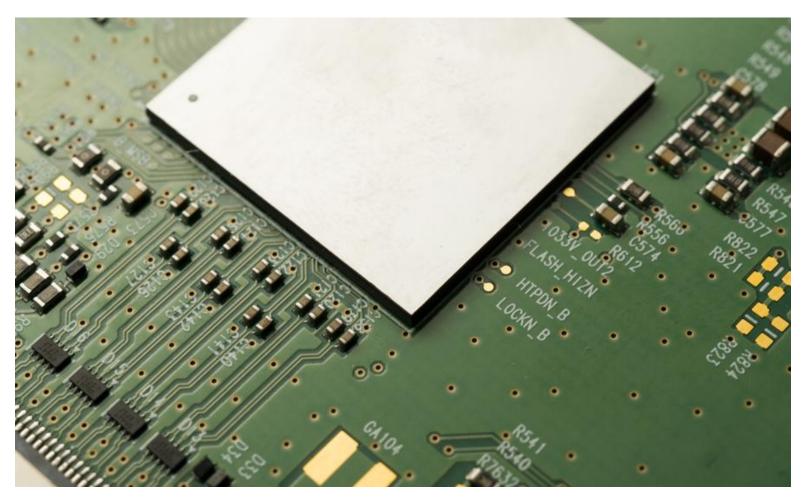
Avalon Technologies Ltd

Manufacturing your Success.





Kyon ki bhaiya, sabse bada rupaiya.





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NOT RATED

Manufacturing your success.

Avalon Technologies Limited (ATL) is a leading fully integrated Electronic Manufacturing Services (EMS) company (in India, in terms of revenue in Fiscal 2022) with end-to-end capabilities in delivering box-build solutions (source: F&S Report), with a focus on high-value precision-engineered products. Through a unique global delivery model (source: F&S Report), they provide a full stack product and solution suite, right from printed circuit board (PCB) design and assembly to the manufacture of complete electronic systems (Box Build), to global original equipment manufacturers (OEMs), including OEMs located in the United States, China, Netherlands, and Japan. Through their end-to-end capabilities, they believe their customers may achieve tangible benefits such as reduced manufacturing costs, improved supply chain management, and reduced inventory obsolescence.

During FY19-22, ATL's revenue/EBITDA grew at a CAGR of 14.4%/ 23.0% to INR 840.7 cr/INR 97.55 cr, respectively, while EBITDA and net margins improved by 116bps to 11.6% and 610bps to 8.0%, respectively.

They have 12 manufacturing units located across the United States and India:

- 1 unit in Atlanta, Georgia,
- 1 unit in Fremont, California,
- 7 units in Chennai, Tamil Nadu,
- 1 unit in Kanchipuram, Tamil Nadu,
- 2 units in Bengaluru, Karnataka.

Their electronic manufacturing facilities comprise an aggregate of 66 production lines, consisting of 11 Surface Mount Technology (SMT) lines, 12 Through Hole Technology (THT) lines, and 43 assembly lines.

Industry		EMS				
Issue Details						
Listing	_	SE & NSE				
Open Date		Apr 2023				
Close Date	lose Date 5 th Apr 202					
Price Band	INR	415-435				
Face Value		INR 2				
Market Lot	3	34 shares				
Minimum Lot		1 Lot				
Issue Structure						
Offer for Sale		37%				
Fresh Issue		63%				
Issue Size (Amt)	INF	R 865 cr				
Issue Size (Shares) 20,843,37						
QIB Share (%)	QIB Share (%) ≤ 75%					
Non-Inst Share (%)		≥ 15%				
Retail Share (%)		≥ 10%				
Pre issue sh (nos)	57,9	953,128				
Post issue sh (nos)	65,2	292,577				
Post issue M Cap	INR 2	2,847 cr				
Shareholding (%)	Pre (%)	Post (%)				
Promoter	53.38	36.74				
Promoter Group	17.37	14.50				
Public	29.25	48.76				
TOTAL	100	100				

