AXIS CAPITAL

IPO NOTE

AVALON TECHNOLOGIES LIMITED

Issue highlights

- **Avalon Technologies Limited ("Avalon Technologies")** was incorporated on November 3, 1999. Avalon Technologies is one of the leading fully integrated Electronic Manufacturing Services ("**EMS**") companies with end-to-end capabilities in delivering box build solutions in India in terms of revenue in Fiscal 2022, with a focus on high value precision engineered products. 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 certain global original equipment manufacturers ("**OEMs**"), including OEMs located in the United States, China, Netherlands, and Japan.
- Company's capabilities include PCB design and assembly, cable assembly and wire harnesses, sheet metal fabrication and machining, magnetics, injection moulded plastics and end-to-end box build of electronic systems. They specialize in manufacturing and providing design support for critical integrated assemblies, sub-assemblies, components and enclosures for multiple industry verticals.
- Avalon Technologies has a unique global delivery model, comprising design and manufacturing capabilities across both India and the United States. **Avalon Technologies is the only Indian EMS company with full-fledged manufacturing facilities in the United States**, which gives them a unique competitive advantage in the North American markets.
- 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.

Brief Financial Details*

(₹ In Cr)

	As at Nov' 30,		As at Mar' 31,		
	2022(08)	2021(08)	2022(12)	2021(12)	2020(12)
Share Capital	11.34	1.60	1.60	1.60	1.53
Instruments entirely equity in nature	3.50	-	-	-	-
Reserves	133.00	93.27	85.59	58.35	45.04
Net Worth	147.83	94.87	87.19	59.95	46.57
Revenue from Operations	584.79	541.40	840.72	690.47	641.87
Revenue Growth (%)	8.01%	-	21.76%	7.57%	-
EBITDA	68.06	58.29	97.55	66.14	64.48
EBITDA Margin (%)	11.64%	10.77%	11.60%	9.58%	10.05%
Profit before Tax	47.39	53.56	86.43	28.83	15.30
Net Profit for the period	34.19	42.30	68.16	23.08	12.33
Net Profit Margin (%)	5.73%	7.78%	8.00%	3.32%	1.89%
EPS – Basic & Diluted (₹)	6.10^	6.79^	11.30	4.01	2.21
RONW (%)	28.17%^	49.00%^	85.86	40.36	25.19
Net Asset Value (₹)	26.37	16.98	15.60	11.19	8.93

*Source: RHP, *Restated Consolidated, ^ not annualised, Net profit margin on Total revenue*

Issue Details

Fresh Issue of Equity shares aggregating upto ₹320 Cr and Offer for sale of Equity shares aggregating upto ₹545 Cr

Issue size: ₹ 865 Cr
No. of shares: 20,843,373 – 19,839,449 Shares
Face value: ₹ 2/-

Price band: ₹ 415 – 436
Bid Lot: 34 Shares and in multiple thereof

Post Issue Implied Market Cap = ₹ 2,725 – 2,847 Cr

BRLMs: JM Financial, DAM Capital, IIFL Securities, Nomura Financial
Registrar: Link Intime India Pvt. Ltd.

Issue opens on: Monday, **3rd Apr'2023**
Issue closes on: Thursday, **6th Apr'2023**

Indicative Timetable

Activity	On or about
Finalisation of Basis of Allotment	12-04-2023
Refunds/Unblocking ASBA Fund	13-04-2023
Credit of equity shares to DP A/c	17-04-2023
Trading commences	18-04-2023

Issue break-up

	No. of Shares		₹ In Cr	% of Issue
	@Lower	@Upper		
QIB	15,632,531	14,879,588	648.75	75%
NIB	3,126,505	2,975,917	129.75	15%
-NIB1	*1042168*	*991,972*	*43.25*	-
-NIB2	*2084337*	*1,983,945*	*86.50*	-
RET	2084337	1,983,944	86.50	10%
Total	**20843373**	**19,839,449**	**865.00**	**100%**

NIB-1=NII Bid between ₹ 2 to 10 Lakhs
NIB-2 =NII Bid Above ₹ 10 Lakhs

Listing: BSE & NSE

Shareholding (No. of Shares)

Pre issue	Post issue~	Post issue^
57,953,128	65,663,971	65,292,577

~@Lower price Band ^@ Upper Price Band

Shareholding (%)

	Pre-Issue	Post-Issue
Promoters	53.38%	36.74%
Promoters Group	17.37%	14.50%
Public – Other Selling S/h	22.28%	12.19%
Public - Others	6.97%	36.58%
Total	**100.00%**	**100.00%**

For additional information & risk factors please refer to the Red Herring Prospectus.

BACKGROUND

Company and Directors

The Company was incorporated as 'Avalon Technologies Private Limited' on November 3, 1999. Kunhamed Bicha and Bhaskar Srinivasan are the Promoters of the company. Currently the promoters collectively hold 30,936,108 Equity Shares, representing 53.38% of the pre-Offer issued, subscribed and paid-up capital of the company.

Company History

The company was incorporated in 1999 at Chennai, India as a manufacturing facility catering mainly to ABV Electronics Inc, USA (doing business as **Sienna Corporation**), and in 2000 they commenced their operations of pure play Printed Circuit Board ("**PCB**") design and assembly in India. The inception of the business originally commenced with the setup of ABV Electronics Inc, for manufacturing of PCB assemblies at Fremont, California in the US in 1995 by their promoters. They have enhanced their offering to include sheet metal fabrication, cable assembly and wire harnesses, magnetics, electromechanical assemblies, injection moulded plastics along with in-house design capabilities, thus making them a fully integrated player in the EMS industry.

The company was set up by Kunhamed Bicha and Bhaskar Srinivasan, who have more than 2 decades of experience in the field of EMS, and they have been instrumental in the growth of their business. They also have a diversified Board of Directors, which is supplemented by a strong management team with experience in the EMS sector and with a track record of performance.

Brief Biographies of Directors

Kunhamed Bicha is one of the Promoters and Chairman and Managing Director of the company. He co-founded Sienna and currently serves as its chief executive officer. He has been associated with the company since its incorporation.

Bhaskar Srinivasan is one of the Promoters and Non-executive Director of the Company. He co-founded Sienna and currently serves as its president. He has been associated with the company since its incorporation. Prior to joining the company, he was associated with Applied Materials, Inc.

Luquman Veedu Ediyanam is the Non-executive Director of the company. He has been associated with the company since March 3, 2017. Currently he is the legal partner and the managing director at Dhafir Technologies LLC, United Arab Emirates since its establishment in 1970.

Sareday Seshu Kumar is the Non-executive Director of the company. Prior to joining the company, he was associated with Emantras Interactive Technologies Pvt Ltd as its founder and chief executive officer.

Venkataramani Ananthramakrishnan is the Independent Director of the company. Currently he is serving as the managing director of IP Rings Ltd since 2010, a company forming part of the Amalgamations group.

Chandar Pattabhiram is the Independent Director of the company. He is currently serving as the chief marketing officer of Coupa Software Incorporated. Prior to joining the company, he was associated with Badgeville, Inc. and Marketo, Inc.

