

Initiating Coverage

KAYNES TECHNOLOGY INDIA LTD



Kaynes Technology

Execution superiority in a favourable ecosystem

Kaynes Technology (Kaynes) is one of the prominent players in electronics system design and manufacturing (ESDM) services with three decades of experience (mainly in B-B). It serves various industries such as automotive, industrial, aerospace, defence, outer space, nuclear, medical, railways, IoT, and IT. Kaynes is one of the key beneficiaries of the GoI's focus on the 'Aatmanirbhar Bharat' initiative along with the global need of 'China+1'. COVID was an inflection point for the ESDM industry and India has seen a massive trend change thereafter. Top ESDM players have seen revenue CAGR of 14%-33% over the last three years, and Kaynes has clocked 45% CAGR. The industry is expected to clock >30% CAGR over FY22-27E to reach INR 6trn, and Kaynes aims to grow ahead of the industry.

We model a 42% revenue CAGR for FY23-26E to INR 32bn in FY26E (7x of gross block). Kaynes has a superior operating margin (14-15%) and RoE (c.20%) metric among peers given B-B products, focus on value-added products, scale of operation, etc. Besides traditional business, Kaynes has announced its forays into OSAT (phase-1 in Telangana, proof of concept by Apr'24, phase-2 in Karnataka), whose benefits will begin from FY25 onwards. Major benefits will be back-ended but considering its potential to achieve >INR 30bn revenue with c.18% EBITDA margin at full efficiency (with both phases), we assign INR 23bn value in our SoTP (with discounting of 18%). We value the traditional business at 45x P/E on Dec-24 EPS and add INR 400/share value of OSAT ([link](#)). We initiate coverage on Kaynes with a BUY rating and a TP of INR 2,850.

- Buoyant industry tailwinds:** The ESDM market is expected to sustain >30% CAGR during FY22-27E to INR 6trn. High domestic demand for electronics products, GoI's import substitution focus, and India's rising reputation in global manufacturing to be key growth drivers. The industry is broken down between B-B and B-C in 30:70% mix. B-C gives high volume and low working capital traction but is exposed to new entrants. While B-B is heavy on working capital with low competition and high margin, it delivers a healthy RoE.
- Kaynes superior execution:** Kaynes registered revenue of INR 11bn in FY23 with 33% revenue CAGR during FY19-23. Automotive remained a key contributor with c.38% mix, followed by industrial at 27%, railways at 12%, consumer at 9%, medical at 6% and IOT at 6% respectively. The automotive vertical was a key driver with >50% CAGR during the last four years, and its mix has improved to 38% in FY23 vs. 20% in FY19. Kaynes clocked 10x improvement in its order book in the last three years. The company has also de-risked its business model by diversified client/supplier mix. We model revenue/EBITDA/PAT CAGR of 42/42/53% over FY23-26E
- Kaynes' better scorecard than peers:** Kaynes has been one of the fastest-growing EMS players recording revenue/EBITDA/PAT of 45/60/104% over FY20-23. Syrma grew by 73% while Avalon/Cyient saw revenue growth of 14/22%. Kaynes RoCE at 20% is also superior to its peers (broadly 14-18%).
- Risk:** The industry tailwinds are strong with enough investments in setting up the ecosystem. We do not expect much business reversal risk due to the change in government (a key risk for many B-B stories, particularly after seeing a sharp stock run-up). However, we do see risks which are associated with the nature of the business (particularly when growth assumptions are very bullish along with rich valuation multiples). We see business risks such as (1) client forfeit, (2) order execution delays, (3) change in policies, (4) delays in payment, (5) global supplies of key RM, (6) cost of funds and (7) intervention of state, bodies, etc. in key approvals.

BUY

CMP (as on 24 Nov2023)	INR 2,450
Target Price	INR 2,850
NIFTY	19,795

KEY STOCK DATA

Bloomberg code	KAYNES IN
No. of Shares (mn)	58
MCap (INR bn) / (\$ mn)	142/1,742
6m avg traded value (INR mn)	437
52 Week high / low	INR 2,966/625

STOCK PERFORMANCE (%)

	3M	6M	12M
Absolute (%)	32.0	85.2	235.6
Relative (%)	30.9	78.4	229.7

SHAREHOLDING PATTERN (%)

	Jun-23	Sep-23
Promoters	63.57	63.57
FIs & Local MFs	13.12	15.59
FPIs	7.96	9.90
Public & Others	15.35	10.94
Pledged Shares	0.00	0.00

Source : BSE

Pledged shares as % of total shares

Naveen Trivedi
naveen.trivedi@hdfcsec.com
+91-22-6171-7324

Paarth Gala
paarth.gala@hdfcsec.com
+91-22-6171-7336

Riddhi Shah
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+91-22-6171-7359

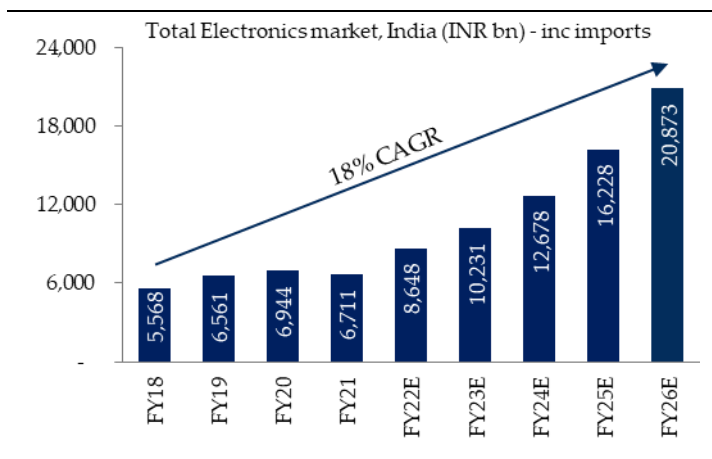
Executive Summary

Favourable ecosystem, multi-year growth opportunity

India's electronics market is one of the fastest growing industries, which has seen a significant demand spur during the last 2-3 years. The total electronics market (domestic production and imports) was valued at >INR 7trn in FY21 and is growing at a pace of 25-30%. It is expected that the market will be close to INR 20-21trn by FY26. Out of this, domestic production stands at 74% in FY21 (INR 5trn) and it is expected to reach 96% by FY26 (INR 20trn). Besides the fast-growing electronics market, the shift from imports to domestic production will lead to robust growth in domestic manufacturing in India.

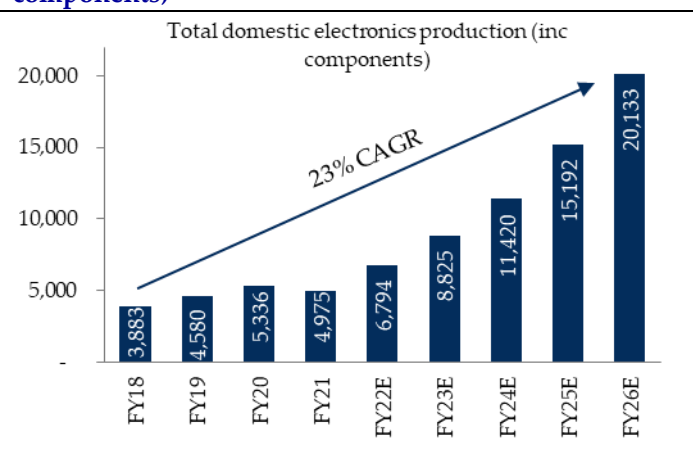
The government's 'Aatmanirbhar Bharat' initiative is driving India's electronic industry. The 'Make in India' initiative which focused on increasing India's presence in the global market faced various challenges like global competition, pro-manufacturing government policies of key countries, India's relatively small scale in manufacturing and its underdeveloped supply chain. However, 'Aatmanirbhar Bharat' focused on replacing the imports with domestic manufacturing. A variety of incentives have been laid down to create the essential infrastructure which led to a reduction of manufacturing and capex costs.

Total electronics market (including imports)



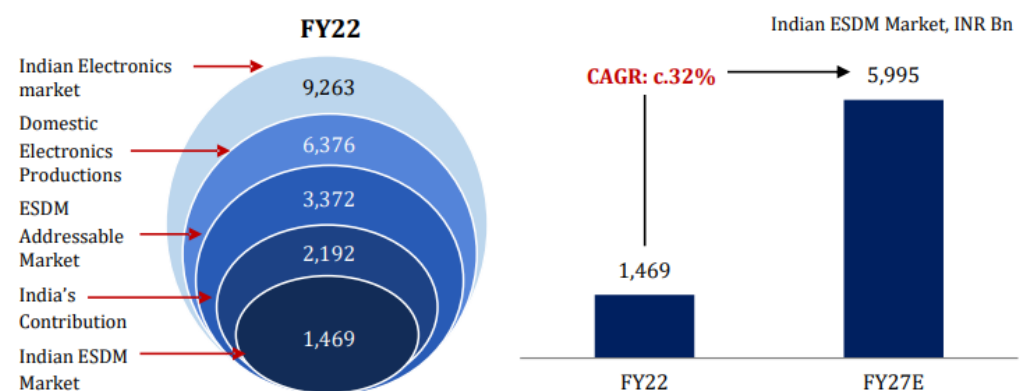
Source: RHP, HSIE Research

Total electronics domestic production (including components)



Source: RHP, HSIE Research

India ESDM market break-up

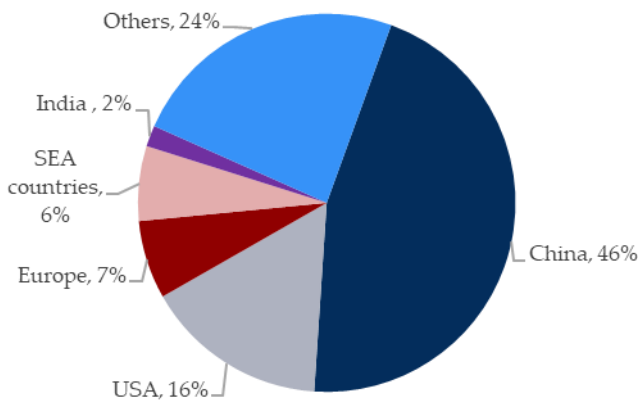


Source: Company, HSIE Research

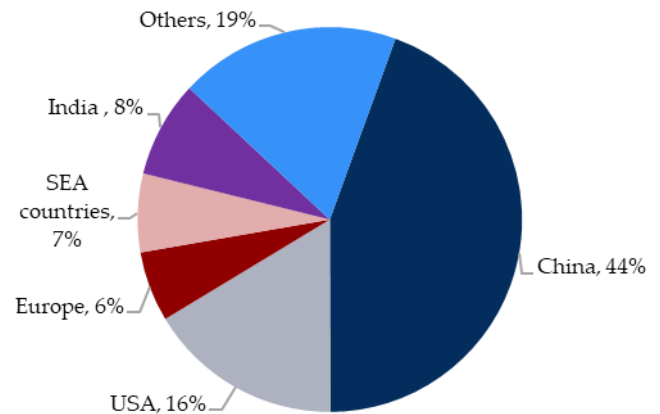
Global theme – China +1

The global ESDM market was USD 800bn in 2020 and it is expected to grow at c.5% to reach USD 1,000bn market by 2025. China leads the global ESDM business with almost 45.5% share. China dominates the global market due to its cost-effectiveness and technological leadership in electronics manufacturing. Ongoing digitalization, IoT, and urbanisation are some megatrends that are driving the growth prospects. It is a high-growth region due to operational cost benefits, availability of a large number of highly skilled personnel, infrastructure, logistical advantages, and proximity to the largest end-user base across all end-user verticals. However, after the COVID-19 pandemic, many global electronics manufacturers are contemplating on China + 1 strategy and looking for alternate manufacturing locations for export business. This is creating tremendous investment potential for countries like Vietnam, India, and the Philippines.