Key Financial Data (INR Cr, unless specified)

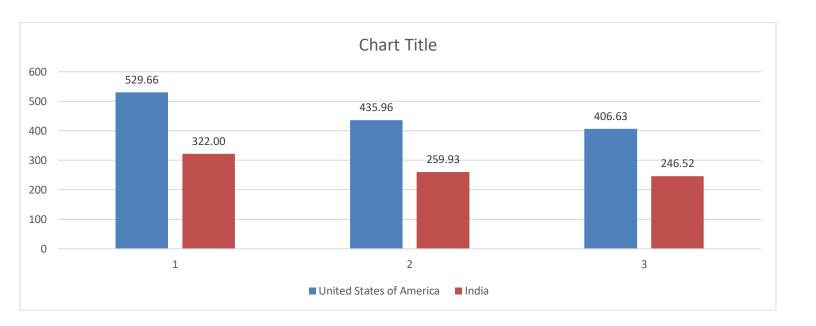
	Revenue	EBITDA	Adj PAT	EBITDA (%)	Net (%)	Adj EPS (₹)	NW (₹)	RoE (%)	RoCE (%)	NAV (X)
FY20	641.9	64.5	12.3	10.0	1.9	2.2	46.6	2.7	24.0	8.9
FY21	690.5	66.1	23.0	9.6	3.3	4.0	60.0	1.5	17.3	11.2
FY22	840.7	97.5	68.1	11.6	8.0	11.3	87.2	1.2	29.2	15.6





Revenue distribution based on geography:

Region	2022		2021		2020		
region	Amount(₹Cr)	% of Total	Amount(₹Cr)	% of Total	Amount(₹Cr)	% of Total	
United States of America	529.66	62.19%	435.96	62.65%	406.63	62.26%	
India	322.00	37.81%	259.93	37.35%	246.52	37.74%	
Total Income	851.66	100.00%	695.89	100.00%	653.15	100.00%	



Marquee Customers:

- Kyosan India Pvt Ltd.,
- Faiveley Transport Rail Technologies India Pvt Ltd.,
- TransDigm Technologies India Pvt Ltd.,
- Zonar Systems Inc.,
- Collins Aerospace (in mobility),
- Caire Inc (Medical Industry),
- e-Infochips Pvt Ltd.,
- Haas Automation, Inc. (Industrial Sector),
- TMEIC and Ohmium India Pvt Ltd.,
- The US Malabar Co.,
- Systech Corporation,
- Meggitt (Securaplane Technologies Inc)





Company Products:

Avalon Technologies offers integrated design and manufacturing solutions for domestic and internationally recognized OEMs, along with promising start-ups. Their solutions spectrum spans EMS box builds, PCB assemblies, cable assembly and wire harnesses, sheet metal fabrication, injection molded plastics, machining and magnetics. They also offer design services and new product development services.

Products Sold	2022	2021	2020
Box Build	373.99	327.68	283.09
Printed Circuit Boards (PCBs)	296.17	242.95	228.61
Cables	84.64	63.54	54.51
Metal	35.16	29.12	45.48
Magnetics	26.57	8.78	6.79
Design	18.47	15.12	13.98
Plastics	5.74	3.30	9.41
Total	840.74	690.49	641.87
Revenue growth (%)	21.76%	7.57%	

