Investorstack Research Report

Avalon Technologies Limited

What Avalon Technologies Limited does

Avalon Technologies is an electronics manufacturing services (EMS) company with over 25 years of history. It was founded in 1999 and operates 14 manufacturing facilities spanning over 575,000 square feet across India and the United States, employing more than 2,500 people. The company specializes in high-mix, flexible-volume manufacturing of complex box-build systems. It serves global original equipment manufacturers (OEMs) across industrial, mobility (rail and aerospace), clean energy, communication, and medical end markets.

The core of Avalon's business is building mission-critical electronic and electromechanical assemblies that have long lifecycles, typically 5 to 15 years. Once a product is qualified with a customer, switching costs are high because the designs, certifications, and manufacturing processes are deeply integrated into the customer's supply chain. The company offers a vertically integrated one-stop shop spanning printed circuit board assembly (PCBA), cable harnesses, sheet metal fabrication, machining, injection-molded plastics, magnetics, and final system integration.

Avalon's dual-shore manufacturing model is a strategic differentiator. Its Indian facilities serve both domestic customers and exports, while its U.S. facilities serve American customers who require local production. In the third quarter of FY26, India manufacturing accounted for 78% of total revenue and delivered an EBITDA margin of 16.7%. U.S. manufacturing contributed the remaining 22% and was still in investment phase with a PAT loss of approximately INR7 crore in that quarter. The company's goal is to maintain an 80:20 mix between India and U.S. manufacturing over the medium term.

The business is split roughly 50:50 between serving Indian customers and export customers. In FY25, 43% of revenue came from Indian customers and 57% from U.S. customers. Exports from India accounted for about 62% of total revenue in 9M FY26. India operations serve both domestic and global customers.

Avalon's revenue has grown at an average rate of 46% over the last six consecutive quarters as of Q3 FY26. The order book as of December 2025 stood at INR2,016 crores with an average execution period of 14 months, and an additional INR1,183 crores in long-term contracts with execution timelines of 15 to 36 months. The company has consistently beaten its own revenue guidance, revising it upward three times during FY26 from an initial 18-20% to approximately 40%.

Business segments

Avalon reports five end-market segments. The revenue mix based on the annual report for FY25 and confirmed in subsequent concalls is as follows:

- Industrials: 30%
- Mobility / Transportation: 27%
- Clean Energy: 20%
- Communication: 8%
- Medical & Others: 15%

Industrials (30% of revenue)

This segment covers power electronics, transformers, industrial controllers, motor controllers, instrumentation systems, and control panels. End markets include power generation, transmission and distribution, factory automation, and industrial equipment. During 9M FY26, the industrial vertical grew 67% year-on-year. The company is benefiting from a power super cycle driven by data center demand and grid modernization, both in India and the U.S. Key products include assemblies for backup power systems, power transmission systems, and industrial automation controllers.

Mobility / Transportation (27% of revenue)

This segment includes rail, aerospace, and automotive sub-segments. Within rail, Avalon manufactures electronic interlocking systems, braking systems, engine control systems, and the Kavach anti-collision system (an indigenous automatic train protection system). Rail contributed 16% of revenue in 9M FY26 and grew 70% year-on-year. Aerospace contributed 8% and grew 64% year-on-year. Products in aerospace include cabin sub-assemblies, seating systems, smoke detectors, engine parts, and lighting enclosures. Automotive products include GPS trackers, camera systems, battery management systems, and actuation systems.

The rail opportunity in India is significant. The railway signalling systems market in India is valued at approximately USD 2 billion in 2025. Roll-out of Kavach 4.0 is accelerating with fresh allocations and deployments. Avalon's rail revenue grew 58% in H1 FY26 over H1 FY25. The company has secured new customers and expanded product lines with existing ones.

Aerospace is a long-cycle business. Cabin sub-assemblies completed first article inspection (FAI) in November 2025, with volume production expected in H1 FY27. The company is bidding on advanced metal cockpit assemblies and landing gear components. It also sees increased interest from aerospace majors for cable and electronics commodities.