ESDM market breakup by countries (CY20)



ESDM market breakup by countries (CY25E)



Source: Company, HSIE Research

Source: Company, HSIE Research

Well-diversified portfolio among peers with an impetus to aid growth drivers

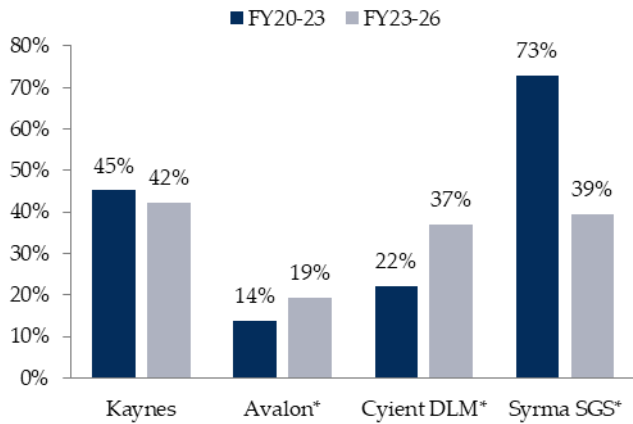
Kaynes boasts of a well-diversified business profile with a portfolio having applications across industry verticals ranging from CEA, industrial, telecom, aerospace & defence, IT, medical and railway. It has a higher B2B share with industrials (37%)/automotive (33%) and railways (10%) contributing 80% of revenues. Kaynes has been one of the fastest-growing EMS players recording revenue/EBITDA/PAT of 45/60/104% over FY20-23. During the same period, its order book has grown c.6-7x. Given its diverse service offerings and industry tailwinds, we believe Kaynes will continue to grow at a fast clip and its revenue/EBITDA/PAT is expected to grow by 42/42/53% over FY23-26E.

India EMS player’s presence across various end-use industries

Company	Mobile Phones	CEA	Automotive	Industrial	Telecom	Aerospace & Defence	IT	Medical	Railway
Kaynes	x	✓	✓	✓	✓	✓	✓	✓	✓
Avalon	x	x	✓	✓	✓	✓	x	✓	✓
Syrma SGS	x	✓	✓	✓	✓	x	x	✓	x
Amber	x	✓	x	x	x	x	x	x	✓
Dixon	✓	✓	x	x	x	x	x	✓	x
Elin Electronics	x	✓	x	x	x	x	x	x	x
Bharat FIH	✓	✓	✓	x	✓	✓	✓	x	x
Sanmina-SCI	x	x	✓	✓	✓	✓	✓	✓	x
SFO Technologies	x	x	✓	✓	✓	✓	x	✓	x
VVDN Technologies	x	x	✓	✓	✓	x	✓	x	x

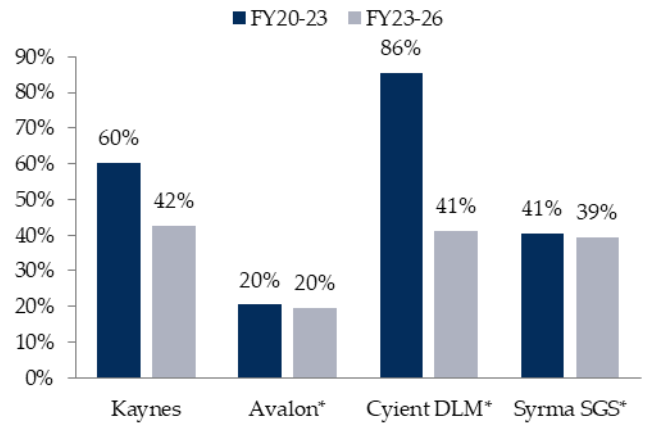
Source: Company, HSIE Research

India EMS – revenue CAGR



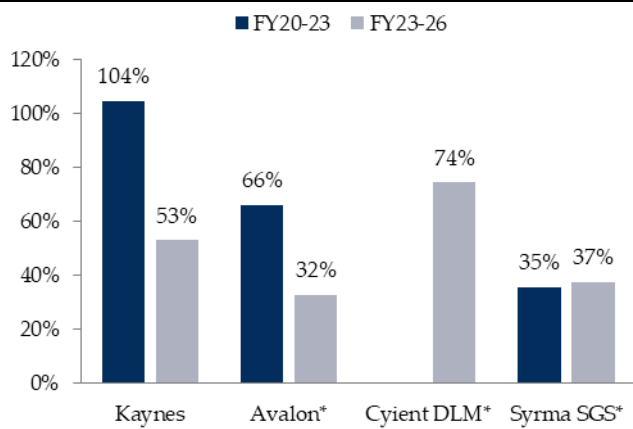
Source: Company, HSIE Research; *Bloomberg estimates

India EMS – EBITDA CAGR



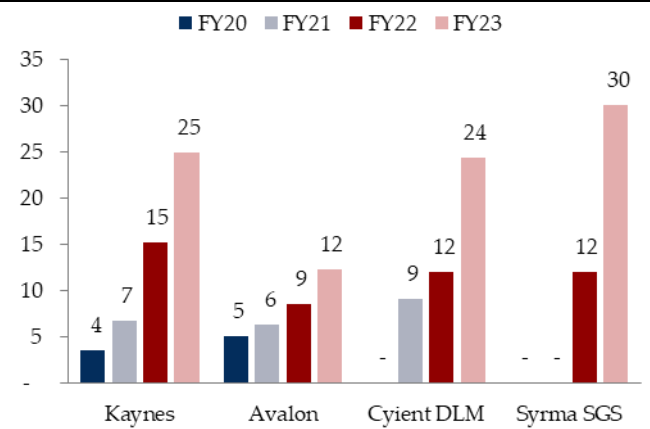
Source: Company, HSIE Research; *Bloomberg estimates

India EMS – PAT CAGR



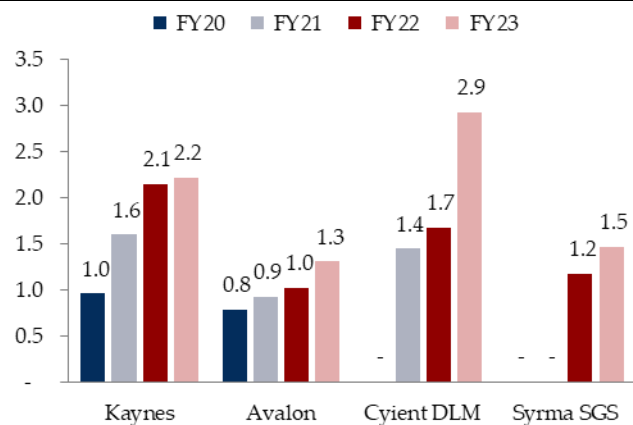
Source: Company, HSIE Research; *Bloomberg estimates

India EMS – order book



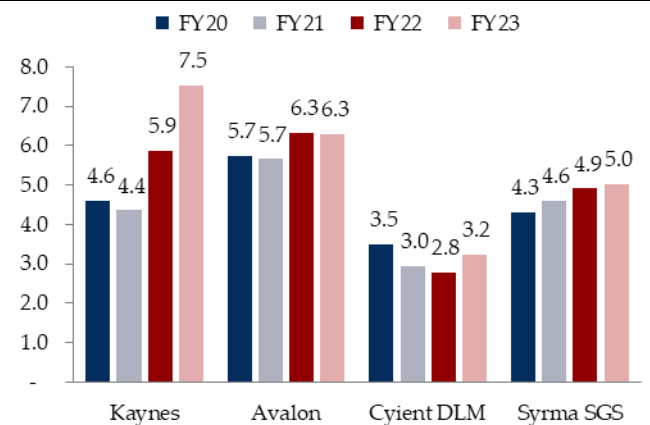
Source: Company, HSIE Research

India EMS – order book to bill (x)



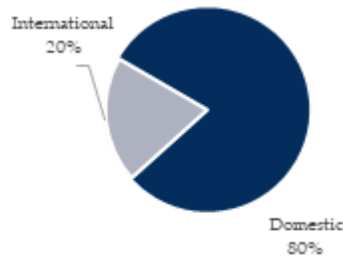
Source: Company, HSIE Research

India EMS – fixed asset turnover



Source: Company, HSIE Research

Order book breakup

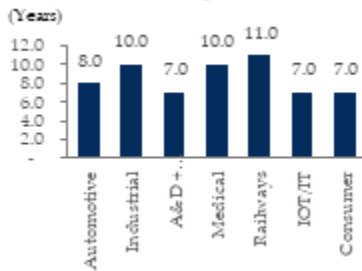


Order book is up 10x in the last three years

Kaynes order book has grown by 10x during the last three years to INR 34bn in H1FY23. Domestic contributes 80-85% of the order book and the rest is for international business. In the order book, automotive, industrial and railways contribute 35%, 30-35% and 15% respectively. The order book is a lead indicator of the strong demand from clients. Typically, automobile orders get 6-9 months in execution, and aerospace & railways get around two years. The weighted average execution period is 1.5 years.

Particulars (INR mn)	FY20	FY21	FY22	FY23	H1FY24
Order Book	3,522	6,705	15,166	24,862	34,618
Chg in order book		3,183	8,461	9,696	9,756
Revenue	3,682	4,206	7,062	11,261	6,580

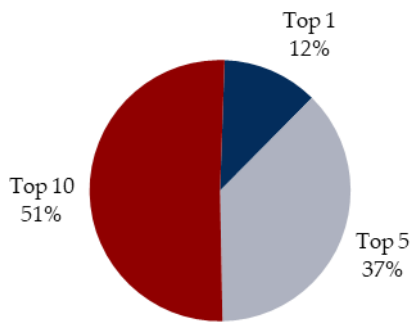
Long relationship with clients



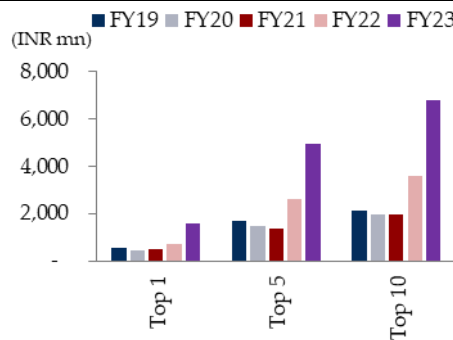
Focus on widening client base to de-risk

Kaynes has de-risked its business model by widening the client base. Top-1 clients contribute 12% of the business while top-5 and top-10 contribute 37% and 51% respectively. The growth is broad-based as company growth and client mix have not changed over the last four years.

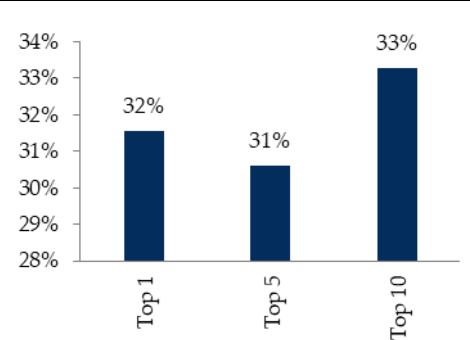
Client-wise revenue mix (FY23)



Client-wise revenue change



Client-wise revenue CAGR(FY19-23)



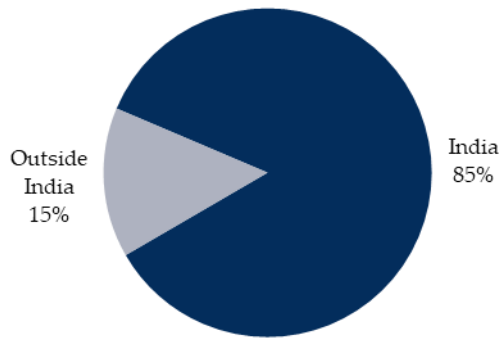
Source: Company, HSIE Research

Kaynes has long-standing relationships with their clients, and the average relationship is in the range of 9-10 years whereas industrial and railways clients have been present for >10 years. In automotive, IJL (India Japan Lighting Pvt Ltd) is the top client while in the industrial vertical the key customers are from global manufacturers of electronic instruments and electromechanical devices. In the railways vertical, Siemens and Hitachi are the key customers.

