes, Tanay, you are.

Tanay Shah - Analyst, DAM Capital
Yes, sir. Sorry, I think there was just some mix-up. Sorry. Thank you so much for taking my question again, sir. Sir, I have two questions, right? I mean, if we look at it over the last few quarters, we've steadily increased our US manufacturing, right? I mean, almost from 18% to 20% to now almost 28%. So, and that's now in fact even sort of helped us, if I'm not wrong, almost reach break-even levels for US manufacturing standpoint on the EBITDA level. Is it fair to say that this is a base which now helps us sort of build on and this becomes a base where we break even on US levels, or do you think that this is just a quarterly fluctuation and what would the ideal split be between the India versus US manufacturing?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Tanay, as we grow, as the top lines grow over the next few years, our goal is to keep US manufacturing around 20%, okay? So I'm not saying... the best growth for us is made in India for export, and made in India for India, okay? But to get these margins in made in India, I need the US manufacturing. So in the short term, we want to cap it at 20%. You'll have a few quarters which goes up and down, and most of the significant growth what we anticipate over the next two, three years is going to be made in India, okay? Saying that, we are also opening up two geographies, right, which we are very excited about, which is Europe, which was a very small percentage of exports; the next two years, we see that hopefully growing in a very, very meaningful way. And Southeast Asia. I mean, that is a foray which I believe will take us to the next level. So you're basically competing with the best in the world with the best products you could make made in India, and this comes with relatively very decent margins. We're not doing commodity-type stuff; we are doing complex systems. So saying that, US will always be there, and again, it is a treadmill, you know. I feel bad for the US guys because every time there is a good number coming there, it's always more profitable to move to India, okay? So as a group, we tend to do that. So you'll see certain spikes, and that has helped us through the tariff situation if you look at it, right? It has given a lot of solace to our customers that we are in the US, and if they want to launch there, they're more than welcome to launch there at higher cost. Did that answer your question, Tanay?

Tanay Shah - Analyst, DAM Capital
Absolutely, sir. Absolutely. That makes sense. Sir, and the second question which I had is that, you know, we're seeing a lot of supply chain disruption, especially from a bare PCB board side, may it be for the raw materials or even the glass, the fiberglass, or, you know, the high-purity PP which is required. So any comments on that? Is it impacting our operations by any means, or do we expect any impact going forward, or are we well covered there?

Shriram Vijayaraghavan - Chief Operating Officer, Avalon Technologies Limited
Hey Tanay, Sriram here. See, you know, you have instances of different commodities that go up and down. We are generally okay, you know, last quarter and this quarter. We've tried to stay a little ahead of the curve in terms of securing some of the supplies of the commodities that you mentioned. So for the time being, you know, with the environment the way it is, we think we're okay.

But obviously we, you know, stay on high alert and, you know, we'll move quickly where we have to if we need to.

Tanay Shah - Analyst, DAM Capital
Perfect, perfect. Great. Thank you so much for answering my questions, and wishing you all the very best. Thank you.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Tanay.

Operator
Thank you. The next question comes from the line of Mayank Pandey from NKE Global. Please go ahead.

Mayank Pandey - Analyst, MK Global
Hi, sir. Congratulations on a good set of numbers, and thank you for taking my question. I have two questions. Question number one is your asset turns, 9.9x. Now with our box build revenues going up to 60% of our total revenues, I would have expected that this would probably be a driver to move up the asset turns. So just wanted to get a theoretical understanding as to what would cause us to breach this level, or put another way, what could be the maximum level that we can see on asset turns with the current asset base and current growth that we're having? That's question number one. And the second question is on the box build mix itself. If you could just walk us through the segments that we have in the box build mix in each of those segments, if that's possible, or what is the main driver, which segments are the main drivers for the box build to grow further from these current levels? Those are my two questions.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Okay, great. Thank you, Mayank. First and foremost, we don't do ODM, okay? We do box build, which is custom designed by a customer. Even if we do the design for them, the IP is owned by the customer. So we do build-to-print, and that is the reason why most of these complex systems are coming to us, so we don't want to have a situation where we can do our own products, okay? So end of the day, even though we do design, it is done for the customer, so the ODM piece is not there. What you're referring to is our box build solution, which is where we do the whole product for the customer, okay? So we have always strived with vertical integration to get this number as high as possible, and we've been successful so far, and we continue to strive, and I think that portion of our business will grow because we may start with one commodity and then we try to, within two to three years, get the whole box build as PCBA, cable, plastic, all in a box, yeah. So that's always been our aspiration as well as our goal. Did I miss anything, Mayank?

Mayank Pandey - Analyst, MK Global
Sir, just want to understand it from a different lens. Can this go up to, let's say, 10x, 12x, 15x? How should I, or what would be the incremental capex required in that sense?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
As you know, we are probably the best in asset turns, you know. What we always commit to is 8 to 10 times. Sometimes this goes up and down when you do an investment in a building or so, but 8 to 10 times is what you should look at, and we want to stay in that range because we have to make investments also, right? So that's our goal. I think you should look at us as 8 to 10 times. And we are

looking to improve our ROCE even from here.

Mayank Pandey - Analyst, MK Global
Right, right. Of course. And if you could, sorry, I misspoke earlier on the ODM versus box build, my bad. If you could just help me understand which of our segments have the highest percentage of box build, or how should we look at it from a segment-to-segment perspective?

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
I think most of the segments except for Aero, we can't build a plane, but we build boxes. It's spread across various verticals, all verticals. It is not focused on just one industry vertical. For example, Railways, we do the interlocking systems, braking systems, the complete box. In the Clean Energy, we make different types of inverters, battery storage, it's all complete boxes. Only in the Aero piece where we do sub-assemblies.

Mayank Pandey - Analyst, MK Global
Got it, got it. And sir, just one last question. The ISM 2.0 scheme came out, and I know you must have been getting a lot of questions on that, but any chance you see that we could be one of the beneficiaries from it, given that we will, because it specifically calls out equipment suppliers, and we might be part of that value chain now with your wins in that space? Any possible benefits you see to Avalon from that scheme?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
We believe so, but we are yet to look at the finer details of the ISM 2.0. But definitely semiconductor manufacturing equipment is one of the key verticals for us over the coming years, and when the finer details come, then we will have more details to share to everyone.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
So in short, yes, we are looking at it.

Mayank Pandey - Analyst, MK Global
And would you be open to like incremental capex for that as a separate carved-out sort of structure, or not carved-out structure, but let's say a separate capex to that effect, or would you want to continue with the current business model?

Suresh Veerappan - Chief Financial Officer, Avalon Technologies Ltd
In the opening remarks, we highlighted about acquiring a large piece of land in Chennai for our future growth, the next phase of growth, whether it is with respect to semiconductor manufacturing equipment or advanced electronics, so both of it. So yes, the answer is yes.

Mayank Pandey - Analyst, MK Global
Okay. Thank you. Thank you so much.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
Thank you, Mayank.

Operator
Thank you. Ladies and gentlemen, in the interest of time, that was our last question. I would now like to hand the conference over to the management for their closing comments. Thank you, and over to you.

Kunhamed Bicha - Chairman and Managing Director, Avalon Technologies Ltd
With a healthy order book, expanding customer engagement, and a flexible global manufacturing model, we remain focused on delivering profitable growth. We thank our investors for their continued support and look forward to updating you in the coming quarters. Thank you, thank you very much.

Operator
Thank you. On behalf of DAM Capital Advisors, that concludes this conference. Thank you for joining us, and you may now disconnect your lines.