Byas Unnikrishnan Nambisan is the Independent Director of the company. He is currently the chief executive officer and is a director on the board of Ezetap Mobile Solutions Pvt Ltd ("**Ezetap**") and has been associated with Ezetap since June 2014.

Nandita Abraham is the Independent Director of the company. She was associated with the Pearl Academy for over 19 years and is currently serving as the chief partnership officer at GUS Global Services (India) Pvt Ltd.

Key Managerial Personnel

R M Subramanian is the Chief Financial Officer of the company and is responsible for the financial functions of the company and Subsidiaries. He joined the company on August 2, 2019. He has several years of experience in the financial functions. Prior to joining the Company, he was associated with A.F. Ferguson & Co, Cairn Energy India Pty Ltd, Greenstar Fertilizers Ltd, Essar Oil Ltd, Sembcorp India Pvt Ltd and Chemplast Cuddalore Vinyls Ltd.

Dr. Rajesh V is the Company Secretary, Compliance Officer and Legal Head of the company and is responsible for secretarial and legal functions of the company. He joined the company on February 2, 2022. He has several years of

experience in the secretarial and legal functions. Prior to joining the Company, he was associated with Chemfab Alkalis Ltd, Lancor Holdings Ltd, M Damodharan & Associates, Global Hospitals and S&S Power Switchgear Ltd

Kesavan P is the vice president - operations of the company. He joined the company on May 1, 2000. He has several years of experience in operations pertaining to printed circuit board and cables division. Prior to joining the company, he was associated with Quest Smartech Pvt Ltd, Texmaco Micro Indo Utama, Quest Technology, Sun Fibre Optics Pvt Ltd, MiniCircuits Ltd, and Talent Packaging Industries.

Arjun Balakrishnan is the vice president – corporate strategy of ATSPL and is responsible for the operations of the metals, aerospace and plastics division of the company. He joined ATSPL on December 1, 2015. He has several years of experience in the various functions including manufacturing operations, supply chain management, sub-contracting, program management, business development, quality and delivery. Prior to joining ATSPL, he was associated with the Holm Industries as manager-international business and productivity, GE Power Controls India Ltd and Panasonic India Pvt Ltd

Shamil Bicha is the vice president – business development of the company. He joined the company on July 2, 2002 and is responsible for overall sales, business development and marketing of the company. He has several years of experience in functions pertaining to business development. Prior to joining the company, he was associated with Applied Materials, Inc.

Michael Raj A is the general manager – human resources of the company and is responsible for all the human resources functions of the company and Indian Subsidiaries. He joined the company on April 1, 2020. He has several years of experience in various human resources functions. Prior to joining the company, he was associated with Wabco India Ltd and Sheenlac Paints Ltd, ESAB India Ltd and Sherston Educational Software Pvt Ltd and with Visteon Electronics India Pvt Ltd.

O J Sathish is the vice president and head – PCB and semi-conductor engineering of Sienna ECAD and heads the design and development division of Sienna ECAD. He joined Sienna ECAD on September 7, 1997. He has several years of experience in the various fields including designing and development of printed circuit boards, marketing and quality management. Prior to joining the Sienna ECAD, he was associated with Alpha-Imager Pvt Ltd.

Savita R Ganjigatti is the vice president - engineering of Sienna ECAD and heads the printed circuit board design and analysis team of Sienna ECAD. She joined Sienna ECAD on September 7, 1997. She has several years of experience in various functions including engineering and designing complex printed circuit board. Prior to joining the Sienna ECAD, she was associated with Karnataka Telecom Ltd and Alpha-Imager Pvt Ltd.

Harold Frederick Schilb III is the vice president – business development of Sienna and leads the sales function of Sienna. He joined Sienna on December 2, 2021. He has several years of experience in functions pertaining to business development. Prior to joining the Sienna, he was associated with Dwfritz Automation, LLC, Celestica Corporation, Electri-Cord Manufacturing Co, IEC Electronics Corp, Industrial Electronics Services Inc, Plexus Corp and Solectron.

Michael Robinson is the chief operating officer of Sienna and is responsible for overall operations of the manufacturing business in the USA. He joined Sienna on December 5, 2008. He has several years of experience in functions pertaining to manufacturing and operations. Prior to joining Sienna, he was associated with Motorola Inc. and Wconect, LLC. He co-invented “Battery Identification Apparatus” and “Weldless Battery Pack”, for which patent registrations have been obtained in the USA.

OBJECTS OF THE ISSUE

The net proceeds of the Issue are proposed to be utilised as:

Objects	Amount (₹ Cr)
• Prepayment or repayment of all or a portion of certain outstanding borrowings availed by the Company and one of their Material Subsidiaries, ATSPL	145.00
• Funding the working capital requirements of the Company	90.00
• General Corporate Purposes	[•]
Total	[•]

OFFER DETAILS

Fresh Issue	₹ Cr	No. of Shares	Weighted Average cost of acquisition (₹)
Fresh Issue	**₹ 320 Cr**	Upto 7,710,843~ - 7,339,449^ Equity Shares	_
The Offer for Sale by:	**(₹ 545 Cr)**	**Upto 13,132,530~ - 12,500,000^ Equity Shares**	
The Promoter Selling Shareholders			
- *Kunhamed Bicha*	*₹ 131.00 Cr*	*Upto 3,156,627~ - 3,004,587^ Equity Shares*	*2.15*
- *Bhaskar Srinivasan*	*₹ 172.00 Cr*	*Upto 4,144,578~ - 3,944,954^ Equity Shares*	*2.33*
The Promoter Group Shareholders			
- *T P Imbichammad*	*₹ 16.00 Cr*	*Upto 385,542~ - 366,972^ Equity Shares*	*2.01*
- *Mariyam Bicha*	*₹ 10.00 Cr*	*Upto 240,964~ - 229,358^ Equity Shares*	*3.79*
The Other Selling Shareholders			
- *Anand Kumar*	*₹ 75.50 Cr*	*Upto 1,819,277~ - 1,731,651^ Equity Shares*	*23.90*
- *Sareday Seshu Kumar*	*₹ 65.00 Cr*	*Upto 1,566,265~ - 1,490,826^ Equity Shares*	*0.01*
- *Luquman Veedu Ediyanam*	*₹ 75.50 Cr*	*Upto 1,819,277~ - 1,731,651^ Equity Shares*	*61.59*

(~ at lower price band and ^ at upper price band and rounded/adjusted to the nearest).

SHAREHOLDING PATTERN

Shareholders	Pre-offer		*No. of Shares offered^*	Post-offer	
	Number of Equity Shares	% of Total Equity Share Capital		Number of Equity Shares	% of Total Equity Share Capital
Promoter	30,936,108	53.38%	6,949,541	23,986,567	36.74%
Promoters Group	*10,063,650*	*17.37%*	596,330	9,467,320	*14.50%*
Total for Promoter and Promoter Group	**40,999,758**	**70.75%**	**7,545,872**	**33,453,886**	**51.24%**
Public – Other Selling Shareholders	*12,911,813*	*22.28%*	4,954,128	7,957,685	*12.19%*
Public - Other	*4,041,557*	*6.97%*	0	23,881,006	*36.58%*
Total for Public Shareholder	**16,953,370**	**29.25%**	**4,954,128**	**31,838,690**	**48.76%**
Total Equity Share Capital	**57,953,128**	**100.00%**	**12,500,000**	**65,292,577**	**100.00%**

^ at upper price band and rounded/adjusted to the nearest.