India and international both growing rapidly

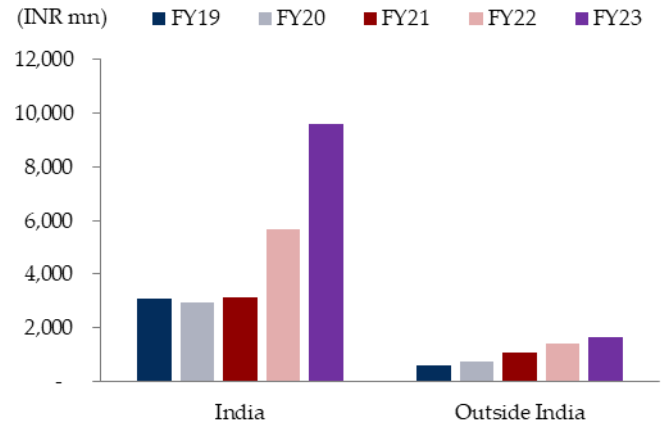
The domestic revenue mix stands at 85% in FY23 and clocked a CAGR of 33% during FY19-23. International clocked robust growth as well and registered a 30% revenue CAGR during FY19-23. The international business has a presence in Europe, North America, and South East Asia. Europe is the top market for Kaynes and it contributes 60% of the total international business vs. 40% in FY20.

Domestic/international revenue mix



Source: Company, HSIE Research

Domestic/international revenue mix change



Source: Company, HSIE Research

Vertical-wise operating margin quadrants

Aerospace	High
Railways	High
Industrial	Medium
Medical	Medium
Auto	Low
Consumer	Low

Cost structure—huge leverage on employee cost

Kaynes has a high dependence on raw material prices as these stand at c.70% of sales. Thereby, currency, global prices and customs duty have high sensitivity for the raw material basket. Besides, in the variable cost, employee cost is a significant contributor with 8-10% of sales. Kaynes with rapid revenue growth has seen huge operating leverage on employee costs. With revenue registered at 33% CAGR during FY19-23, employee cost only saw 15% CAGR. Employee cost at % of sales was at 12% in FY19 which has gone down to 7% in FY23, almost a 500bps swing, and this gives a boost to Kaynes' operating margin. EBITDA margin was up by c.500bps during FY19-23 to 15% in FY23. PBT margin even saw higher expansion at 750bps to a healthy 11% in FY23.

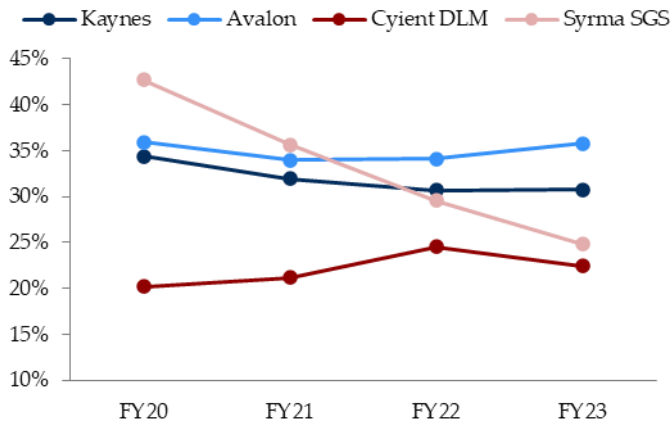
Indexing of cost structure

Particulars	FY19	FY20	FY21	FY22	FY23	CAGR (%)
Revenue	100	100	100	100	100	33%
RM	66	66	68	69	69	34%
Gross Profit	34	34	32	31	31	30%
Employee Cost	12	11	11	9	7	15%
Power & fuel	1	1	1	1	0	15%
Repairs	1	1	1	1	0	8%
Travelling and conveyance	1	1	0	0	0	9%
Legal and professional fee	0	0	0	0	0	26%
Consumption of stores & spares	2	3	2	2	3	50%
R&D expense	0	-	0	0	0	70%
Contract wages	2	3	2	2	1	21%
Others	5	3	4	3	2	13%
Total expenses	90	89	90	87	85	31%
EBITDA	10	11	10	13	15	48%
Depreciation	1	2	2	2	2	38%
EBIT	8	9	7	11	13	50%
Other Income	1	1	1	1	1	48%
Interest	5	6	6	4	3	17%
PBT	4	4	3	8	11	75%
Tax	1	1	0	2	3	68%
PAT	3	3	2	6	8	77%
Margin trend (%)						
GPM (%)	34%	34%	32%	31%	31%	
EBITDA margin (%)	10%	11%	10%	13%	15%	
EBIT margin (%)	8%	9%	7%	11%	13%	
PBT margin (%)	4%	4%	3%	8%	11%	

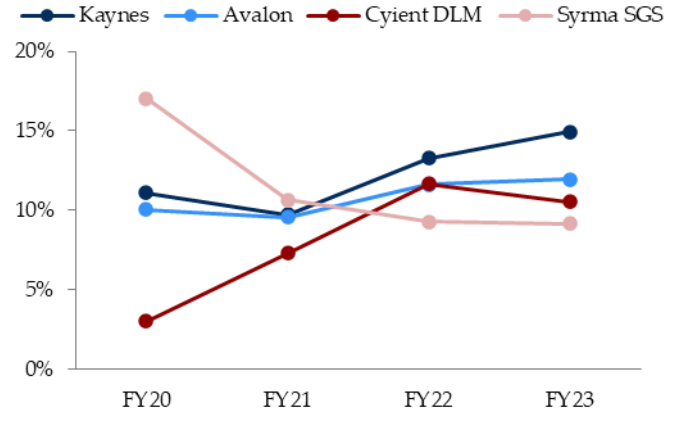
Healthy RoCE of >20% with a superior operating margin

Kaynes has one of the best operating margin metrics, given the company’s business model of value-added products. High revenue growth has provided huge operating leverage to Kaynes resulting in a sharp improvement in EBITDA margin. RoCE of 20% in FY23 is the best among its peer set.

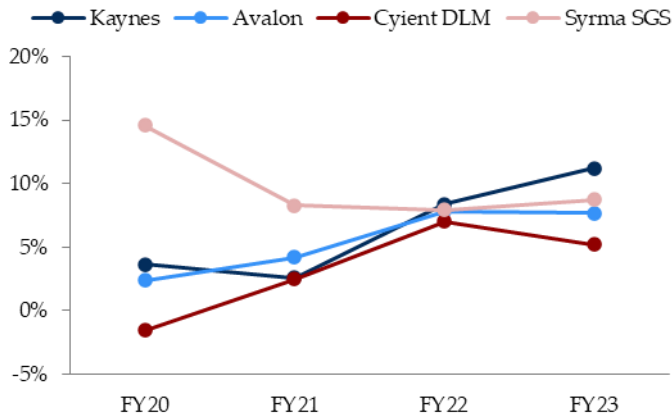
India EMS – Gross Margin %



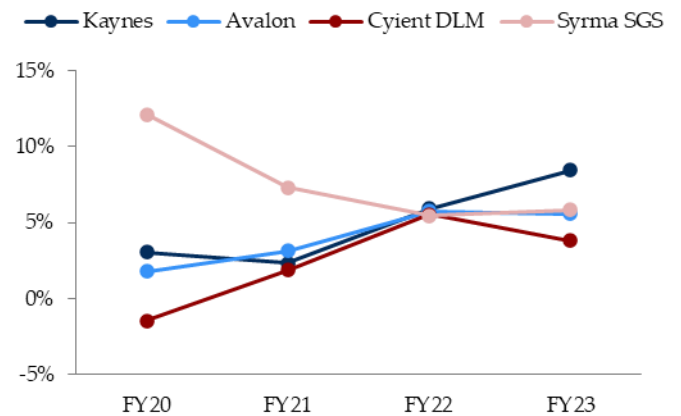
India EMS – EBITDA Margin %



India EMS – PBT Margin %



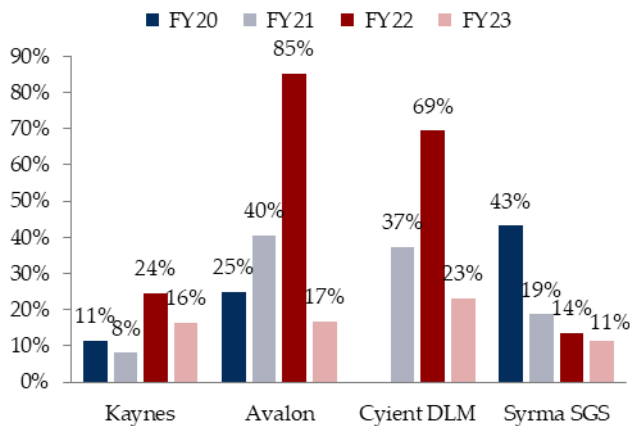
India EMS – PAT margin %



Source: Company, HSIE Research

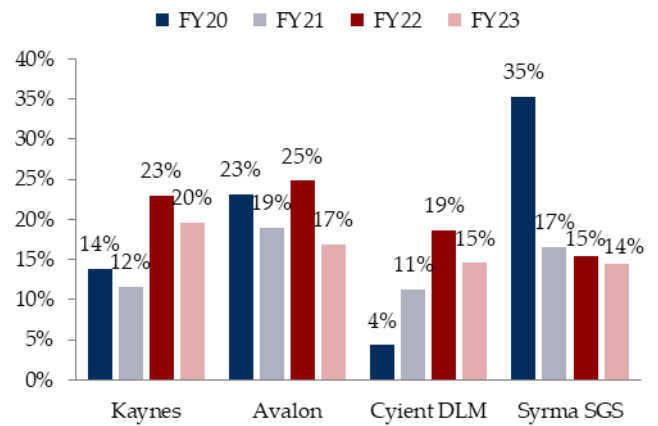
Source: Company, HSIE Research

India EMS – RoE %



Source: Company, HSIE Research

India EMS – RoCE %



Source: Company, HSIE Research

OSAT a big opportunity

GoI remains focused on building the overall semiconductor ecosystem which in turn will help catalyze India's rapidly expanding electronics manufacturing and innovation ecosystem. In its bid to do so, GoI has approved the Semicon India programme with a total outlay of INR 760bn for the development of the semiconductor and display manufacturing ecosystem in the country. Keeping in mind the larger opportunity at hand, Kaynes has taken baby steps by getting into Outsourced Semiconductor Assembly and Test (OSAT) and bare PCB manufacturing. In terms of project timelines, Kaynes expects to begin trial runs for the first line by Apr'24 and begin commercial production by H2FY25. It is looking to install 12 lines by FY25. The total investment required is envisaged to be INR 28.5bn. Kaynes expects to achieve INR 30bn revenue (both phases) with 18-20% EBITDAM on these businesses once they stabilize.

Valuation and reco - Rich valuation but robust growth normalizing quickly

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TP table

Valuation	Dec-24
Traditional Business	
EPS (Dec-24)	54.3
P/E (x)	45.0
Value per share	2,450
OSAT	
Value of business	23,000
Value per share	400
Target Price	2,850
Implied P/E (x)	52.5
CMP	2,450
Up	16%

OSAT valuation

PAT (FY30E)	1,783
P/E (x)	30
Value (INR mn)	53,481
Disc rate (%)	18%
Disc value (INR mn)	₹ 23,000
Value per share	₹ 400

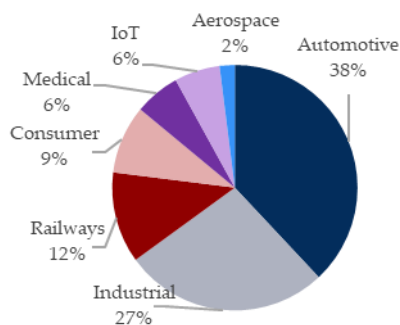
OSAT assumption, discounting and valuation

Particulars (INR mn)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
Revenue	472	3,220	8,400	12,220	18,338	25,628
EBITDA	(236)	225	1,008	1,833	3,301	4,613
EBITDAM	-50%	7%	12%	15%	18%	18%
PBT	(461)	(321)	(124)	267	1,140	2,148
ETR %	17%	17%	17%	17%	17%	17%
Tax	-	-	(21)	45	194	365
PAT	(461)	(321)	(103)	222	947	1,783
Total investment	1,150	5,250	10,850	17,150	20,450	28,450
Asset Turns (x)		0.1	0.4	0.6	0.7	0.8
Kaynes investment	288	1,313	2,713	4,288	5,113	7,113

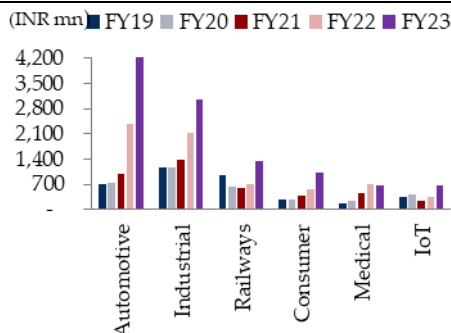
Business mix

Revenue break-up: Kaynes registered revenue of INR 11bn in FY23 with 33% revenue CAGR during FY19-23. Automotive remained a key contributor with c.38% mix followed by industrial at 27%, railways at 12%, consumer at 9%, medical at 6% and IOT at 6% respectively. The automotive vertical was a key driver with >50% CAGR during the last four years, and its mix has improved to 38% in FY23 vs. 20% in FY19.