Strengths of the business

- 1. End-to-end integrated solutions, providing a "One Stop Shop" for electronics and electro-mechanical design and manufacturing services:
 - Avalon Technologies is one of the few EMS companies in India that offers one-stop services from PCB design and analysis to new product development (NPD) and subsequent volume production. They focus on NPD as a means to build long-term customer relationships. They are able to support NPD initiatives by virtue of their diversified offerings and their ability to catalyze transformation of products from the prototype stage to production.
- 2. High entry barriers to business through the collective cross-industry experience, customer engagement capabilities and leading position in the high mix flexible volume product manufacturing segment.
 - Avalon Technologies has built long term relationships and as of November 30, 2022, they had an average relationship of 8 years, with customers who accounted for 80% of their revenue. Their experience in offering EMS services across product and industry verticals for customers globally for several years serves as an entry barrier in the industry for any new entrants.
- 3. Well-diversified business leading to strong growth avenues.
 - The company's business is well-diversified, in terms of end-use industries, customers, geographies and offerings. They have, over the years, diversified and expanded their customer bases, and developed their operations to cater to various end-use industries across multiple product capabilities.
- 4. Established relationships with marquee customer base.





Company's product portfolio has helped them forge strong relationships with their major clients. They have established and will continue to focus on strengthening longstanding relationships with well-known customers across the end-use industries that they cater to.

5. Global delivery footprint with high quality standards and advanced manufacturing and assembly capabilities.

➤ The company currently operates through 12 manufacturing units, supported by 1,783 permanent employees and 221 persons employed as contract workers/temporary employees, as of November 30, 2022. Their manufacturing facilities have an aggregate of 66 production lines.

6. Experienced board, management and operating team.

➤ The promoters of the company have several decades of pioneering experience in the field of EMS, and they have been instrumental in the growth of the business. They also have a diversified Board of Directors, which is supplemented by a strong management team with extensive experience in the EMS sector and a proven track record of performance.

Manufacturing Facilities:

- The company's manufacturing and assembly processes are carried out at 4 different locations, including 2 in India (Karnataka and Tamil Nadu) and 2 in the US (California and Georgia).
- Their facilities house 66 production lines in total, including 11 SMT lines, 12 THT lines, and 43 assembly lines. They have both dedicated and flexible production and assembly lines. They offer specialised, dedicated lines that are made for a select few particular clients, including e-Infochips Pvt Ltd and Kyosan India Pvt Ltd.







Business Diversity:

They have a wide range of offerings and may be found in almost all key industry sectors, including clean energy, mobility, industry, communication, and healthcare. Clean energy accounted for 20.28% of sales in Fiscal 2022 and 23.36% in the eight months that concluded on November 30, 2022, respectively. They also serve sectors including aerospace, defence, and healthcare that demand very precise manufacturing.

Electronic Manufacturing Services:

- ✓ PCB Design and Assembly: The company is a leading EMS provider serving customers across the globe. They are an end-to-end service provider of PCBAs, with in-house capabilities to support the entire value chain for their customers. Their services and capabilities include Printed Circuit Board (PCB) Design and Analysis; Printed Circuit Board Assembly (PCBA) and Inspection and Test
- ✓ Metal/Sheet Metal Fabrication: Sheet metal fabrication is the process of forming desired shapes from metal sheets using various manufacturing methods. They are an AS 9100D and ISO 9001:2015 certified company for sheet metal fabrications.
- ✓ Cable Assembly and Wire Harnesses: The company's cable assembly and wire harness assemblies cover commercial and military applications and





designs, which are customizable to suit specific demands of their customers. They maintain an integrated manufacturing facility for custom wire harnessing and over-moulding, which is equipped to carry out processes such as automatic wire stripping, cutting, crimping, soldering, laser stripping and harness braiding. They also provide test solutions for high quality mould and die fixtures.

- ✓ Magnetics: Company's magnetics division, the products and services include the following:
 - **1. Transformers**: Transformers are used in various industries including aerospace, industrial and pharmaceuticals. They also manufacture power transformers, current transformers, ferrite transformers and fly back transformers.
 - **2. Chokes and Inductors:** The company manufactures common mode and differential mode chokes, powered iron core inductors, ferrite core inductors, laminated core inductors and ferrite rod inductors.
 - **3. Injection Moulded Plastics:** The company specialises in small precise plastic injection moulded parts for a variety of applications including aerospace. They use various types of plastic resins and additives in their injection moulding process.