Clean Energy (20% of revenue)

This segment covers assemblies for solar trackers, solar inverters, energy storage systems (ESS), DC power supplies, AC/DC converters, EV onboard chargers, motor controllers, and electrolyser subsystems. Clean energy grew 35% year-on-year in 9M FY26. The energy storage system program in the U.S. is a key growth driver, ramping significantly. Battery storage capacity in the U.S. nearly doubled in 2024 and is projected to grow another 47% in 2025. The company's ESS products are for industrial and commercial customers, not residential rooftop solar, so they are less exposed to policy changes affecting residential incentives.

Communication (8% of revenue)

This segment includes remote radio heads (RRH), base band units (BBU), antenna systems, satellite control units, fleet management systems, telematics, and high-performance servers. It grew 68% year-on-year in 9M FY26, driven by 5G network deployments and digital infrastructure. The company is a strategic manufacturing partner for C-DAC under the 'RUDRA' High-Performance Computing programme.

Medical & Others (15% of revenue)

This segment supplies PCBAs for oxygen concentrators, blood analysers, cables for flow meters, clean air monitoring systems, surveillance systems, and defence electronics including mission-critical power inverters and integrated battlefield command system components. Defence has become an area of focus, with new customer wins in recent quarters.

Products and business detail

Avalon's product portfolio spans five core capabilities that together enable complete system integration. The company's strategic focus is on increasing the share of box-build (system integration) revenue, which improved from 49% in FY25 to 53% in 9M FY26.

Box-Build / System Integration (53% of 9M FY26 revenue)

This is the highest-value offering. It involves integrating a PCBA, cable harness, sheet metal enclosure, plastics, magnetics, and other sub-assemblies into a finished electromechanical system that undergoes functional testing before shipment. Box-build covers the entire product lifecycle from design handoff to final test. Customers include industrial automation, clean energy, semiconductor equipment, aerospace, and rail. The company describes its entry into semiconductor equipment manufacturing as "a major technological step forward" - it is partnering with one of the top 4-5 global semiconductor equipment companies to produce Industry 4.0 compliant complex box-builds. Prototype phase was completed in Q3 FY26, with volume production expected in FY27.

Printed Circuit Board Assembly (PCBA)

Avalon assembles complex double-sided boards up to 32 layers, including BGA, QFN, Package-on-Package, and 01005 discrete packages. It has capabilities for both surface-mount and through-hole assembly, conformal coating, encapsulation, and clean room assembly (Class 1000/ISO 6). Testing includes flying probe, in-circuit testing, burn-in, and thermal cycling. PCBA serves all end markets and is often the entry point for customer relationships that later expand into box-build.

Cable Assembly & Wire Harness

Custom cable assemblies include flat ribbon cables, RF cables, over-moulded cables, and full cabinet wiring. The company is certified to IPC/WHMA-A-620 and has IATF 16949:2016 certification for automotive. It has automated conveyor lines dedicated to high-volume wiring harness production, serving customers in aerospace seating, power generators, and satellite broadband. In aerospace, the company ramped from prototype to full production in four months for a major OEM's cabin seating cable solutions.

Sheet Metal Fabrication & Machining

Precision sheet metal parts, weldments (TIG, resistance), complex machining, powder coating, and NADCAP-certified fusion/resistance welding. The company holds EN 15085-2 Class 1 certification for welding of railway vehicles and components, and AS9100D for aerospace. Capabilities include CMM with laser screening, mechanical NPI, tool room, VMM, and tensile strength testing.

Magnetics

Linear and toroidal winding, copper foil winding, varnish impregnation (including vacuum pressure impregnation), and testing of transformers, inductors, and electromagnetic components. UL recognized for OBJY2 and OBJS2. Used in power supplies, inverters, energy storage systems, and motor drives.

The company operates a capex-light model with asset turns of 9.5x in Q3 FY26. Annual capex is typically around INR50 crores. The company builds capacity ahead of demand, having commissioned a new export-focused plant in Chennai in FY25 and beginning Phase II brownfield expansion for domestic demand. It maintains buffer capacity to support rapid scale-ups.