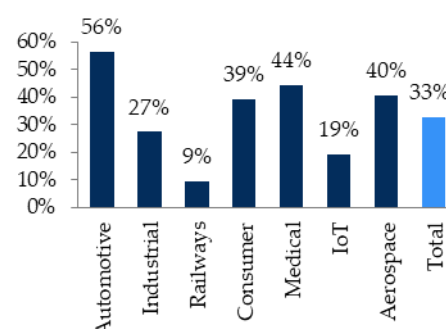
Revenue mix (FY23) – vertical wise



Revenue mix change



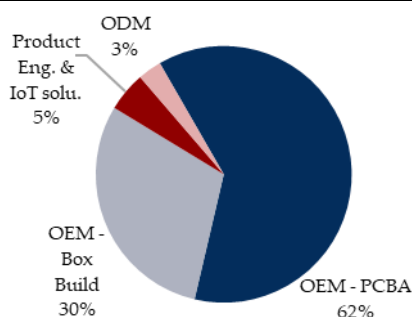
Revenue CAGR (FY19-23)



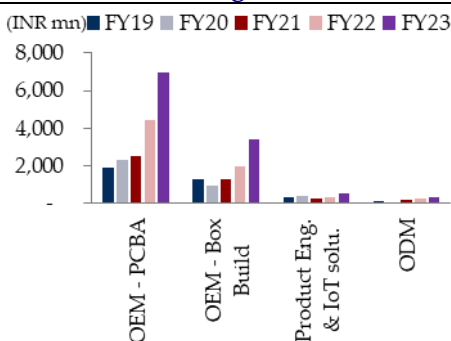
Source: Company, HSIE Research

Segment-wise revenue mix: Segment-wise, OEM-PCBA contributes >60% of the revenue mix, followed by OEM-Box Build at 30%. OEM-PCBA was a key driver with c.38% CAGR during the last four years, and its mix has improved to 62% in FY23 vs. 52% in FY19.

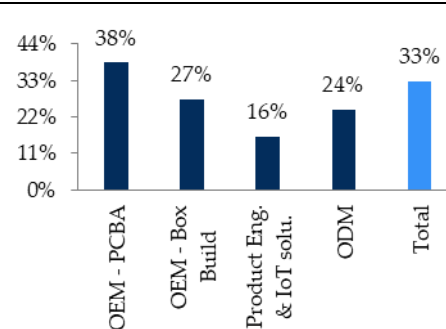
Revenue mix (FY23) – segment wise



Revenue mix change

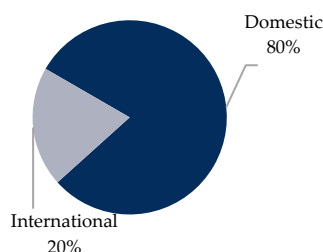


Revenue CAGR (FY19-23)



Source: Company, HSIE Research

Order book breakup



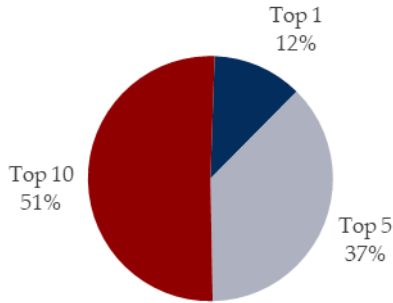
Order book up 10x in the last three years: Kaynes' order book has grown by 10x during the last three years to INR 34bn in H1FY23. Domestic contributes 80-85% of the order book and the rest is contributed by international business. In the order book, automotive, industrial and railways contribute 35%, 30-35% and 15% respectively. The order book is a lead indicator of the strong demand from clients. Typically, automobile orders get 6-9 months in execution, and aerospace & railways get around two years. Weighted average is 1.5 years execution period.

Particulars (INR mn)	FY20	FY21	FY22	FY23	H1FY24
Order Book	3,522	6,705	15,166	24,862	34,618
Chg in order book		3,183	8,461	9,696	9,756
Revenue	3,682	4,206	7,062	11,261	6,580

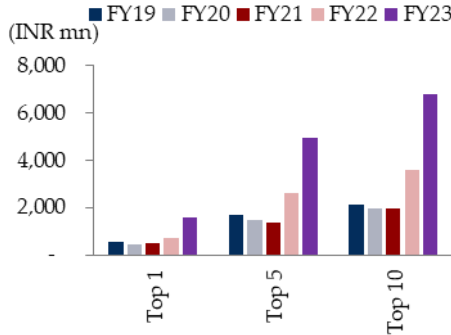
Focus on widening client base to de-risk

Kaynes has de-risked its business model by widening the client base. Top-1 client contributes 12% of the business while top-5 and top-10 contribute 37% and 51% respectively. The growth is broad-based as company growth and client mix have not changed over the last four years.

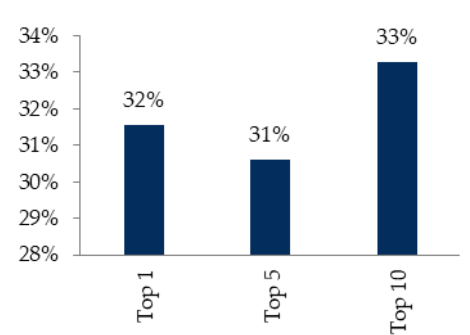
Client-wise revenue mix (FY23)



Client-wise revenue change



Client-wise revenue CAGR(FY19-23)



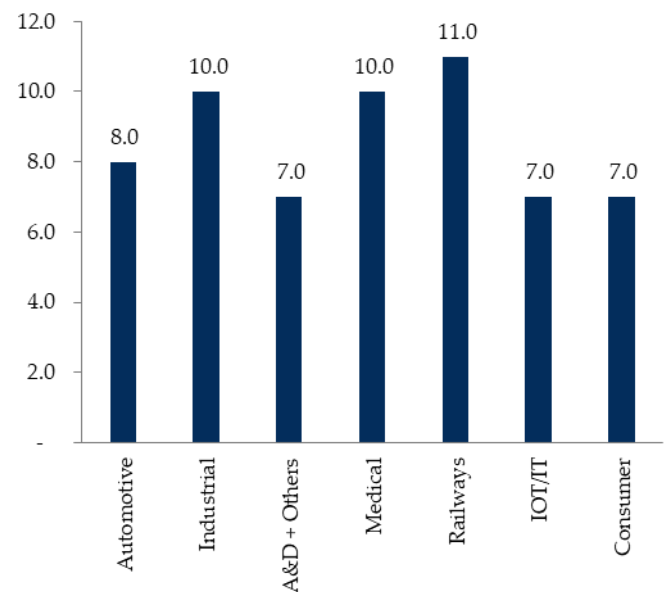
Source: Company, HSIE Research

Kaynes has long-standing relationships with its clients, and the average relationship is in the range of 9-10 years whereas industrial and railways clients are >10 years. In automotive, IJL (India Japan Lighting Pvt Ltd) is the top client while in the industrial vertical, the key customers are from global manufacturers of electronic instruments and electromechanical devices. In the railways vertical, Siemens and Hitachi are the key customers.

Marquee customer base

Industry	Key Customers
Industrial	Leading global mfg of electronic instruments and electromechanical devices
Railways	SIEMENS, FRAUSCHER, HITACHI
Automotive	IJL
Medical	AGAPPE, BeatO
A&D+ Others ¹	TANBO imaging, CANYON
IoT / IT and others	iskraemeco
Consumer	Leading players in BLDC Fans, Consumer Appliances
Non - Auto	Leading provider of global digital infrastructure

(Years)



Source: HSIE Research

Source: HSIE Research

Customer base vertical-wise

Industry Verticals	Number of Customers (Fiscal 2022)		Average period of business relationship of top 10 customers (years)*
	Domestic	International	
Automotive	67	5	5.20
Industrial	179	29	8.78
Aerospace, defence, outer space, nuclear	23	2	7.00
Medical	23	6	6.30
Railways	10	5	8.80
IoT/IT	16	7	7.44
Consumers	6	1	3.67

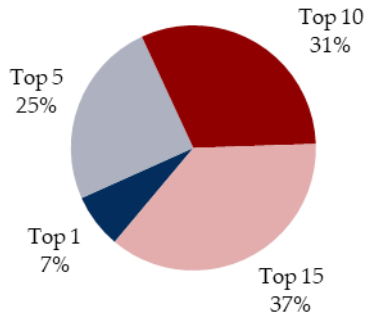
Top clients

Agappe Diagnostics Limited
Canyon Aero (formerly Cobham Aerospace Communications) ("Canyan AERO")
Frauscher Sensor Technology India Private Limited
Hitachi Rail STS India Private Limited
India Japan Lighting Private Limited
Siemens Rail Automation Private Limited
Iskraemeco India Private Limited
Tonbo Imaging India Private Limited

Long-standing relationship with suppliers

Kaynes has also been focusing on de-risking its business model by widening the supplier base. The top-5 suppliers contributed 25% while top-10 suppliers and top-15 suppliers contributed 31% and 37% respectively in FY22.

Supplier mix (FY22)



Long-standing relationship with suppliers



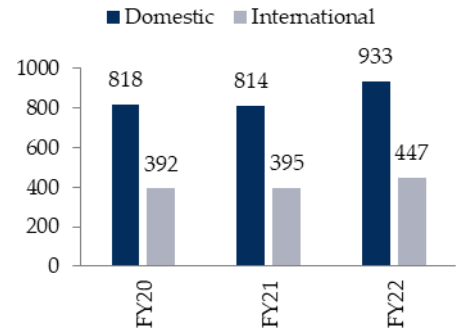
Long term relationship with suppliers leading to better credit terms



Top 10 suppliers - avg relationship of 12+ years²

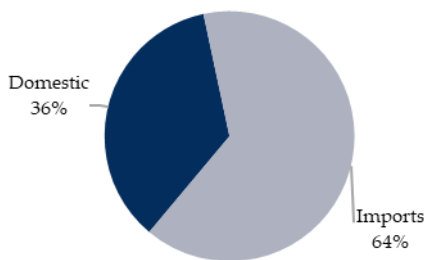


1,500+ suppliers² with multiple sources for a single component with specialized dealers for niche verticals

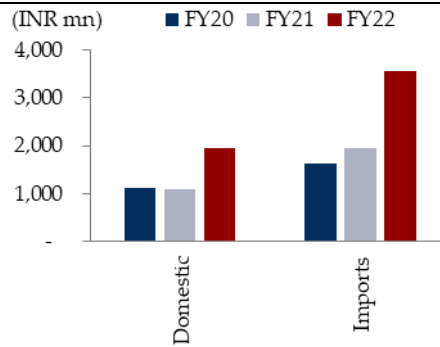


Source: Company, HSIE Research

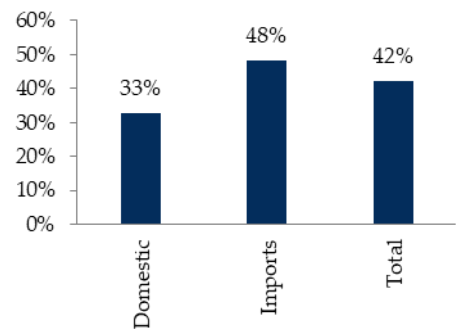
Domestic & imports of purchase (FY22)



Domestic & import trend



Domestic and import purchase CAGR (FY20-22)