Key Growth Strategies:

1. Create high growth opportunities for the existing offerings.

With the emergence of the trend to add new applications by leading manufacturers to their portfolios, a number of opportunities have arisen for power electronic devices such as transformers, chokes and inductors, for the control and operation of heavy machinery. Electric vehicles are one of the key growth opportunity verticals, due to the technology transformation currently underway with autonomous car development and electric vehicle commercialization activities.

2. Invest in expanding the technological capabilities and manufacturing capacities.

The company's existing manufacturing facilities in Tamil Nadu are located on 0.37 msf, of which they are utilizing only 0.26 msf, as of November 30, 2022, which leaves additional area for any expansion which may be required. This includes their proposed new manufacturing facility in MEPZ, Chennai, through which they will increase their capacity for PCBA and Box build.

3. Sustain and cater to high growth sunrise industry sectors such as clean energy and emerging communication technologies.

- Clean Energy: The company caters to 14 customers within the clean energy sector, as of November 30, 2022 and, since 2020, they have onboarded 3 new customers within this industry, including Ohmium India Pvt Ltd. Revenues from clean energy is expected to grow at a CAGR of 87.3%, to reach ₹76 billion by Fiscal 2026.
- Communication Technology: The company caters to 11 customers in the communication technology sector, as of November 30, 2022, and since 2020, they have onboarded 3 new customers within this industry, including LiveView Technologies, Inc.

4. Consolidate and expand the position in global markets for existing industry verticals.

The company intends to continue to consolidate their position in wellestablished end-use industries including industrial, communications, mobility, and medical devices.

5. Continue to build on hybrid model of delivery leveraging access to high value market and low-cost production base.

The company is ideally poised to offer a hybrid model of delivery to their customers and through this model, they offer 2 modes of delivery, depending on customer preference: 1. The automated portion of manufacturing is done in their manufacturing facilities in the US, and the labour intensive portion is done in India and the product is configured in the US; 2. Cater directly to customers in the US from their Indian manufacturing bases, leveraging high value markets and optimal cost. manufacturing in India.





Key Risks & Concerns

- Any disruption in the continuous operations of its manufacturing facilities would have a material adverse effect on the business, results of operations, and financial condition.
- They source their raw materials from suppliers, primarily on a purchase order basis. There is a possibility that the suppliers may not perform their contractual obligations in a timely manner, or at all. Any increase in the cost of raw materials or components, delay, shortage, interruption, or reduction in the supply of raw materials and major production inputs to manufacture their products may adversely affect the business, results of operations, cash flows, and financial condition.
- The markets in which its customers compete are characterized by rapidly changing preferences and other related factors, including lower manufacturing costs. As a result, the company may be affected by any disruptions in downstream industries.
- The current and continuing impact of the COVID-19 pandemic, or a similar public health threat, could adversely affect its business, financial condition, and results of operations.
- The global nature of its operations exposes it to numerous risks that could materially adversely affect the financial condition and the results of operations.
- They may not be able to successfully develop new production processes and adopt new original design manufacturing capabilities if they are unable to identify emerging trends and are not able to predict customer preferences.





Management Team						
Key Person	Designation	Details				
Kunhamed Bicha	Chairman and MD	He holds a bachelor's degree in mechanical engineering from PSG College of Technology and a master's degree in science (industrial engineering) from Wichita State University. He has been associated with the Company since its incorporation.				
Bhaskar Srinivasan	President	He holds a bachelor's degree in mechanical engineering from Annamalai University, a master's degree in business administration from Cochin University of Science and Technology, and a master's degree in science (industrial engineering) from Wichita State University. He has been associated with the Company since its incorporation.				
R M Subramanian	CFO	He holds a bachelor's degree in civil engineering from Birla Institute of Technology and Science and a post graduate diploma in management from Indian Institute of Management, Bangalore. He has several years of experience in the financial and accounting functions.				
Nandita Abraham	Independent Director	She holds a Bachelor's of Economics degree from St. Joseph College, Bangalore, and a Master's Degree in Textile -Tech (Product Development) from the University of Thomas, Jefferson, Philadelphia, USA. She brings with her over 30 years of prior experience in general management.				