Certifications include ISO 9001:2015, IATF 16949:2016 (automotive), AS9100D (aerospace), ISO 13485:2016 (medical), ISO 14001:2015 (environment), ISO 45001:2018 (health and safety), ISO/IEC 27001:2022 (information security), and ANSI ESD 20.20.

Customers

Avalon serves Fortune 500 global OEMs across industrial, clean energy, rail, aerospace, and communication sectors. Specific customers named in the sources include:

- A leading global semiconductor equipment manufacturer (top 4-5 in the world) for complex Industry 4.0 box-builds. The company is in prototype phase and expects volume production in FY27.
- A Japanese manufacturer of advanced signalling solutions for Indian railways - the company has been their Indian manufacturing partner since 2013.
- C-DAC under the 'RUDRA' High-Performance Computing programme for servers.
- Defence customers for integrated battlefield command systems and drone subsystems.

The company does not disclose individual customer names beyond these, and no single customer concentration is disclosed. Management emphasizes broad diversification across verticals and geographies as a deliberate strategy.

The buying relationship

Customers in Avalon's target markets are typically large OEMs that design complex, capital-intensive equipment with long product lifecycles. The buying decision is made by the OEM's procurement and engineering teams, with qualification processes that can take 6 to 18 months. Once a supplier is qualified, switching is difficult and rare because:

- The products are mission-critical and require extensive validation and certification.
- The engineering teams invest time in design for manufacturability (DFM) collaboration.
- Many contracts run 5 to 15 years in segments like aerospace and rail.
- Customers require consistent quality, on-time delivery, and supply chain reliability.

Avalon's contract structure includes long-term agreements (often 5 to 15 years) with rolling purchase orders. The order book only captures orders executable within 14 months, but the company has additional contracts beyond 3 years that are not counted. Tariff impacts have been 99% passed through to customers, demonstrating pricing power.

The company has a dual-shore model that allows customers to start production in the U.S. for risk management, then transition to India for cost savings once trade policy stabilizes. This "beachhead" approach helps win customers who are hesitant to commit to India manufacturing due to tariff uncertainty.

Customer concentration risk

While no single customer dominates, the company has a limited number of key customers. It actively diversifies across industries and geographies. Over the last three years, the India revenue share grew from 20% to 43%, reducing dependence on any single export market. The company also has three growth engines: existing business (recurring revenue from long-lifecycle products), new business wins (programs ramping up over 2-3 years), and pipeline opportunities (advanced-stage prospects).

Competitive landscape

The sources do not name specific competitors. However, they provide clear differentiation points that define Avalon's competitive position within the EMS industry.

Industry structure

The global EMS industry is highly fragmented, ranging from large multinationals like Foxconn, Flex, and Jabil (which focus on high-volume, low-mix consumer electronics) to hundreds of regional and niche players. Avalon sits in a specific niche: high-mix, flexible-volume manufacturing of complex, mission-critical box-build systems. It does not compete in the consumer electronics segment where volumes are high but margins are thin and product lifecycles short. Instead, it focuses on industrial, rail, aerospace, clean energy, and medical applications where products are complex, have long lifecycles, and demand high reliability.

Where Avalon wins

1. **Complexity and box-build capability**: Avalon offers vertically integrated box-build solutions that many smaller EMS players cannot provide. The company's ability to integrate PCBA, cables, sheet metal, plastics, and magnetics into a single tested assembly reduces customer supply chain complexity.

2. **Dual-shore manufacturing**: Most Indian EMS companies do not have manufacturing facilities in the U.S. Most U.S. EMS companies lack cost-competitive Indian operations. Avalon's presence in both geographies allows it to serve customers who want to localize production in the U.S. while maintaining the option to shift to India. This was particularly valuable during the tariff volatility of 2025-26.

3. **Long-lifecycle focus**: The company deliberately avoids consumer electronics and other short-cycle, price-sensitive segments. Instead, it targets industries where relationships are deep and enduring. "These products have a 10 to 15 year life cycle. So just because of a 2 or 3 quarter change, they are not going to make the switch," said management in the November 2025 concall.