Source: Company, HSIE Research

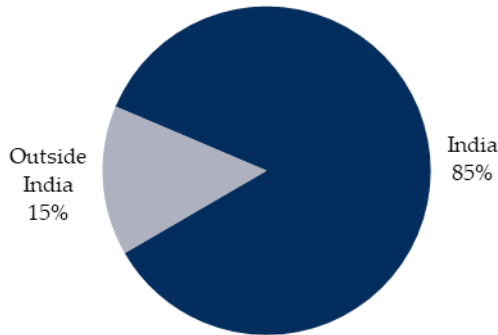
Details of the countries from where the raw materials were imported

Details of Purchase (INR mn)	FY20	FY21	FY22	CAGR
Domestic	1,115	1,090	1,961	33%
Imports	1,616	1,940	3,557	48%
Total	2,731	3,031	5,518	42%
Details of the countries from where the raw materials were imported				
Singapore	962	1,075	1,995	44%
China	90	123	358	99%
USA	124	139	305	57%
Hong Kong	80	101	180	50%
UK	80	94	118	21%
Others	280	408	602	47%
Total	1,616	1,940	3,557	48%
% mix				
Singapore	60%	55%	56%	
China	6%	6%	10%	
USA	8%	7%	9%	
Hong Kong	5%	5%	5%	
UK	5%	5%	3%	
Others	17%	21%	17%	
Total	100%	100%	100%	

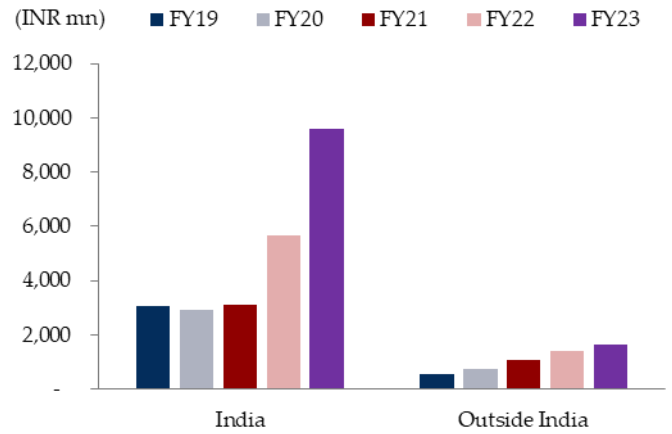
India and international both growing rapidly

Domestic revenue mix stands at 85% in FY23 and clocked a CAGR of 33% during FY19-23. International clocked robust growth and registered 30% revenue CAGR during FY19-23. International business has a presence across Europe, North America, and South East Asia. Europe is the top market with Kaynes which contributes 60% of the total international business vs. 40% in FY20.

Domestic/international revenue mix



Domestic/international revenue mix change



Source: Company, HSIE Research

Source: Company, HSIE Research

India and international revenue trend

Revenue by Geography	FY20	FY21	FY22	FY23
India	2,927	3,128	5,651	9,600
Outside India	755	1,079	1,412	1,662
North America	276	306	443	338
Europe	312	361	791	1,014
South-East Asia	37	63	52	113
Others	131	348	126	198
Total	3,682	4,206	7,062	11,261
Domestic (%)	79%	74%	80%	85%
Export (%)	21%	26%	20%	15%
Export countries	17	18	20	26

Cost structure—huge leverage on employee cost

Kaynes has a high dependence on raw material prices as they stand at c.70% of sales. Thereby, currency, global prices and customs duty have a high sensitivity for the raw material basket. Besides, in the variable cost, employee cost is a significant contributor with 8-10% of sales. Kaynes with rapid revenue growth has seen huge operating leverage on employee costs. With revenue registering a 33% CAGR during FY19-23, employee cost only saw a 15% CAGR. Employee cost % of sales was at 12% in FY19 which has gone down to 7% in FY23, almost a 500bps swing during the period to boost operating margin for Kaynes. EBITDA margin up by c.500bps during FY19-23 to 15% in FY23. PBT margin even saw higher expansion at 750bps to a healthy 11% in FY23.

Indexing of cost structure

Particulars	FY19	FY20	FY21	FY22	FY23	CAGR (%)
Revenue	100	100	100	100	100	33%
RM	66	66	68	69	69	34%
Gross Profit	34	34	32	31	31	30%
Employee Cost	12	11	11	9	7	15%
Power & fuel	1	1	1	1	0	15%
Repairs	1	1	1	1	0	8%
Travelling and conveyance	1	1	0	0	0	9%
Legal and professional fee	0	0	0	0	0	26%
Consumption of stores & spares	2	3	2	2	3	50%
R&D expense	0	-	0	0	0	70%
Contract wages	2	3	2	2	1	21%
Others	5	3	4	3	2	13%
Total expenses	90	89	90	87	85	31%
EBITDA	10	11	10	13	15	48%
Depreciation	1	2	2	2	2	38%
EBIT	8	9	7	11	13	50%
Other Income	1	1	1	1	1	48%
Interest	5	6	6	4	3	17%
PBT	4	4	3	8	11	75%
Tax	1	1	0	2	3	68%
PAT	3	3	2	6	8	77%
Margin trend (%)						
GPM (%)	34%	34%	32%	31%	31%	
EBITDA margin (%)	10%	11%	10%	13%	15%	
EBIT margin (%)	8%	9%	7%	11%	13%	
PBT margin (%)	4%	4%	3%	8%	11%	

Vertical-wise operating margin quadrants

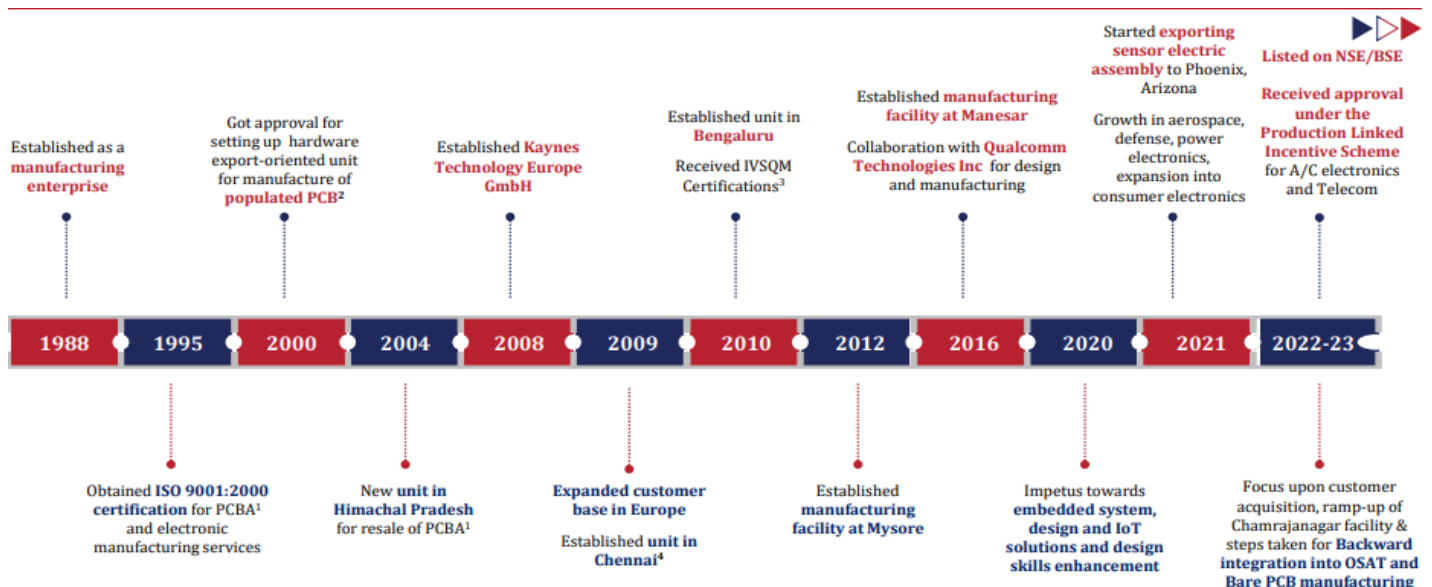
Aerospace	High
Railways	High
Industrial	Medium
Medical	Medium
Auto	Low
Consumer	Low

Company background

Kaynes Technology India Ltd (Kaynes) is a prominent player in integrated electronics manufacturing, offering end-to-end and IoT-enabled solutions. With expertise in electronics system design and manufacturing (ESDM) services, Kaynes caters to various sectors such as automotive, industrial, aerospace, defence, outer space, nuclear, medical, railways, IoT, IT, and more. With over three decades of experience, Kaynes provides conceptual design, process engineering, integrated manufacturing, and life-cycle support. Given its manufacturing infrastructure, Kaynes is able to handle high-mix and high-value products across different industries and has the flexibility to produce variable volumes. Kaynes' operations can be classified as follows:

- **OEM—Box Build:** Kaynes undertakes 'Build to Print' or 'Build to Specifications' of complex box builds, sub-systems and products across various industry verticals.
- **OEM—Turnkey Solutions—PCBAs:** Kaynes undertakes turnkey electronics manufacturing services of PCBAs, cable harnesses, magnetics and plastics ranging from prototyping to product realization including mass manufacturing.
- **ODM:** Kaynes offers ODM services in smart metering technology, smart street lighting, BLDC technology, inverter technology, gallium nitride-based charging technology and IoT solutions for making smart consumer appliances or devices IoT-connected.
- **Product engineering and IoT Solutions:** Kaynes offers conceptual design and product engineering services in industrial and consumer segments. Their digital engineering offerings leverage the latest technologies including IoT, big data, machine learning, cloud and media to improve customers' efficiency. They also provide end-to-end IoT and cloud enablement solutions and offer IoT data and analytics platforms and vertical IoT solutions.

Business Evolution and Key Milestones



Source: Company

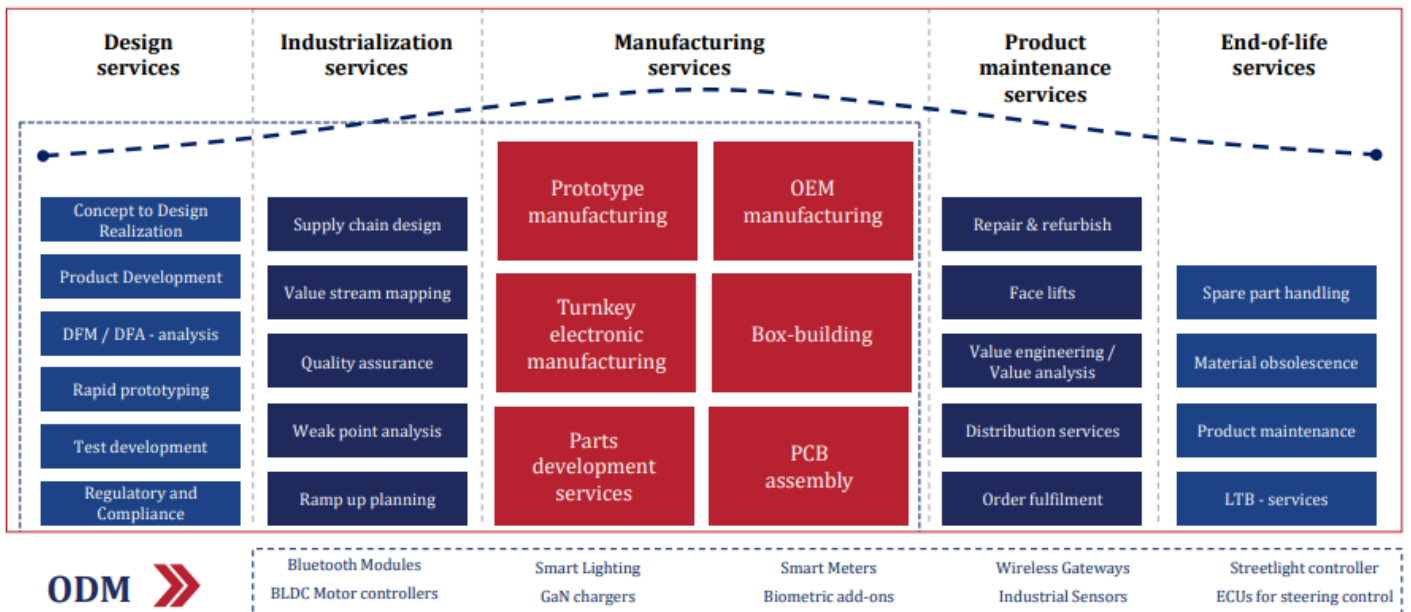
Kaynes offers a wide-ranging product portfolio having applications across industry verticals such as automotive, telecom, aerospace and defence, space, medical, IoT and industrial, each of which is individually growing. This in turn limits exposure to downturns associated with a particular vertical. It also ensures consistency of revenues across periods on account of customers serving different industry verticals with different business or industry cycles.