Details of Pre- IPO Placement of ₹ 80 Cr

The company has undertaken a Pre-IPO Placement of **798,339 Equity Shares** at a price of **₹ 375.78**/ - per share, aggregating to **₹ 30 crore** and **1,173,543 Equity Shares** at a price of **₹ 426.06**/ - per share, aggregating to **₹ 50** crore as under:

Name of the Entity	No. of Equity Shares	Price per share (₹)	Amount (₹ Cr)
Unifi Financial Pvt Ltd	798,339	375.78	30.00
Ashoka India Equity Investment Trust PLC	1,173,543	426.06	50.00
Total	**1,971,882**		**80.00**

BUSINESS OVERVIEW

Avalon Technologies Ltd ("**Avalon Technologies**") is one of the leading fully integrated Electronic Manufacturing Services ("**EMS**") companies with end-to-end capabilities in delivering box build solutions in India in terms of revenue in Fiscal 2022, with a focus on high value precision engineered products. Through a unique global delivery model, 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 certain global original equipment manufacturers ("**OEMs**"), including OEMs located in the United States, China, Netherlands and Japan. Through their end-to-end capabilities, their customers achieve tangible benefits such as reduced manufacturing costs, improved supply chain management and reduced inventory obsolescence.

Company's capabilities include PCB design and assembly, cable assembly and wire harnesses, sheet metal fabrication and machining, magnetics, injection moulded plastics and end-to-end box build of electronic systems. They specialize in manufacturing and providing design support for critical integrated assemblies, sub-assemblies,

components and enclosures for multiple industry verticals. The end-use industries they cater to include a mix of established and long product lifecycle industries, such as industrial, mobility and medical devices and high growth "sunrise" industries, such as solar, electric vehicles and hydrogen in the clean energy sector and digital infrastructure in the communications sector.

They have developed long relationships with certain of their customers through a client servicing model which aims to provide fully integrated solutions, robust manufacturing capabilities, delivering quality products on time, supply chain efficiency as well as a focus on new product development. Their new product development approach typically starts with component level design engagement with customers. This allows them to be entrenched with the customer from the conception of their product, and subsequently move up the value chain with their customers by leveraging their fully integrated offerings.

MARQUEE CUSTOMERS

Avalon has several global brands as customers both in India and overseas. Some of their marquee customers across the end-use industries are:

- **Kyosan India Pvt Ltd.,**
- **Faiveley Transport Rail Technologies India Pvt Ltd.,** a Wabtec Company,
- **TransDigm Technologies India Pvt Ltd.,**
- **Zonar Systems Inc.,**
- **Collins Aerospace** in the mobility industry,
- **Caire Inc,** in the medical industry,
- **e-Infochips Pvt Ltd.,**
- **Haas Automation, Inc**. in the industrial sector,
- **TMEIC and Ohmium India Pvt Ltd** in the clean energy sector
- **The US Malabar Co.,**
- **Systech Corporation**
- **Meggitt (Securaplane Technologies Inc)**

In addition to maintaining their relationships with existing customers, they have increased their key customer base:

	For 8 months ended Nov'30		Fiscal		
	2022	2021	2022	2021	2020
Customer Base	89	72	81	62	54
Order Book (Open Order) (₹ Cr)	1,190.25	918.23	857.87	634.58	504.67

They have been recognized by their customers with various awards including "Best Supplier Award for demonstrated sustained performance" from Collins Aerospace, Bengaluru in 2019 and "Supplier Excellence Award for Strategic Partnership" from Faiveley Transport Rail Technologies India Pvt Ltd, a Wabtec Company in 2018. As they have a diversified client base across multiple end-use industries, they have minimal concentration risk.

Avalon Technologies has a unique global delivery model, comprising design and manufacturing capabilities across both India and the United States. **Avalon Technologies is the only Indian EMS company with full-fledged manufacturing facilities in the United States**, which gives them a unique competitive advantage in the North American markets.

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

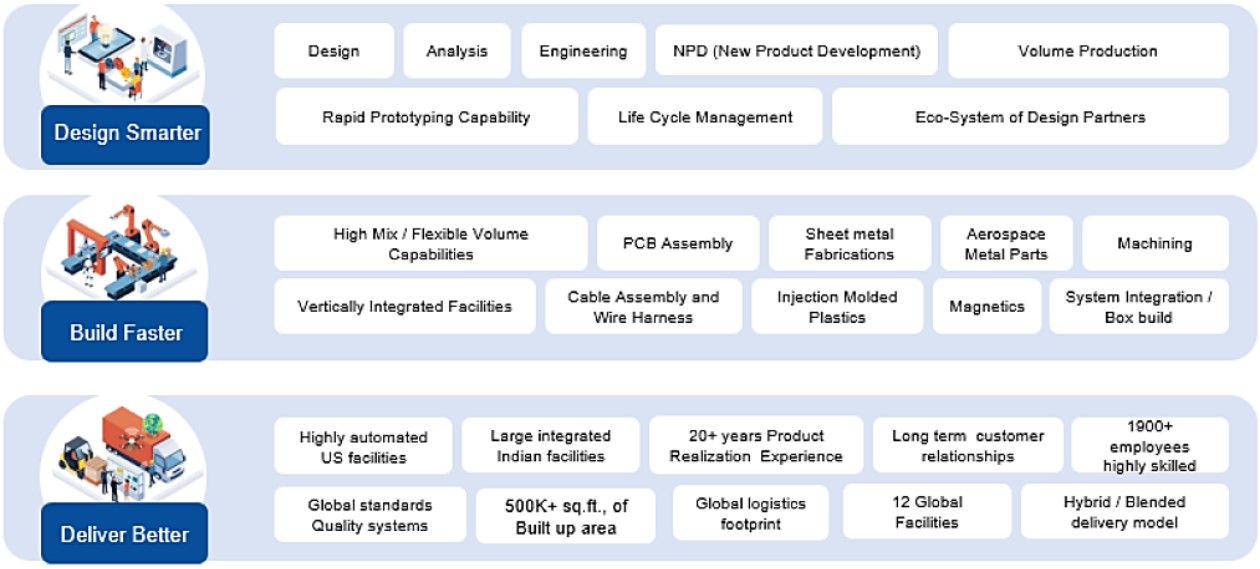
- 1 unit in Atlanta, Georgia,
- 1 unit in Fremont, California,
- 7 units in Chennai, Tamil Nadu,
- 1 unit in Kanchipuram, Tamil Nadu and
- 2 units in Bengaluru, Karnataka.

This enables them to offer clients local manufacturing services across these locations depending on their needs, and also leverage favourable policy initiatives such as the 'Make in India' program of the GoI, leading to high customer retention and cost-efficient manufacturing. They also benefit from leveraging manufacturing cost arbitrage, through their manufacturing facilities located in India, for the global market. Further, they stand to benefit from the tailwinds of Aatmanirbhar Bharat and the Production Linked Incentive Scheme ("**PLI Scheme**") (which they are eligible for) across verticals, which would help to reduce import dependence as well as position India as an export hub.