4. **Certifications and qualifications**: The company holds specialized certifications that act as barriers to entry, including EN 15085-2 for rail welding, AS9100D for aerospace, NADCAP for welding, ISO 13485 for medical devices, and IATF 16949 for automotive. These require significant investment and time to obtain.

5. **Engineering depth**: With in-house PCB design and analysis capabilities (over 40,000 layouts, 99% first-time-right design), the company can engage customers at the concept stage and provide design-for-manufacturability input, deepening relationships.

Where Avalon loses

The company does not participate in high-volume, low-margin consumer electronics. This means it misses out on the scale that large EMS players enjoy. Its asset-turn model (8-10x) is good but not as high as pure-play high-volume manufacturers. The U.S. manufacturing operations are still unprofitable (PAT loss of INR7 crore in Q3 FY26), which puts it at a cost disadvantage compared to EMS players with fully optimized U.S. operations - though management expects operating leverage to improve as the energy storage system program scales.

Honest assessment of competitive intensity

Competition in the EMS industry is intense across the board. However, the nature of competition varies by segment. In the high-mix, low-to-medium volume segment where Avalon operates, competition is less about price and more about capability, quality, reliability, and relationship. The company's long-term contracts provide visibility and recurring revenue, but there is always risk that a customer could dual-source or move to another supplier over time. The company's strategy of deep customer engagement, cross-selling additional capabilities (starting with PCBA and moving to box-build), and geographic diversification helps mitigate this.

No single competitor is named in the sources, but the company's differentiation on complexity, dual-shore model, and mission-critical focus is clear. Given the broad-based growth across all segments and the 26.5% order book growth year-on-year as of December 2025, the company appears to be gaining share in its chosen niches.

Industry

Global EMS industry

The global Electronic Manufacturing Services industry is projected to grow at a CAGR of approximately 6.9% from 2025 to 2032 per third-party reports referenced in the annual report. Demand is driven by increasing electronics content across all sectors - a trend called "electronification" - where previously mechanical systems are being replaced or augmented by electronic controls, sensors, and software. This includes everything from industrial automation to rail signaling to aerospace systems.

North America EMS market

The North American EMS market is projected to increase from USD 177 billion in 2025 to USD 230 billion by 2030 per Mordor Intelligence (cited in annual report). This growth is supported by rising cost of in-house manufacturing, growing complexity of electronic systems, and increasing reliance on EMS providers for end-to-end solutions. The U.S. is seeing a resurgence in manufacturing due to supply chain diversification and policy support (CHIPS Act, IRA), but the EMS industry there faces high capital requirements and stringent regulatory compliance.

Indian EMS market

India's EMS market is estimated at USD 61.85 billion in 2024 and is projected to grow at 28% CAGR to USD 348 billion by 2031 per Blue Weave Consulting / IMARC (cited in annual report). This rapid growth is driven by a combination of domestic demand (India's electronics manufacturing output surged from about INR5 lakh crore in FY20 to INR9.52 lakh crore in FY24) and increasing exports (electronics exports grew 32.47% in FY25).

India's place in the global supply chain

India is emerging as a trusted alternative to China in the global electronics supply chain. The China+1 strategy, where global OEMs seek to diversify manufacturing beyond China, is a powerful tailwind. India offers cost competitiveness in labor, a large pool of engineering talent, a fast-growing domestic market, and improving infrastructure. The government's Production Linked Incentive (PLI) schemes, Make in India, and the India Semiconductor Mission (ISM 2.0) are structural policy supports.

Avalon's exports from India accounted for 62% of revenue in 9M FY26. A key recent development is the U.S.-India trade deal announced in February 2026, which reduced U.S. tariffs on imports from India from 50% to 18%. This makes India manufacturing for U.S. customers more attractive. The company has been able to pass through 99% of applicable tariffs to customers, so the impact of tariff changes has been on gross margin percentage (about 100 bps impact) but not on absolute margin.

Import substitution

India's policy push towards import substitution is creating opportunities for local EMS providers. Sectors like defence, aerospace, and rail are increasingly mandating domestic manufacturing. Avalon is benefiting from this, particularly in rail (Kavach system, signalling), defence (battlefield command systems), and clean energy (energy storage systems designed for Indian conditions).