Diversified product portfolio



Source: Company

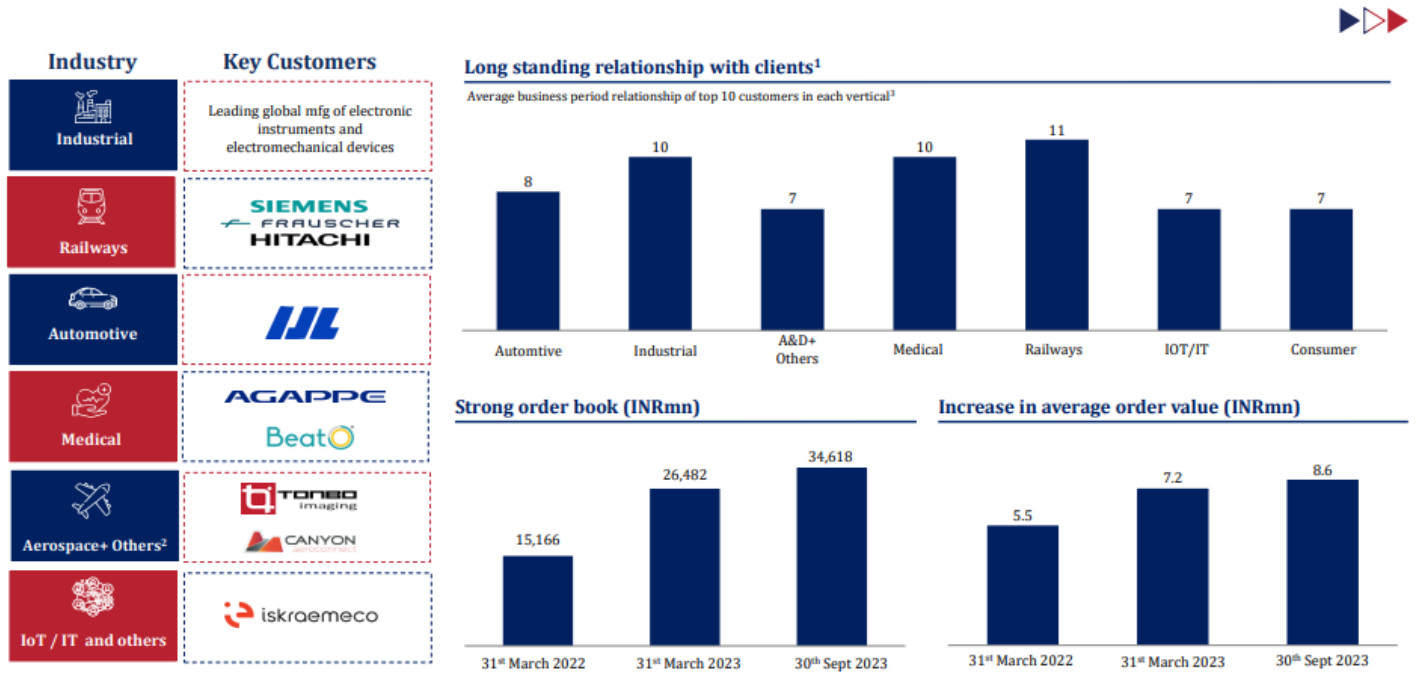
End-to-end design & engineering capabilities encompassing service offerings across entire customer value chain



Source: Company

Over the past three decades, Kaynes has established long-term relationships with well-known customers across the industries it caters to. Kaynes has a diversified customer base and has served 350+ customers in 26 countries. Their continued success is, in part, due to customer-centric practices such as open book costing, internal and external audits, and direct shipments to end customers.

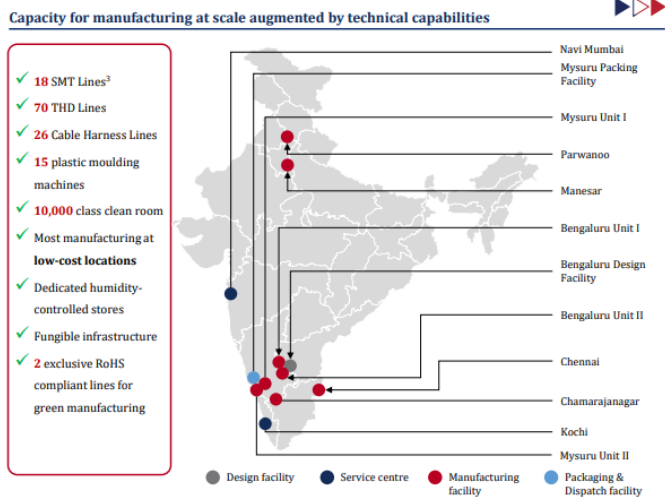
Long standing relationship with marquee customer base



Source: Company

Kaynes currently operates through its nine advanced manufacturing facilities to undertake high mix and high-value products with variable or flexible volumes. Kaynes' operations are complying with global standards with 12 global accreditations – most for an ESDM company in India. It has a dedicated research facility at Mysore, Bengaluru and Ahmedabad with a 75+ member R&D team.

Manufacturing facilities



Source: Company

Global certifications/ R&D capabilities



Source: Company

Manufacturing plants and capacity

Location	Verticals	Area (Sq. Ft)	Area (acre)	Owned/Leased
Mysore, Karnataka – Unit I	Railways, Defence and Aerospace, Medical and Industrials	1,26,085	2.89	Owned
Mysore, Karnataka – Unit II	Railways, Defence and Aerospace, Medical and Industrials			Leased
Parwanoo, Himachal Pradesh	IT, Telecom, Industrial, Medical and Automotive	5,253	0.12	Owned
Selaqui, Uttarakhand	IT and Industrial	5,500	0.13	Leased
Bengaluru, Karnataka – Unit I	Automotive, Medical, IOT, IT and Industrial	12,425	0.29	Leased
Bengaluru, Karnataka – Unit II	Automotive and Industrial	13,447	0.31	Leased
Chennai, Tamil Nadu	Automotive, Medical and Industrial	10,125	0.23	Leased
Manesar, Haryana	Industrial, Medical and Automotive	88,000	2.02	Leased

Board of Directors

Name	
Promoter & Promoter Group Representation on BoD	
Savitha Ramesh	Chairperson and Wholetime Director
Ramesh Kunhikannan	Managing Director
Other Board of Directors	
Jairam Paravastu Sampath	Whole-time Director and CFO
Poornima Ranganath	Independent Director
Anup Kumar Bhat	Independent Director
Heinz Franz Moitzi	Independent Director
Koshy Alexander	Independent Director
Murali S G	Independent Director

Source: Company

Leadership team

Name	
Ramesh Kunhikannan	Managing Director
Rajesh Sharma	CEO
Jairam Paravastu Sampath	Whole-time Director and CFO
Col. Sharath Kumar Bhat (Retd.)	SVP - International Business
Col. Dilip Nambiar (Retd.)	SVP - Operations
Govind Menokee	Head - Information Technology
Premita Govind	Head - Human Resources
Gaurav Mehta	SVP - Business Development
Abdul Nazar	SVP - Business Development (Auto)
Vishwanathan K	SVP - Supply Chain Management
G Sriram	VP - Operations
Sajan Anandaraman	Head - Commercial & Corporate Affairs
Balasubramanian R	Deputy CFO
Ramachandaran Kunnath	Chief Strategy Officer, CS & Compliance Officer

Source: Company

IPO—Issue Details

IPO	Shares #	Value (IN mn)
Fresh Issue	90,28,960	5,300
OFS	55,84,664	3,278
Total	1,46,13,624	8,578
OFS		
- Promoter (Ramesh Kunhikannan)	20,84,664	1,224
- Investor - Freny Firoze Irani	35,00,000	2,054
<i>Issue Price</i>		587

Source: Company

Utilisation of proceeds from IPO

Objective of IPO	Amount (INR mn)
Repayment/ prepayment of borrowings	1,300
Capacity expansion of existing facilities	989
Setting up new facility at Chamarajanagar	1,493
Working capital requirements	1,147
General corporate purposes	1,328
Net Proceeds	6,257

Source: Company; includes INR 1,300mn from pre-IPO placement

Industry

ESDM evolution and scope of service

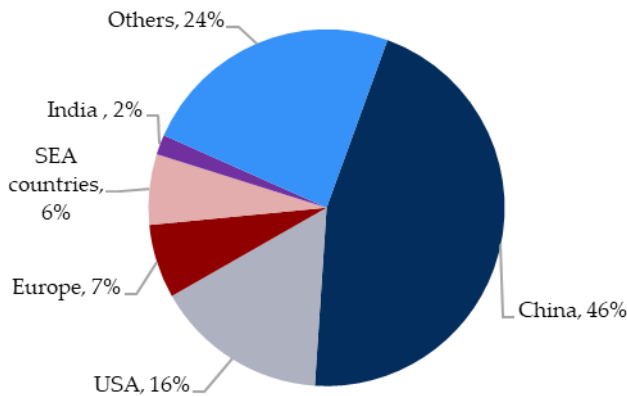
The electronics system design & manufacturing (ESDM) industry globally began in 1970 and ESDM service providers were primarily engaged in contract manufacturing. During the recession period of the 1990s, many OEMs saw downsizing and the contract manufacturing business grew rapidly. Thereafter, the industry has seen consistent progression in the last two decades.

ESDM companies offer a range of services like (1) product design (hardware & software design), (2) prototyping of electronics schematic, (3) product testing, (4) PCB assembly, (5) Box assembly (housing of PCBA in a small enclosure), (6) system integration, (7) solutions design and (8) repairs and rework services.

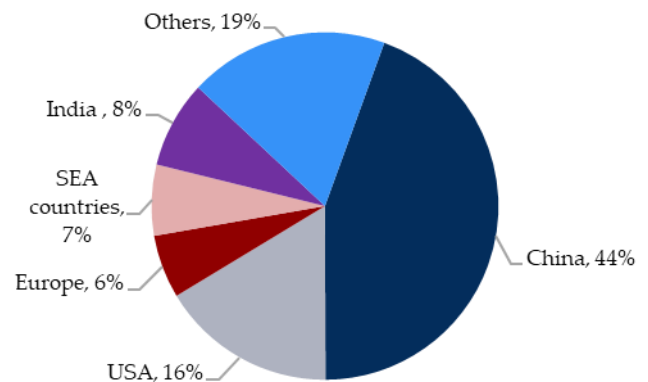
Global theme – China +1

The global ESDM market was USD 800bn in 2020 and it is expected to grow at c.5% to reach USD 1,000bn market by 2025. China leads the global ESDM business with almost 45.5% share. China dominates the global market due to its cost-effectiveness and technological leadership in electronics manufacturing. Ongoing digitalization, IoT, and urbanisation are some megatrends that are driving the growth prospects. It is a high-growth region due to operational cost benefits, availability of a large number of highly skilled personnel, infrastructure, logistical advantages, and proximity to the largest end-user base across all end-user verticals. However, after the COVID-19 pandemic, many global electronics manufacturers are contemplating on China + 1 strategy and looking for alternate manufacturing locations for export business. This is creating tremendous investment potential for countries like Vietnam, India, and the Philippines.