Source: Company Reports

Issue Structure and Offer Details

The proposed fresh issue size of ATL is INR 320 cr and the price band for the issue is in therange of INR 412-436 and the bid lot is 34 shares and multiples thereof.

Investor Category	Allocation	No. of shares offered
QIB	Not more than 75% of the Offer	14,879,588
NIB	Not less than 15% of the Offer	2,975,917
Retail	1,983,944	
Number of shares based on a h	nigher price band of INR 436	





ATL's Financial Summary analysis									
Fig in INR Cr (unless specified)	FY20	FY21	FY22	Fig in INR Cr (unless specified)	FY20	FY21	FY22		
Income Statement				Per share data & Yields					
Revenue	641.9	690.5	840.7	Adjusted EPS (INR)	722.6	1,345.8	3,955.1		
YoY Growth (%)		7.6	21.8	Adjusted Cash EPS (INR)	1,693.7	2,331.9	5,031.7		
Raw Material Cost	411.3	456.0	554.1	Adjusted BVPS (INR)	215.8	1,766.3	5,459.7		
RM Cost to Sales (%)	64.1	66.0	65.9	Adjusted CFO per share (INR)	4,115.5	345.4	867.8		
Employee Cost	116.2	119.2	131.4	CFO Yield (%)	3,039.5	255.1	640.9		
Employee Cost to Sales (%)	18.1	17.3	15.6	Adjusted FCF per share (INR)	2,326.3	(2,020.5)	(1,021.3)		
Other Expenses	49.9	49.9	57.7	FCF Yield (%)	1,718.1	(1,492.2)	(754.3)		
Other Exp to Sales (%)	7.8	7.2	6.9						
EBITDA	64.5	65.4	97.5	Solvency Ratio (X)					
Margin (%)	10.0	9.5	11.6	Total Debt to Equity	72.1	10.5	3.4		
YoY Growth (%)		1.4	49.2	Net Debt to Equity	64.4	9.3	3.3		
Depreciation & Amortization	15.5	15.7	17.2	Net Debt to EBITDA	3.4	4.0	2.9		
EBIT	49.0	49.6	80.4						
Margin (%)	7.6	7.2	9.6	Return Ratios (%)					
YoY Growth (%)		1.3	62.0	Return on Equity	24.8	35.9	72.4		
Other Income	11.3	6.2	10.9	Return on Capital Employed	13.4	11.2	16.6		
Finance Cost	45.0	27.0	24.8	Return on Invested Capital	18.2	15.4	21.7		
Interest Coverage (X)	1.1	1.8	3.2						
Exceptional Item	0.0	0.0	20.0	Working Capital Ratios					
PBT	15.3	28.8	86.4	Payable Days (Nos)	77	67	51		
Margin (%)	2.4	4.2	10.3	Inventory Days (Nos)	88	77	101		
YoY Growth (%)		88.5	199.8	Receivable Days (Nos)	65	96	77		
Tax Expense	3.0	5.7	18.3	Net Working Capital Days (Nos)	76	106	127		
Tax Rate (%)	19.4	19.9	21.1	Net Working Capital to Sales (%)	20.8	29.0	34.7		
PAT	12.3	23.1	68.2						
Margin (%)	1.9	3.3	8.1	Valuation (X)					
YoY Growth (%)		87.3	195.3	P/E	0.2	0.1	0.0		
Min Int/Sh of Assoc	(0.8)	(1.6)	(5.0)	P/BV	0.6	0.1	0.0		
Net Profit	11.5	21.5	63.2	EV/EBITDA	3.5	4.0	2.9		
Margin (%)	1.8	3.1	7.5	EV/Sales	0.3	0.4	0.3		
YoY Growth (%)		86.2	193.9						

Source: Ventura Research





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