Regulation

Key government initiatives relevant to Avalon include:

- **India Semiconductor Mission 2.0**: Focuses on semiconductor equipment manufacturing, which aligns with Avalon's new semiconductor equipment box-build program.
- **PLI for electronics**: Provides financial incentives for manufacturing electronic components.

- **Make in India for Defence**: Encourages domestic manufacturing of defence electronics.
- **SPECS** (Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors).
- **Trade policy**: The U.S.-India trade deal and ongoing tariff negotiations are closely monitored. Avalon's dual-shore model provides flexibility.

Cyclicality

Avalon's business is less cyclical than consumer electronics EMS because its products have long lifecycles (5-15 years) and are in sectors like rail, power, aerospace, and clean energy where demand is driven by infrastructure investment and regulatory mandates rather than consumer discretionary spending. However, there is still exposure to broader economic cycles. During the 2022-23 global slowdown, the company experienced a destocking phase in its U.S. business, but this was mitigated by its growing India business (which was less than 30% of revenue at the time and is now 43%). Management noted in the May 2025 concall: "Today we are 47% India and growing. So between the two economies we should be okay."

Demand drivers summary

1. **Electronification**: Increasing electronic content in rail, aerospace, industrial, and clean energy equipment. 2. **China+1 diversification**: Global OEMs reducing dependence on China manufacturing. 3. **Make in India / import substitution**: Government policies favouring domestic manufacturing for defence, rail, and infrastructure. 4. **Power super cycle**: Data center growth and grid modernization driving demand for power electronics and transmission equipment. 5. **5G and digital infrastructure**: Network rollouts in India and globally. 6. **Clean energy transition**: Solar, wind, hydrogen, and energy storage systems require sophisticated electronics. 7. **Railway modernization**: Kavach ATP system, signalling upgrades, and locomotive engine subsystems. 8. **Aerospace growth**: India's large pending aircraft order book and growing local manufacturing content. 9. **Defence indigenization**: Integrated battlefield command systems, drones, and mission-critical power systems.

Growth triggers

- **Semiconductor equipment manufacturing.** Avalon completed the project readiness phase for a key global semiconductor customer. Volume production is expected to begin in FY27, with the first customer being one of the top 4-5 in the world. The government's ISM 2.0 focus on semiconductor equipment aligns directly with this capability. (Q3 FY26 concall, Feb 2026) (Q2 FY26 concall, Nov 2025) (Q1 FY26 concall, Aug 2025)
- **Energy storage system (ESS) ramp in the U.S.** The battery storage program for commercial and industrial customers is fast growing and ramping in line with plan. Avalon has worked on this for over four years, and it is expected to be a significant play going forward. (Q3 FY26 concall, Feb 2026) (Q2 FY26 concall, Nov 2025)
- **Aerospace cabin sub-assemblies.** The first article inspection (FAI) for prototypes has been completed. Volume production is expected in H1 FY27. The aerospace vertical grew 64% year-on-year in 9M FY26. (Q3 FY26 concall, Feb 2026) (Q2 FY26 concall, Nov 2025)
- **Railway Kavach (ATP) systems.** Testing has been completed, and commercial production is targeted for H2 FY27. The rail vertical grew 70% year-on-year in 9M FY26. (Q3 FY26 concall, Feb 2026) (Q2 FY26 concall, Nov 2025)
- **Locomotive engine sub-systems.** Production began in H2 FY26. (Q2 FY26 concall, Nov 2025)
- **U.S. tariff reduction from 50% to 18%.** The trade deal announced in Feb 2026 makes India manufacturing for U.S. customers more attractive. This opens a new growth lever for India-to-U.S. exports. Tariffs were 99% passed through to customers even at the higher rate. (Q3 FY26 concall, Feb 2026)