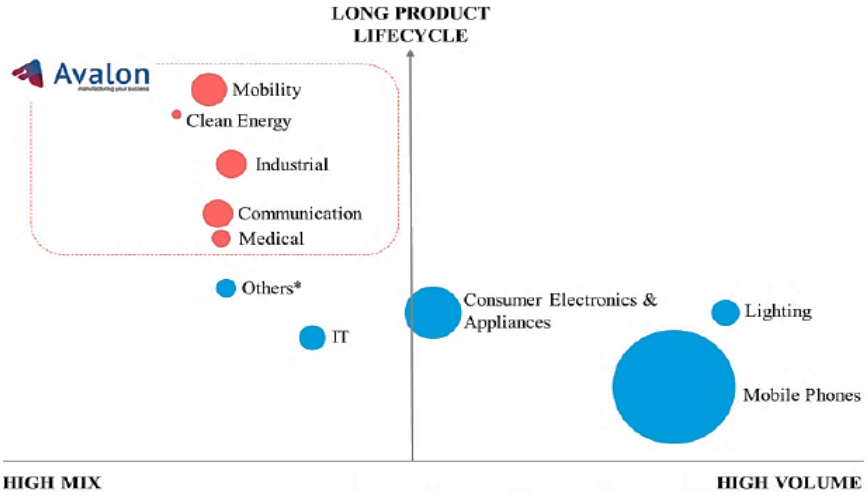
Each of their manufacturing facilities integrates manufacturing, warehousing and logistics. Their electronic manufacturing facilities comprise an aggregate of 66 production lines, consisting of 11 Surface Mount Technology ("**SMT**") lines, 12 Through Hole Technology ("**THT**") lines and 43 assembly lines. They have separate lines for their sheet metal fabrication, machining, cable assembly and wire harnesses, magnetics and plastics to mention a few. Each of their facilities is accredited with global quality standards and certifications. Their manufacturing facilities are staffed by a workforce of 2,004 persons, as of November 30, 2022. Their operations are enhanced by the 243 members strong product engineering teams, as of November 30, 2022, who have backgrounds in multiple engineering disciplines, including electrical and electronics, mechanical, aeronautical, plastics engineering and mechatronics, among others.

Company's Capabilities and Value Propositions

Avalon Technologies is a fully integrated EMS provider and continue to expand their offerings. They started in 1999 as a pure play PCB assembler and have invested in their capabilities and become vertically integrated to include multiple offerings. They have a significant level of vertical integration in the EMS industry, that includes PCB assembly, cable assembly and wire harnesses, sheet metal fabrications and machining, injection moulded plastics, magnetics and end-to-end box build. Each of their diversified capabilities stands alone on its own merit, providing customers with a number of options while also enabling their growth in each of these areas. Further, they also provide design and new product development services, leading to an end-to-end service offering. In addition, they have a unique set of customers for each capability.



Avalon Technologies is one of the leaders in the high mix, flexible volume product manufacturing segment and is present across multiple industry verticals with a focus on complex integrated solutions with significant engineering content. They service a variety of industries including power, clean energy, railways, aerospace and medical industries, which according to the F&S Report are characterized by long life cycles. Their business has expanded into products such as electric mobility, energy systems, satellite communications, and telematics, among others, that are used in industries such as clean energy and emerging communication technology.



The continuous learning from the diversified offerings makes their workforce capable and creates a platform for nurturing talent. This ensures cost efficiency in developing special processes for specific product iterations such as ultrasonic welding on piston assemblies for fuel dispensers and vacuum and pressure impregnation system which ensures reliable coating of magnetics and transformers. They focus on integrated solutions as opposed to standalone products, led by an engineering-driven new product development approach and sustained by fully integrated in-house capabilities, which enables them to provide holistic solutions to their customers.

MARKET OPPORTUNITIES

The EMS sector is a sizeable industry globally and in India and is poised for robust growth over the next 5 years. The EMS market in India was valued at ₹1,469 billion in Fiscal 2022 and is expected to grow at a CAGR of 32.3% to reach a value of ₹4,502 billion in Fiscal 2026. In particular, the advent of semiconductor manufacturing in India promises significant opportunities for EMS manufacturing, as a key component of such semiconductor manufacturing is PCB design and assembly. In Fiscal 2022, revenue from the India semiconductor industry amounted to ₹2,310 billion, and the market is expected to grow at a CAGR of 19.9%, to reach a market value of ₹4,768 billion in Fiscal 2026.

Avalon Technologies stand to benefit from government initiatives in infrastructure, clean energy and sustainability, both in India and North America. For instance, the rising stringency in the government policies in North America to curb the carbon footprint is witnessing an expansion of electric vehicles and will encourage automakers to opt for electronic manufacturing services. Similarly, the Government of India ("GoI") has taken ample initiatives to effectively integrate renewable energy into the present energy mix, which presents an enormous opportunity to establish regional hubs for exporting high-value green products.

REVENUE FROM OPERATIONS

(₹ Cr)

Particulars	For the 8 Months ended November 30		For the Year Ended March 31,		
	2022	2021	2022	2021	2020
Revenue from Operations					
- Sales of Products	530.80	501.53	771.78	639.61	615.66
- Sales of services	52.63	39.00	67.54	49.99	25.44
Other operating revenues					
- Scrap sales	1.35	0.87	1.39	0.87	0.77
Total for Revenue from Operations	**584.79**	**541.40**	**840.72**	**690.47**	**641.87**

Product line wise breakup of Revenue:

(₹ Cr)

Categories of products sold	For the 8 Months ended November 30		For the Year Ended March 31,		
	2022	2021	2022	2021	2020
Box Build	281.94	303.02	373.99	327.68	283.09
Printed Circuit Board	194.02	135.48	296.17	242.95	228.61
Cables	57.55	51.29	84.64	63.54	54.51
Metal	22.41	19.80	35.16	29.12	45.48
Magnetics	10.72	16.05	26.57	8.78	6.79
Design	13.64	12.18	18.47	15.12	13.98
Plastics	4.51	3.59	5.74	3.30	9.41
Total	**584.79**	**541.40**	**840.71**	**690.47**	**614.87**

Company's business is also diversified in terms of customer revenue contribution

Customers	8 months ended November 30, 2022				Fiscal 2022		Fiscal 2021		Fiscal 2020	
	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total
Top-2 Customers	109.79	18.39%	141.82	26.08%	217.37	25.52%	157.11	22.58%	136.08	20.83%
Top-5 Customers	221.74	37.14%	290.04	53.34%	422.83	49.65%	338.63	48.66%	298.32	45.67%
Top-10 Customers	321.94	53.93%	368.22	67.72%	549.93	64.57%	457.75	65.78%	414.04	63.39%
Largest Customer (across all verticals)	58.46	9.79%	71.99	13.24%	109.09	12.81%	83.62	12.02%	68.95	10.56%

Details of the revenue contribution by end-use industry:

Industry Category	Industry Verticals	8 months ended November 30, 2022				Fiscal 2022		Fiscal 2021		Fiscal 2020	
		Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total
Clean Energy	• Solar Electric Vehicle Hydrogen	138.88	23.26%	104.45	19.21%	172.69	20.28%	123.43	17.74%	102.62	15.71%
Mobility / Transportation	• Railways • Automotive • Aerospace	133.69	22.39%	161.48	29.70%	226.47	26.59%	198.37	28.51%	201.20	30.80%
Industrial	• Power • Automation	167.56	28.07%	162.64	29.91%	255.83	30.04%	204.25	29.35%	182.34	27.92%
Communication	• Telecom and Satellite • Digital Infrastructure • (IOT and 5G)	53.91	9.03%	33.02	6.07%	61.14	7.18%	54.67	7.86%	40.94	6.27%
Medical	-	51.96	8.70%	42.96	7.90%	65.64	7.71%	54.47	7.83%	52.74	8.07%
Others*	• Defense • Design	50.98	8.54%	39.16	7.20%	69.88	8.21%	60.71	8.72%	73.31	11.22%
Total		**596.98**	**100.00%**	**543.72**	**100.00%**	**851.65**	**100.00%**	**695.90**	**100.00%**	**653.15**	**100.00%**

** Others also includes other income.*

Details of the Total Number of Customers by end-use industry:

End Use Industry	8 months ended November 30, 2022 No. of Customers	8 months ended November 30, 2021 No. of Customers	Fiscal 2022 No. of Customers	Fiscal 2021 No. of Customers	Fiscal 2020 No. of Customers
Clean Energy	14	7	11	6	4
Mobility	13	13	14	12	11
Industrial	39	33	38	30	26
Communication	11	9	8	6	5
Medical & Others	12	10	10	8	8
Total	**89**	**72**	**81**	**62**	**54**

The revenue contribution based on geography:

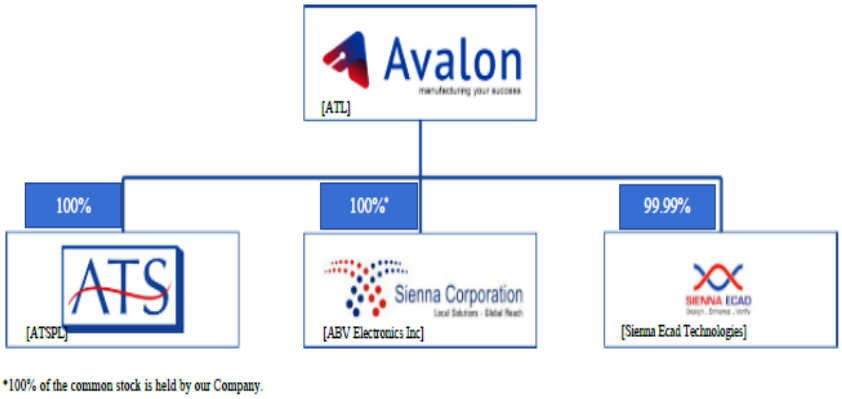
Region	8 months ended November 30, 2022 Amount (₹ Cr)	% to Total	Amount (₹ Cr)	% to Total	Fiscal 2022 Amount (₹ Cr)	% to Total	Fiscal 2021 Amount (₹ Cr)	% to Total	Fiscal 2020 Amount (₹ Cr)	% to Total
United State	345.38	57.87%	349.27	62.65%	529.66	62.19%	435.96	62.65%	406.63	62.26%
India*	251.59	42.14%	194.45	37.35%	322.00	37.81%	259.93	37.35%	246.52	37.74%
Total Income	**596.98**	**100.00%**	**543.72**	**100.00%**	**851.66**	**100.00%**	**695.89**	**100.00%**	**653.15**	**100.00%**

**India includes (i) customers whose revenue is less than US$200,000 and (ii) other income.*

KEY PERFORMANCE INDICATORS

Particulars	8 Months ended November 30 2022	8 Months ended November 30 2021	Fiscal 2022	Fiscal 2021	Fiscal 2020
Material Margin (%)	37.10%	33.81%	34.09%	33.96%	35.93%
EBITDA Margin (%)	11.64%	10.77%	11.60%	9.58%	10.05%
PAT Margin (%)	5.73%	7.78%	8.00%	3.32%	1.89%
ROCE (%)	17.58%	15.96%	27.41%	21.26%	26.83%
Asset Turnover Ratio	6.36	6.78	9.40	8.30	8.92
Order Book (₹ Cr)	1,190.25	918.23	857.87	634.58	504.67
- *India*	*696.88*	*521.84*	*487.54*	*307.48*	*303.65*
- *USA*	*493.36*	*396.39*	*370.33*	*327.10*	*201.02*
Net working Capital (₹ Cr)	352.13	239.37	277.74	219.96	149.91
Net Debt (₹ Cr)	304.52	250.92	283.91	261.81	221.89

COMPANY BUSINESS AND PRODUCTS



*100% of the common stock is held by our Company.

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.

The key functional aspects of their business are Manufacturing and assembly, Design, analysis and prototyping of printed board assemblies, Engineering and development, Components, Sourcing, Supply chain development, Logistics and distribution and Aftermarket services,

Company's Capabilities:

Design Services: Company's design division located in Bengaluru, Karnataka makes them a PCB analysis/design engineering company operating in various verticals including networking, power, transportation, semiconductor, IOT and medical. They serve their customers across the globe and provide complex PCB design solutions, including PCB design, signal integrity analysis (time domain and frequency domain), thermal electromagnetic compatibility ("**EMC**") and electromagnetic interference ("**EMI**") protection and reliability analysis that meet the specifications prescribed by the Institute for Printed Circuits.

New Product Development: Company's NPD division is equipped with an advanced PCB assembly/test facility focused on quick turnarounds of assembly processes. The NPD division handles the latest technology of component packages in their NPD assembly line, including new releases of component packages by semiconductor companies, securing a competitive advantage for them in the PCB assembly market by a few years.

Electronics 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***

The company provides a variety of services including highly complex double-sided PCB assembly, high mix assembly, low to medium volume assembly, flex and rigid PCB assembly, RoHS and non-RoHS processes, SMT assembly, through-hole and mix technology assembly, and backplanes assembly.

Metals/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: 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:
Transformers: Their transformers are used in various industries including aerospace, industrial and pharmaceuticals. They also manufacture power transformers, current transformers, ferrite transformers and fly back transformers.

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.

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.

The company generates revenues in the end-to-end **box build business** from their key customers, primarily operating in the mobility, industrial and communication sectors.

MANUFACTURING FACILITIES

The graphical representation of the locations of the manufacturing facilities

Company's manufacturing and assembly operations are conducted across 4 locations: 2 in India, in the states of Karnataka and Tamil Nadu and 2 in the US in the states of California and Georgia. Their factories comprise a total aggregate of 66 production lines, consisting of 11 SMT lines, 12 THT lines and 43 assembly lines. Their manufacturing and assembly lines include dedicated and flexible lines. They have dedicated lines which are specialized and tailored to few specific customers such as e-Infochips Pvt Ltd and Kyosan India Pvt Ltd.