ESDM market break-up by countries (CY20)

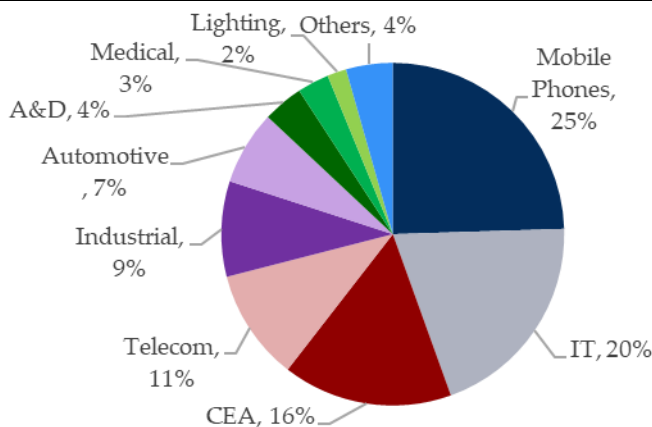


ESDM market break-up by countries (CY25E)



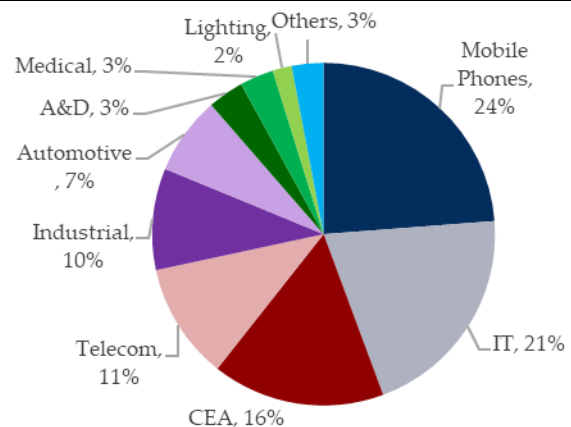
Source: Company, HSIE Research

ESDM market break-up by industry application (CY20)



Source: Company, HSIE Research

ESDM market break-up - industry application (CY25E)



Source: Company, HSIE Research

India setting up for big opportunities

India contributed c.2% of the global ESDM market in 2020. The government, however, is giving a strong push to position India as a prime site for the production of electronics. Under the NPE, India announced various programmes in 2019, including EMC 2.0, to improve the infrastructure of the electronics manufacturing sector and provide incentives to manufacture more products that promote the industry in India. The PLI programme, which benefits electronics manufacturing firms, was introduced in 2020. In the southern state of Tamil Nadu, in Chennai, an electronic manufacturing corridor is being built. The EMC Smart City investment in Greater Noida is planned at USD 162.7 million. Kaynes, Jabil, Dixon, Flextronics, SFO, Elin, Rangsons, and Centum are among the companies that have invested in manufacturing capacity as a result of 'Make in India policy' efforts.

Key government incentives, policies and schemes

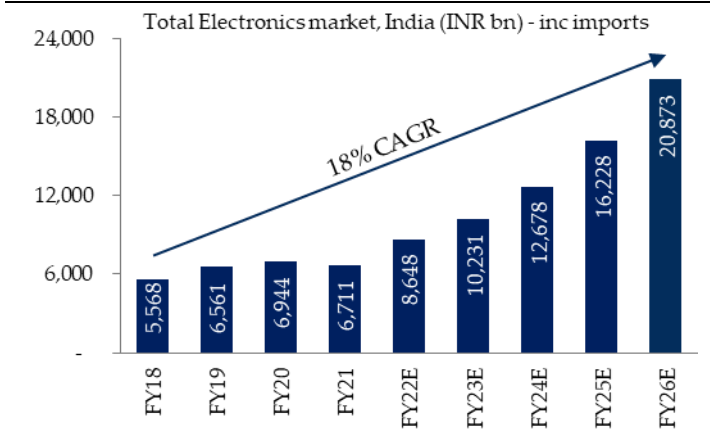
India	PLI Scheme, SPECS, EMC 2.0, MEIS, DLI, Scheme for ATMP/ OSAT units
China	China Standards 2035; Made in China 2025
United States	National Defense Authorization Act of 2021 (NDAA)
Europe	Industry 4.0 Policies, Digital Single Market Strategy; Industrial Policy Strategy
Vietnam	National industrial development policy through 2030
Thailand	Thailand 4.0 Strategy
Indonesia	National Industrial Policy
Singapore	Electronics Industry Transformation Map (ITM)

India's electronics market is one of the fastest growing industries, which has seen a significant demand spur during the last 2-3 years. The total electronics market (domestic production and imports) was valued at INR 7trn in FY21 and is growing at a pace of 25-30%. It is expected that the market will be close to INR 20-21trn by FY26. Out of this, domestic production stands at 74% in FY21 (INR 5trn) and it is expected to reach 96% by FY26 (INR 20trn). Besides the fast-growing electronics market, the shift from imports to domestic production will lead to robust growth in domestic manufacturing in India.

The government's 'Aatmanirbhar Bharat' initiative is driving India's electronic industry. The 'Make in India' initiative which focused on increasing India's presence in the global market faced various challenges like global competition, pro-manufacturing government policies of key countries, India's relatively small scale in manufacturing and its underdeveloped supply chain. However, 'Aatmanirbhar Bharat' focused on replacing the imports with domestic manufacturing. A variety of incentives have been laid down to create the essential infrastructure which led to a reduction of manufacturing and capex costs.

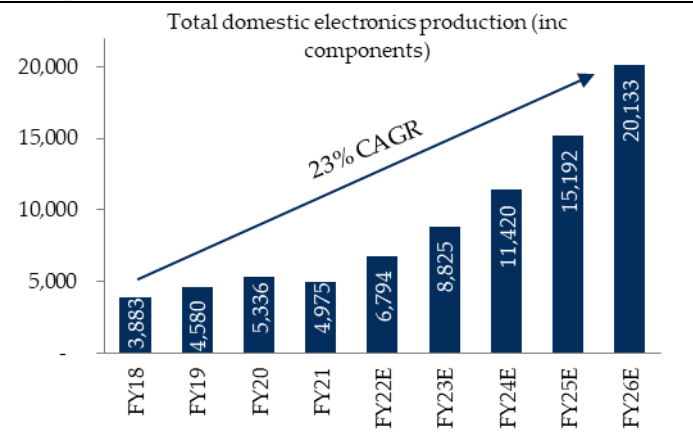
The Indian government is attempting to enhance manufacturing capabilities across multiple electronics sectors and establish the missing links in order to make the Indian electronics sector competitive globally. India is positioned as a destination for high-quality design work as well as a cost-competitive alternative. Many multinational corporations have established or expanded captive centres in India. Increasing penetration of consumer electronics in semi-urban and rural markets, a shift in lifestyle among the Gen Y population, and the adoption of smart devices are some of the key drivers that are assisting the rapid expansion of this industry.

Total electronics market (including imports)



Source: Company, HSIE Research

Total electronics domestic production (including components)



Source: Company, HSIE Research

India’s high dependence on the import of electronic products

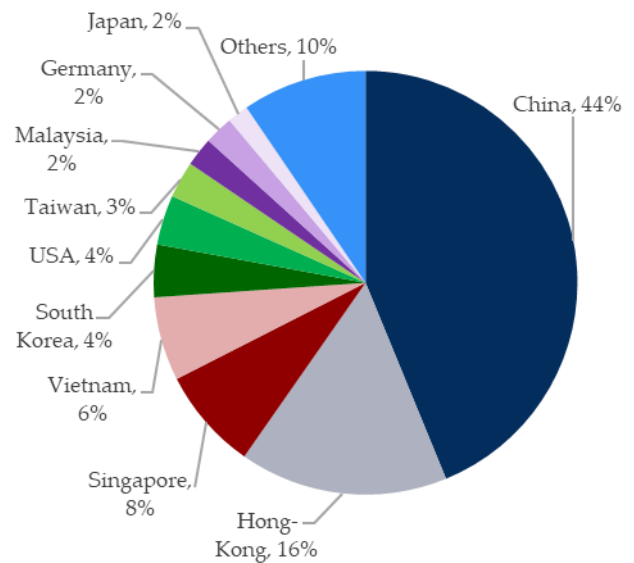
The total import of electronics products was at INR 3,850bn in FY20 as compared to INR 2,296bn in FY15, growing at a CAGR of c.10%. China, HK and Singapore combined contribute c.70% of the total imports for India. Laptops, TV panes, and storage devices are the key contributors to India’s imports.

List of Top 10 Imported Electronic Products by Value, India (FY20)

- Laptops & Notebooks
- FPD Television
- Storage Device
- Set Top Box
- Air Conditioners
- Engine Control Unit
- Biometric Readers
- Medical Devices
- Enterprise Routers
- Air Bags

Source: Company, HSIE Research

Import of INR 3,850bn Electronic Products by Key Countries (FY20)



Source: Company, HSIE Research

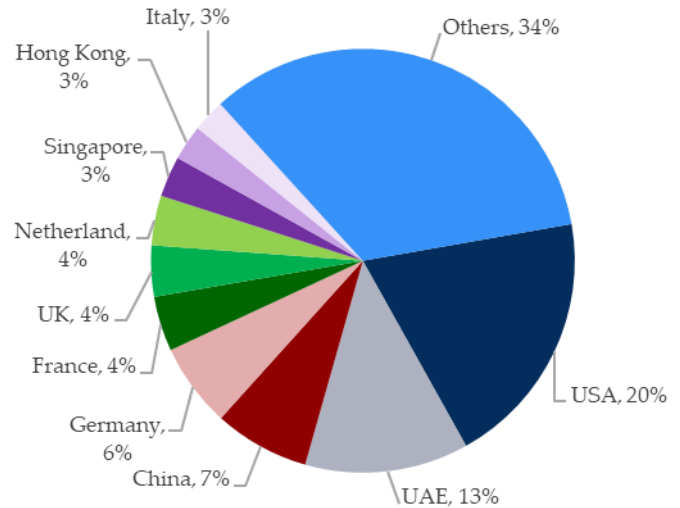
Exports growing at a fast pace, still contributing <25% of our imports

The total export of electronics products was INR 829bn in FY20 as compared to INR 383bn in FY15, growing at a CAGR of c.16%. The USA, the UAE and China combined contribute c.40% of India's total exports. Mobile phones, engine control units, and industrial machinery are the key contributors.

List of Top 10 exported Electronic Products by Value, India (FY20)



Export of INR 829bn Electronic Products by Key Countries (FY20)



Source: Company, HSIE Research

Source: Company, HSIE Research

Import and export trend and mix change

(INR bn)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22E
Import	2,296	2,681	2,876	3,409	4,015	3,851	3,888	4,000
Export	383	391	400	412	619	829	786	1,461
Export/Import Mix (%)	17%	15%	14%	12%	15%	22%	20%	37%

Economic Comparison on Favourable Manufacturing Parameter, India, China and Vietnam (FY20)

Parameters	India	China	Vietnam
Population (mn)	1379	1414	97.4
Annual GDP (USD Tn)	2.66	14.86	0.34
Inflation (%)	6.2	2.4	3.2
Manufacturing Value Added (% of GDP)	13	26	16.7
Export (USD Tn)	0.47	2.73	0.28
Imports (USD Tn)	0.48	2.35	0.27
Manufacturing Risk Index (Rank)	3	1	4
FDI Investments (USD bn)	64	163	17

Source: Company, HSIE Research

Labour Market Comparison, India, China and Vietnam (FY20)

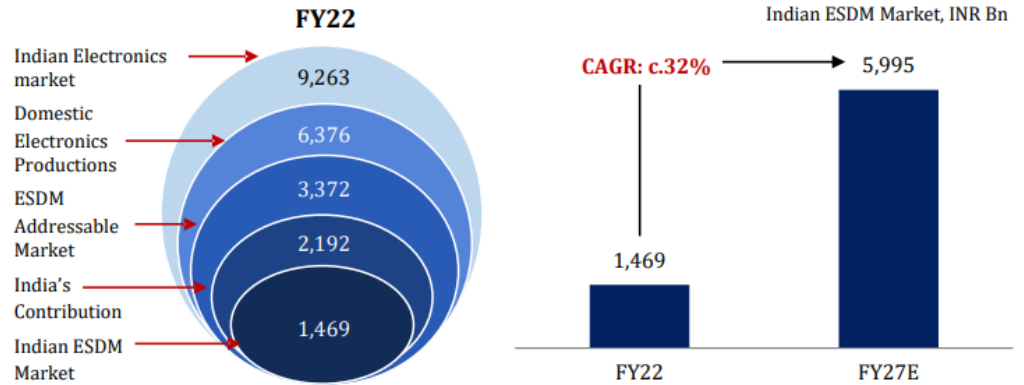
Parameters	India	China	Vietnam
Total labour force (mn)	471.7	750.6	56.5
Total labour force, female (mn)	26.2	63.7	62.2
Labour force participation rate (% of population)	51.1	71.0	68.6
Employment in industry (% of total employment)	26.2	28.2	28.4
Wage and salaried workers (% of total employment)	23.9	53.5	44.4
Average daily wages - manufacturing (USD)	6.0	35.5	10.5

Source: Company, HSIE Research

ESDM addressable market to grow >30% CAGR

The addressable market of ESDM in India was c.INR 1.1trn in FY21 and it is expected to reach c.INR 6trn by FY27. The industry is expected to grow at a pace of 32% CAGR during this period. IoT & embedded systems, telecom & networking and LED lighting are the top contributors to the market and these are growing at a rapid pace.