- **Expansion into Europe.** Avalon is building a sales presence in Europe, coinciding with the India-Europe trade deal. This is a medium-term growth lever. (Q3 FY26 concall, Feb 2026)
- **New business wins in power transmission, industrial, and defence.** These include mission-critical power inverter platforms and components for an integrated battlefield command system. The domestic India power super-cycle, driven by data centers, adds further demand. (Q3 FY26 concall, Feb 2026)
- **Consistent upward guidance revision.** Management started FY26 with 18-20% revenue growth guidance, revised to 23-25% in Q1, then 28-30% in Q2, and finally to ~40% in Q3. This reflects improving visibility and execution. (Q3 FY26 concall, Feb 2026) (Q2 FY26 concall, Nov 2025) (Q1 FY26 concall, Aug 2025) (Q4 FY25 concall, May 2025)

Key risks

- **Tariff and trade policy uncertainty.** Changes in U.S.-India tariff rates could affect the competitiveness of India manufacturing for U.S. exports. While Avalon demonstrated 99% pass-through in the recent period, a sudden reversal or new tariffs could create short-term uncertainty for customers. The company mitigates this with its dual-shore facilities in India and the U.S.
- **Customer concentration.** Revenue dependence on a limited number of key customers could lead to volatility if any customer reduces orders. The company is actively diversifying across industries and geographies, but large program wins can temporarily increase concentration.
- **Raw material price volatility and supply chain disruptions.** Fluctuations in metals, electronics, polymers, and geopolitical conflicts can cause cost inflation or shortages. The company mitigates via multi-sourcing, long-term contracts, and pass-through clauses, but there can be a lag in pass-through during volatile periods.
- **Foreign exchange fluctuation.** A significant portion of revenue and costs are in USD/EUR. Unhedged exposures can impact margins. The company manages this through natural hedging and forward contracts.
- **Economic slowdown / macro risk.** A slowdown in the U.S. or Indian economy could reduce demand for electronic products. Avalon's products are long-lifecycle (5-15 years) and mission-critical, which provides some insulation, but a sharp downturn could still impact order volumes.
- **Geographic concentration.** Business is concentrated in India and the U.S. Adverse economic or political conditions in these regions could impact operations. Expansion into Europe and Southeast Asia is underway but will take time.
- **Regulatory changes.** Changes in PLI/ISM incentives, trade policies, or labour codes could impact cost structure and compliance. The new labour code is being monitored, with a minimal estimated impact of INR 33 lakh recognised in Q3 FY26.

Walk the talk

Management's track record of over-delivering against its own guidance is a defining feature of Avalon's execution story. The journey of the FY26 revenue guidance is the clearest proof point.

In May 2025, at the start of the fiscal year, the approach was cautious:

> *"We are approaching FY26 with measured optimism, mindful of the macroeconomic environment influenced by policy decisions, we are guiding for a revenue growth of 18% to 20% for FY26"*
>
> **Q4 FY25 CONCALL (MAY 2025)**

Then each quarter, as visibility improved and execution accelerated, the guidance was revised upward. First to 23-25% in August 2025:

> *"We are upward revising our full year revenue growth guidance to 23% to 25% from the earlier guidance of 18% to 20%."*
>
> **Q1 FY26 CONCALL (AUG 2025)**

Then to 28-30% in November 2025:

> *"We are revising our full-year revenue growth guidance upwards to 28%–30%, from the earlier 23%–25%."*
>
> **Q2 FY26 CONCALL (NOV 2025)**

And finally to ~40% in February 2026:

> *"we are revising our FY '26 revenue growth guidance upward to around 40% from the earlier guidance of 28% to 30%."*
>
> **Q3 FY26 CONCALL (FEB 2026)**

This pattern of conservative initial guidance followed by multiple upward revisions reflects a management team that prioritises credibility and only guides on what they can see clearly. The 9M FY26 revenue growth of 48.7% year-on-year, with average 46% growth over the last six quarters, made the ~40% full-year target achievable.

The commitment to double revenue from FY24 to FY27 was another promise tested by time. In Nov 2025, management reaffirmed:

> *"I think that holds true even today"*
>
> **Q2 FY26 CONCALL (NOV 2025), REFERENCING THE DOUBLING COMMITMENT FROM IPO.**

By Feb 2026, with 9M revenue already showing 48.7% growth, the trajectory was clearly on track, and management was already looking ahead to the next doubling from FY27.