The details of the manufacturing facilities and quality certification:

Divisions	Certifications standards	Certification body	Valid Up to
ATS, Chennai (Magnetics)	ISO 9001:2015	TUV SUD	September 9, 2024
ATS Bengaluru, (PCBA)	ISO 9001:2015	TUV SUD	September 9, 2024
	ANSI/ESD S20.20-2014	NQA	July 2, 2023
ATS, Chennai (Metal, Plastics, Powder coating)	ISO 9001:2015	TUV SUD	August 18, 2024
	AS 9100D	TUV SUD	August 18, 2024
Avalon, Chennai (PCBA)	ISO 9001:2015	TUV SUD	June 6, 2024
	IATF 16949:2016	TUV SUD	May 26, 2024
Avalon, Chennai (Cable)	ISO 9001:2015	TUV SUD	August 23, 2023
	IATF 16949:2016	TUV SUD	May 26, 2024
	AS 9100D	TUV SUD	August 18, 2024
ABV Electronics Inc (Fremont, CA, USA)*	ISO 9001:2015	DNV	April 17, 2024
ABV Electronics Inc (Suwanee, GA, USA)*	ISO 9001:2015	DNV	April 6, 2024
ABV Electronics Inc (Suwanee, GA, USA)*	ISO 13485:2016	DNV	April 6, 2024

**Provides design support services, cable assemblies, PCB assemblies and system integration / box build.*

GLOBAL DELIVERY FOOTPRINT

COMPETITIVE STRENGTHS

- ***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. As of November 30, 2022, they had 29 customers for their box-build services, which contributed to 48.21% of the revenue from operations in the 8 months ended November 30, 2022. Further, they focus on continually expanding their technological expertise in manufacturing for diverse industries, integrating their services, and thereby enhancing the capability to serve multiple industry verticals.

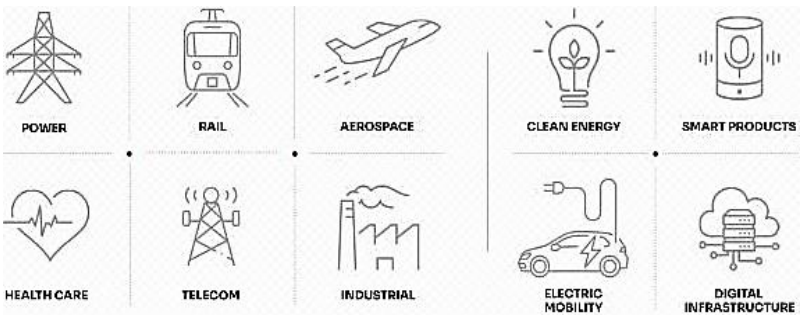
- ***High entry barriers to business through the collective cross-industry experience, customer engagement capabilities and leading position in the high mix flexible volume product manufacturing segment***

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. Given the depth and nature of the engagement with longstanding customers, their customers engage with long lifecycle industries such as power, railways, aerospace, medical, etc. would not find it easy to switchover to alternative EMS providers as the cost, time and effort for such transitions is high.

- ***Well-diversified business leading to strong growth avenues***

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, as set out below.

They are well diversified and are present in virtually every major industry vertical, including clean energy, mobility, industrial, communication and medical. In Fiscal 2022 and in the 8 months ended November 30, 2022, clean energy accounted for 20.28% and 23.36% of the sales, respectively. They also cater to industries which require high precision manufacturing, including aerospace, defense and medical.



- ***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.

The length of relationship with certain customers:

Particulars	8 months ended November 30,		Fiscal		
	2022	2021	2022	2021	2020
Average length of relationship with customers who contribute to top 80% revenue (in number of years)	8.26	8.00	7.15	7.68	7.95

Further, they are a supplier to certain key customers in the railway and aerospace vertical in India. They also provide final integrated solutions to some of their customers' end clients, through logistics and warehousing support, realizing significant supply chain efficiencies for such customers. Certain customers locate their distribution centres inside company's manufacturing facilities in addition to having dedicated lines, ensuring highly efficient distribution operations for their customers.

Avalon Technologies has been recognized by their customers with various awards including "Best Supplier Award" from Collins Aerospace, Bengaluru in 2019, "Supplier Excellence Award for Strategic Partnership" from Faiveley Transport Rail Technologies India Pvt Ltd, a Wabtec Company in 2018 to ATSPL, "Prime Supplier" from Toshiba Mitsubishi Electric Industrial Systems Corporation, Japan in 2017, "Environmental Leadership Award" at the Indian ABO Suppliers Conference from Cummins in 2015, and "Best Indian Supplier 2012" from CE+T.

- ***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. The company has developed a global manufacturing footprint which leverages local manufacturing capabilities, to provide localized services to global clients, through their manufacturing facilities located in India and the US, while leveraging manufacturing cost arbitrage, through their manufacturing facilities located in India, for the global market.

- **Strong financial performance, stable cash flows and visible growth profile**

The company has a track record of sustained growth in revenue and profitability. Their strong product capabilities, high quality and loyal customer base have enabled them to maintain strong financial performance. The company has been able to increase their total income from Fiscal 2020 to Fiscal 2022 at a CAGR of 14.19%. Their order book (open order) has stood at ₹1,190.25 crore as of November 30, 2022. The majority of their open orders will be fulfilled within one year to 18 months. Their financial stability and positive cash flow from operations enable them to meet the present and future requirements of their customers.

- **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. Their key management team has significant experience and has been associated with the company for several years. Further, their Chief Financial Officer has significant experience and has been associated with the company since 2019. In addition, their middle management team and skilled workforce, comprising 1,589 engineers which includes 26 sales and marketing professionals and other skilled workers as of November 30, 2022, provide them with the depth of expertise and managerial skills required to manage their business.

KEY BUSINESS STRATEGIES

- ***Sustaining and catering to high growth sunrise industry sectors such as clean energy and emerging communication technologies***

The company aims to focus on high margin value products within the clean energy and emerging communication technologies sectors. The clean energy sector comprises solar, electric vehicles and hydrogen. The communication sector comprises telecom, satellite and digital infrastructure.

The highlights of their strategy to grow within these sectors, and industry trends within these sectors:

- ***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.

- ***Consolidate and expand the position in global markets for existing industry verticals***

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

The strategy to grow within these sectors, and industry trends within these sectors which will support the growth.

- ***Industrial***: The company caters to 39 customers in the industrial sector, as of November 30, 2022 and, since January 1, 2020, they have onboarded 1 new customers within this industry. The industrial sector, which includes power and automation, was estimated at ₹58 billion in Fiscal 2022 in India, and is expected to grow at a CAGR of 18.7% to reach ₹115 billion by Fiscal 2026.

- ***Communications****:* The company caters to 11 customers in the communications sector, as of November 30, 2022 and, since January 1, 2020, they have onboarded 3 new customers within this industry, including LiveView Technologies, Inc. The communications sector, which includes the telecom and satellite sector and digital infrastructure sector, was estimated at ₹57 billion in Fiscal 2022 in India and is expected to grow at a CAGR of 17.6% to reach ₹109 billion by Fiscal 2026.