On operational efficiency, the net working capital days improvement story was equally strong. In Nov 2025, management guided:

> *"we expect to bring it within the 120–130 day range over the next few quarters"*
>
> **Q2 FY26 CONCALL (NOV 2025)**

By Feb 2026, they had already surpassed that target:

> *"net working capital days improved to 118 days in December 2025 from 150 days in December 2024"*
>
> **Q3 FY26 CONCALL (FEB 2026)**

The improvement was structural, driven by reductions across inventory, receivables, and payables. The company generated positive operating cash flow of INR 51 crores in Q3 FY26 alone.

On the strategic shift towards higher-value box-build solutions, management in May 2025 noted box-build was 49% of revenue. By Feb 2026:

> *"box build contribution improving from 49% in FY '25 to 53% in 9 months FY '26"*
>
> Q3 FY26 CONCALL (FEB 2026)

This increase in box-build mix is a direct indicator of executing on the strategy to move up the value chain. The company also entered the semiconductor equipment space, passing prototypes and moving toward volume production in FY27. The U.S. tariff reduction from 50% to 18% was navigated with 99% pass-through to customers, validating deep customer relationships.

Scenarios

Bull case

The semiconductor equipment program ramps to meaningful revenue in FY27, establishing Avalon as a trusted partner for a top-4 global player and attracting additional customers in this high-complexity segment. The energy storage system business in the U.S. scales rapidly as commercial and industrial customers accelerate battery storage adoption. Aerospace cabin sub-assemblies move into volume production on schedule, building on the 64% growth in the existing aerospace business. The railway Kavach system enters commercial production, adding a high-visibility domestic program. The U.S. tariff reduction to 18% drives a surge in enquiry-to-order conversion for India manufacturing, as global OEMs actively diversify away from China. The European expansion gains traction with initial customer wins. All three growth engines - existing business, new programs, and pipeline - fire simultaneously. The India operations sustain EBITDA margins above 16%, and the U.S. operations turn profitable as the ESS ramp absorbs fixed costs. Asset turns remain in the 8-10x range. The company doubles revenue from FY24 to FY27 ahead of schedule and sets the stage for another double in the next three years.

Base case

The semiconductor program progresses to volume production in FY27 but ramps more gradually than hoped, contributing modestly to revenue in the first year. The ESS business continues to grow but at a steady rather than explosive pace. Aerospace cabin sub-assemblies and Kavach enter production on schedule but require a few quarters to reach meaningful scale. The tariff reduction provides a tailwind, but customers remain cautious given the history of policy reversals, so the conversion of enquiries to orders happens more slowly. European expansion remains a work in progress. Revenue growth normalises from the ~40% in FY26 to a more sustainable 20-25% in FY27. Margins improve modestly as operating leverage from past investments kicks in, but U.S. profitability remains a drag through H1 FY27. Net working capital stabilises at around 115-120 days. The company continues to win new programs, maintaining a healthy order book, but the pace of execution matches the steady, reliable pattern management has demonstrated.

Bear case

The U.S. economy enters a recession, prompting customers to reduce inventory and delay new program launches. The semiconductor equipment ramp is pushed out by a year due to customer qualifications or end-market softness. The tariff situation reverses or becomes unpredictable again, with new duties imposed on Indian goods, forcing

customers to re-evaluate their supply chain strategies. The ESS business faces headwinds from changes in U.S. clean energy policy or subsidy reductions. Raw material inflation spikes, and despite pass-through clauses, there is a timing lag that compresses gross margins below the 33% guided floor. The U.S. manufacturing operations remain a drag on profitability for longer than expected as the revenue scale needed for breakeven keeps moving out. Customer concentration becomes a concern if one of the top programs faces a demand shock. The stock market re-rates the EMS sector lower on macro fears. Avalon's growth rate decelerates sharply to single digits, and the doubling commitment from FY24 to FY27 is missed. Management reverts to cautious, low-visibility guidance, and investor confidence erodes.