- ***Mobility:*** The company caters to 13 customers as of November 30, 2022. The mobility sector, which includes automotive, railways and aerospace, was estimated at ₹78 billion in Fiscal 2022 in India and is expected to grow at a CAGR of 21.6% to reach ₹171 billion by Fiscal 2026.

- ***Medical and Others****:* The company caters to 12 customers in the medical and other sectors as of November 30, 2022. They have onboarded 2 new customers within these sectors. The medical devices sector was estimated at ₹23 billion in Fiscal 2022 in India and is expected to grow at a CAGR of 43% to reach ₹94 billion by Fiscal 2026.

- ***Creating high growth opportunities for the existing offerings***

As business lines of PCBA, cable assembly and wire harnesses, sheet metal fabrication, machining, magnetics and injection moulded plastics are capable of functioning independently, the company intends to focus on high growth opportunities in each of these business verticals.

In sheet metal and injection moulded plastics they have witnessed high growth potential in the aerospace vertical, where they are already present. In magnetics, the company sees high growth opportunities in the power electronics and clean energy vertical. 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.

- ***Focus on expanding the local manufacturing presence in the largest markets, namely the United States and India by leveraging country specific government policy initiatives***

The EMS industry is poised for robust growth over the next 5 years. While the EMS market in India was valued at ₹1,469 billion in Fiscal 2022 and is expected to grow at a CAGR of 32.3% to reach a value of ₹4,502 billion in Fiscal 2026. The order book in the US (i.e., orders received directly by the US entity, namely Sienna) has been steadily increasing from ₹201.02 crore as of March 31, 2020 to ₹327.10 crore as of March 31, 2021 and further to ₹370.33 crore as of March 31, 2022, representing 30.78%, 47% and 43.48% of the total income, respectively. As of November 30, 2021 and 2022, the order book in the US has increased to ₹396.39 crore and ₹493.38 crore, representing 72.90% and 82.65% of the total income, respectively.

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

The company 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: (i) the automated portion of manufacturing is conducted in their manufacturing facilities in the US, and the labour intensive portion is conducted in India and the product is configured in the US; and (ii) the option to cater directly to customers in the US from their Indian manufacturing bases, leveraging high value markets and optimal cost manufacturing in India. To this effect, they have recently acquired a new manufacturing facility spread over a total built up area of 93,552 sq. ft. in the SEZ, Chennai and they intend to continue using this model as demonstrated by the inclusion of a new SMT line at Atlanta, Georgia.

- ***Invest in expanding the technological capabilities and manufacturing capacities***

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. From Fiscal 2020 to Fiscal 2022, they have increased the aggregate SMT production lines of their manufacturing facilities from 8 to 10, and the total installed SMT capacity from 244 million component placement per year to 366 million component placement per year. During the 8 months ended November 30, 2022, they have increased the number of SMT lines to 11 with a corresponding increase in component placements per year to 322 million component placements per year.

INDUSTRY OVERVIEW

Source: Frost & Sullivan

EMS Market Landscape

Automotive Sector	Railway EMS Space	Other Support to Indian Railways*	Aerospace
• Jabil, • Sanmina, • Kaynes, • **Avalon Technologies,** • Syrma SGS	• **Avalon Technologies,** • Kaynes, • Cyient	• RVNL, • Railtel, • DFCC, • Concor	• Kaynes, • **Avalon Technologies,** • Cyient, • Centum

* RVNL is helping build engineering works required by the Indian Railways and Railtel is helping to modernise the train control operation and safety system of the railways.

Comparison of presence of key EMS companies in the Application segments, India, FY22

Name of the EMS Company	Clean Energy	Automotive	Railways	A&D	Industrial	Telecom	Medical	CEA	Others	Company Focus
Avalon Technologies Ltd	✓	✓	✓	✓	✓	✓	✓		✓	B2B
Dixon Technologies India Ltd							✓	✓	✓	B2C
Amber Enterprises India Ltd		✓	✓					✓	✓	B2C, B2B
Elin Electronics Ltd		✓					✓	✓	✓	B2C
Syrma SGS Technology Ltd	✓	✓			✓	✓	✓		✓	B2B
Kaynes Technology India Ltd		✓	✓	✓	✓		✓	✓	✓	B2C, B2B
Bharat FIH Ltd	✓	✓				✓		✓	✓	B2C
SFO Technologies Pvt Ltd		✓		✓	✓	✓	✓		✓	B2B
VVDN Technologies Pvt Ltd					✓	✓			✓	B2B

A&D =Aerospace & Defence, CEA = Consumer Electronics & Appliances; Telecom=Communication; Others include Mobile Phones, IT Hardware, Lighting, Energy, Power.

Services offered by key EMS companies, India, FY22

Name of the EMS Company	Design	Testing	PCB Assembly	Box Build	Vertical Integration	After-market	Manufacturing Locations
Avalon Technologies Ltd	✓	✓	✓	✓	✓	✓	Chennai & Bengaluru (India) and Atlanta & Fremont (USA)
Dixon Technologies India Ltd	✓	✓	✓	✓		✓	Noida, Dehradun, and Tirupati/ Chitoor District
Amber Enterprises India Ltd	✓	✓	✓	✓		✓	Rajpura, Jhajjar, Faridabad, Pune, Kala amb, Dehradun and Noida
Elin Electronics Ltd	✓	✓	✓	✓		✓	Ghaziabad, Baddi and Goa
Syrma SGS Technology Ltd	✓	✓	✓			✓	Chennai, Bargur, Bengaluru,Baddi, Bawal, Gurugram and Manesar
Kaynes Technology India Ltd	✓	✓	✓	✓	✓	✓	Mysore, Bengaluru, Chamarajnagar, Chennai, Mumbai, Selaqui, Parwanoo, Sanand
Bharat FIH Ltd	✓	✓	✓	✓	✓	✓	Sri City, Sriperumbudur, Sungavarchatram
SFO Technologies Pvt Ltd	✓	✓	✓	✓	✓	✓	Kochi, Trivandrum and Bangalore
VVDN Technologies Pvt Ltd	✓	✓	✓				Gurugram

Revenue and EBITDA of key EMS companies, India, Value in ₹ crore, FY19 - FY22

	Operating Revenue (₹ Cr)					EBITDA (₹ Cr)				
Name of the EMS Company	CAGR (%)	FY22	FY21	FY20	FY19	CAGR (%)	FY22	FY21	FY20	FY19
Avalon Technologies Ltd	**14.4%**	**840.72**	**690.47**	**641.87**	**NA**	**23.0%**	**97.55**	**66.14**	**64.48**	**NA**
Dixon Technologies India Ltd	55.9%	10,697.08	6,448.17	4,400.12	2,984.45	30.4%	379.05	286.59	223.06	134.87
Amber Enterprises India Ltd	3.0%	4,206.40	3,030.52	3,962.79	2,751.99	(5.6)%	275.38	220.29	309.27	212.86
Elin Electronics Ltd	18.0%	1,093.75	862.38	785.58	828.55	19.4%	79.02	66.48	55.46	57.02
Syrma SGS Technology Ltd	21.0%	1,266.65	887.40	865.65	794.74	(4.0)%	125.98	99.91	136.56	90.37
Kaynes Technology India Ltd	38.5%	706.25	420.63	368.24	364.23	50.5%	93.67	40.89	41.33	35.04
Bharat FIH Ltd	(17.5)%	18,149.20	15,854.86	26,635.56	34,345.39	(15.7)%	492.78	386.93	693.28	(26.92)
SFO Technologies Pvt Ltd	(0.3)%	NA	1,659.34	1,788.97	1,669.65	22.8%	NA	156.28	157.90	103.68
VVDN Technologies Pvt Ltd	94.7%	1,171.79	662.78	309.09	263.22	-	129.06	75.52	(19.71)	30.58

Note: CAGR for SFO Technologies Ltd is considered from FY 19 to FY21; for all other peers it is FY20 to FY22.

Comparative Analysis - Gross, EBITDA and PAT margins of key EMS companies, India, Ratio in %, FY19 - FY22

	Gross Margin (%)				EBITDA (%)				PAT Margin (%)			
Name of the EMS Company	FY22	FY21	FY20	FY19	FY22	FY21	FY20	FY19	FY22	FY21	FY20	FY19
Avalon Technologies Ltd	**34.1%**	**34.0%**	**35.9%**	**NA**	**11.6%**	**9.6%**	**10.0%**	**NA**	**7.4%**	**3.1%**	**1.8%**	**NA**
Dixon Technologies India Ltd	8.6%	10.5%	12.3%	12.6%	3.5%	4.4%	5.1%	4.5%	1.8%	2.5%	2.7%	2.1%
Amber Enterprises India Ltd	16.1%	17.1%	16.7%	15.7%	6.5%	7.3%	7.8%	7.7%	2.6%	2.7%	4.0%	3.4%
Elin Electronics Ltd	25.4%	27.6%	29.5%	26.5%	7.2%	7.7%	7.1%	6.9%	3.6%	4.0%	3.5%	3.5%
Syrma SGS Technology Ltd	29.6%	32.6%	36.0%	31.6%	9.9%	11.3%	15.8%	11.4%	5.6%	7.0%	10.0%	6.5%
Kaynes Technology India Ltd	30.7%	32.0%	34.4%	33.7%	13.3%	9.7%	11.2%	9.6%	5.8%	2.2%	2.6%	2.6%
Bharat FIH Ltd	7.1%	7.3%	6.5%	4.9%	2.7%	2.4%	2.6%	(0.1)%	1.1%	1.0%	1.5%	(0.6)%
SFO Technologies Pvt Ltd	NA	38.2%	35.8%	34.5%	NA	9.4%	8.8%	6.2%	NA	2.2%	4.2%	1.7%
VVDN Technologies Pvt Ltd	41.4%	47.5%	62.2%	63.9%	11.0%	11.4%	(6.4)%	11.6%	6.4%	6.4%	(5.1)%	5.7%

Comparative Analysis - RoE, RoCE and Asset turnover of key EMS companies, India, Ratio in %, FY19 - FY22

	ROE (%)				ROCE (%)				Fixed Asset Turnover Ratio			
Name of the EMS Company	FY22	FY21	FY20	FY19	FY22	FY21	FY20	FY19	FY22	FY21	FY20	FY19
Avalon Technologies Ltd	**85.9%**	**40.4%**	**25.2%**	**NA**	**27.4%**	**21.3%**	**26.8%**	**NA**	**9.4**	**8.3**	**8.9**	**NA**
Dixon Technologies India Ltd	21.9%	25.0%	26.2%	18.3%	25.5%	31.9%	33.3%	27.0%	14.1	15.9	14.1	12.6
Amber Enterprises India Ltd	6.5%	6.0%	15.0%	10.0%	9.8%	11.3%	20.5%	16.2%	3.9	3.9	5.3	4.2
Elin Electronics Ltd	13.8%	14.2%	12.9%	16.9%	16.4%	16.7%	15.8%	20.7%	5.8	5.4	5.1	6.3
Syrma SGS Technology Ltd	13.0%	12.7%	22.5%	15.8%	19.9%	19.1%	31.3%	21.7%	5.4	4.4	4.3	4.9
Kaynes Technology India Ltd	24.3%	7.8%	9.7%	11.0%	28.0%	13.9%	14.2%	15.1%	11.0	7.4	7.3	8.0
Bharat FIH Ltd	6.6%	5.9%	18.4%	(14.9)%	9.5%	8.0%	19.0%	(7.0)%	29.0	21.0	37.4	46.5
SFO Technologies Pvt Ltd	NA	6.4%	14.1%	6.0%	NA	15.1%	15.0%	12.1%	NA	8.1	8.9	7.7
VVDN Technologies Pvt Ltd	29.5%	45.6%	(20.9)%	22.9%	26.8%	21.9%	(9.6)%	52.3%	4.1	3.7	5.8	7.9

COMPARISON WITH LISTED INDUSTRY PEERS (AS ON 31ST MARCH 2022)

Name of the Company	Consolidated/ Standalone	Face Value	Closing Price*	Revenue from Operations (₹ Cr)	EPS		NAV	P/E	RoNW (%)
					Basic	Diluted			
Avalon Technologies Ltd	Consolidated	**2**	**NA**	**840.72**	**11.30**	**11.30**	**15.60**	**[•]**	**85.86%**
Peer Group									
Dixon Technologies Ltd	Consolidated	2	2,867.45	10,697.08	32.31	32.00	167.73	89.61	21.93%
Amber Enterprises India Ltd	Consolidated	10	1,928.20	4,206.40	32.41	32.41	514.70	59.50	6.54%
Syrma SGS Technology Ltd	Consolidated	10	258.05	1,266.65	5.25	5.17	41.57	49.91	13.04%
Kaynes Technology India Ltd	Consolidated	10	951.50	706.25	9.70	8.93	43.89	106.55	24.29%

Source:RHP; Closing NSE price of these equity shares as on March 16, 2023.

Comparison of financial KPIs of the company and their listed peers (Fiscal 2022)

Particulars	Avalon Technologies	Dixon Technologies (India)	Amber Enterprises India	Syrma SGS Technology	Kaynes Technology India
Revenue from operations (in ₹ Cr)	840.71	10,697.08	4,206.40	1,266.65	706.25
Total income (in ₹ Cr)	851.65	10,700.89	4,239.63	1,284.37	710.35
Material margin (in ₹ Cr)	286.59	917.84	676.73	374.55	216.82
Material margin (%)*	34.09%	8.58%	16.09%	29.57%	30.70%
EBITDA (in ₹ Cr)	97.55	379.05	275.38	125.98	93.67
EBITDA margin	11.60%	3.54%	6.55%	9.95%	13.26%
PAT (in ₹ Cr)	68.16	190.33	111.32	76.46	41.68
PAT margin	8.00%	1.78%	2.63%	5.95%	5.87%
Net working capital (in ₹ Cr)	277.74	583.37	1,045.91	370.86	267.69
Net debt (in ₹ Cr)	283.91	140.63	349.47	121.03	147.95

** Material margin (% of Revenue from Operations)*