India ESDM market breakup



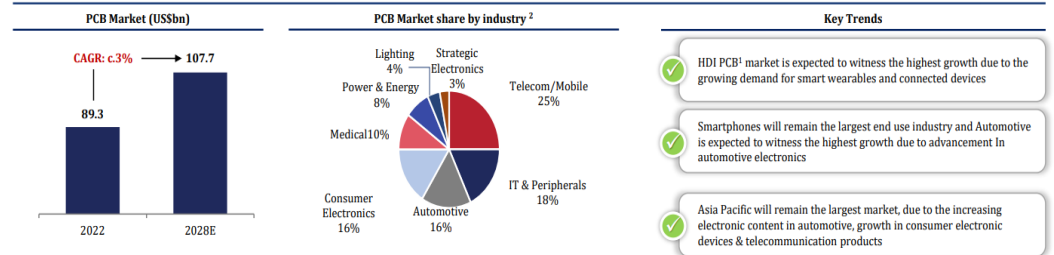
ESDM market break by industry applications in India

Products	FY21		FY26E		CAGR (%)
	% mix	INR bn	% mix	INR bn	
Mobile Phones	64%	688	69%	4,149	43%
CEA	13%	137	10%	568	33%
Automotive	5%	50	3%	179	29%
Industrial	4%	45	2%	120	22%
Telecom	4%	42	2%	120	23%
A&D (aerospace & defence)	3%	27	3%	167	44%
IT	2%	25	6%	359	71%
Medical	1%	15	2%	90	43%
Railways	1%	5	1%	36	46%
Others	3%	35	3%	191	40%
Total	100%	1,069	100%	5,978	41%

Source: Frost & Sullivan Analysis

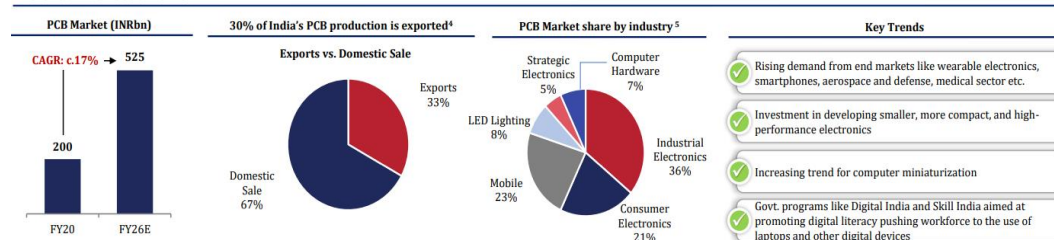
Global PCB market

Global PCB market overview

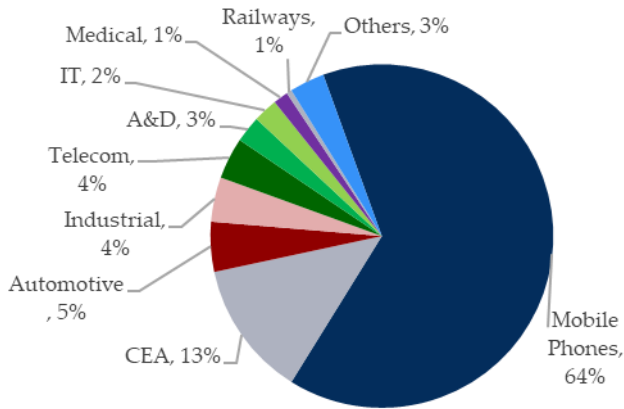


India PCB market

India PCB market overview

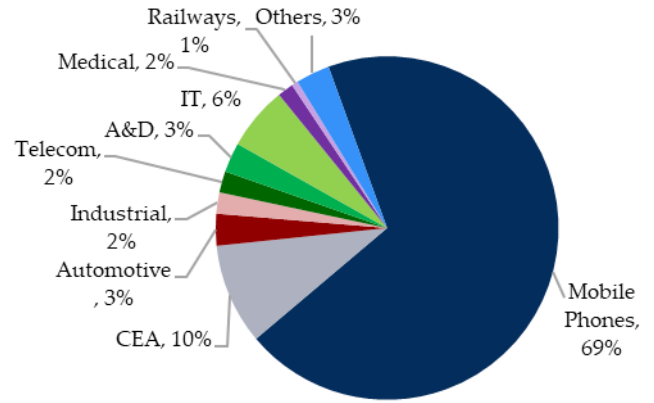


ESDM market break by industry applications (FY21)



Source: HSIE Research

ESDM market break by industry applications (FY26E)



Source: HSIE Research

Recent developments in India - To drive ecosystem

PLI scheme in 13 Key Sectors (FY21-FY22)

Sectors	Approved financial outlay over 5-year period (INR bn)
Mobile manufacturing and specified electronic components	410
Critical key starting materials/drug intermediaries, API	69
Manufacturing of medical devices	34
Advance chemistry cell ACC Battery	181
Electronic/Technology Products	50
Automobiles and Auto Components	259
Pharmaceuticals drugs	150
Telecom & Networking Products	122
Textile Products	107
Food Products	109
High Efficiency solar PV modules	45
White Goods (Acs & LEDs)	62
Speciality steel	63
Total	1,662

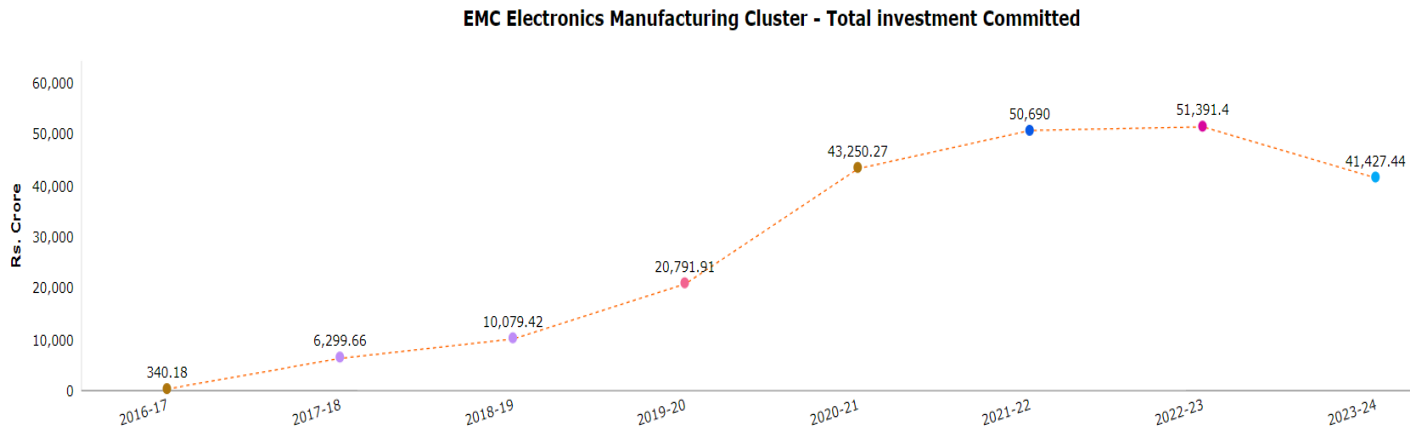
EMC Electronics Manufacturing Cluster

S. No.	Duration	Total Land allotted for EMC - Cumulative (Acre)	Total investment Committed - Cumulative (Rs. Crore)	Total GIA Released - Cumulative (Rs. Crore)	Total number of Land Allottees - Cumulative	Total number of Operational Units - Cumulative
1	2016-17	46	340	42	37	3
2	2017-18	246	6,300	264	66	16
3	2018-19	385	10,079	484	90	22
4	2019-20	883	20,792	612	148	30
5	2020-21	1,043	43,250	757	201	32
6	2021-22	1,321	50,690	790	331	38
7	2022-23	1,618	51,391	840	402	71
8	2023-24	1,580	41,427	848	400	80

S. No.	Duration	Total Land allotted for EMC - Cumulative (Acre)	Total investment Committed - Cumulative (INR Crore)	Total GIA Released - Cumulative (Rs. Crore)	Total number of Land Allottees - Cumulative	Total number of Operational Units - Cumulative
1	Qtr-4 (2021-22)	1,321	50,690	789.76	331	38
2	Qtr-1 (2022-23)	1,342	50,690	799.94	342	40
3	Qtr-2 (2022-23)	1,393	60,554	809.57	364	44
4	Qtr-3 (2022-23)	1,393	57,739	834.34	362	51
5	Qtr-4 (2022-23)	1,618	51,391	840.43	402	71
6	Qtr-1 (2023-24)	1,580	41,427	847.93	400	80

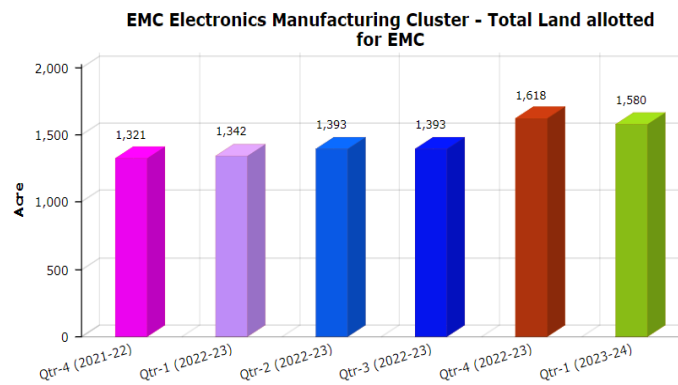
Source: MeitY, HSIE Research

EMC – Total investments committed



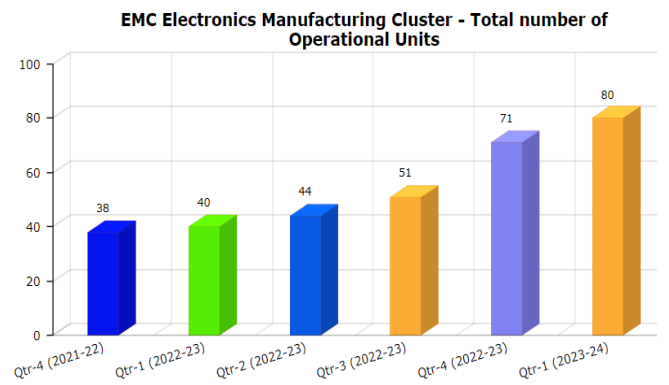
Source: MeitY, HSIE Research

EMC – Total land allotted



Source: MeitY, HSIE Research

EMC – Total number of operational units



Source: MeitY, HSIE Research

Electronics Manufacturing Clusters (EMC) 2.0 Scheme

EMC 2.0 Scheme was notified on 01.04.2020 to provide financial assistance for setting up of both EMC projects and Common Facility Centers (CFCs) across the country. The scheme is open for receipt of applications up to March 2024 with a disbursement period up to March 2028. Under the scheme, 14 applications for setting up EMC projects measuring an area of 4,108 acres with a proposed project cost of INR 5,708 crore including Central Financial assistance of INR 2,757 crore have been received. 5 applications with a project cost of INR 2,219 crore including Central financial assistance of INR 1,036 crore have been accorded approval.

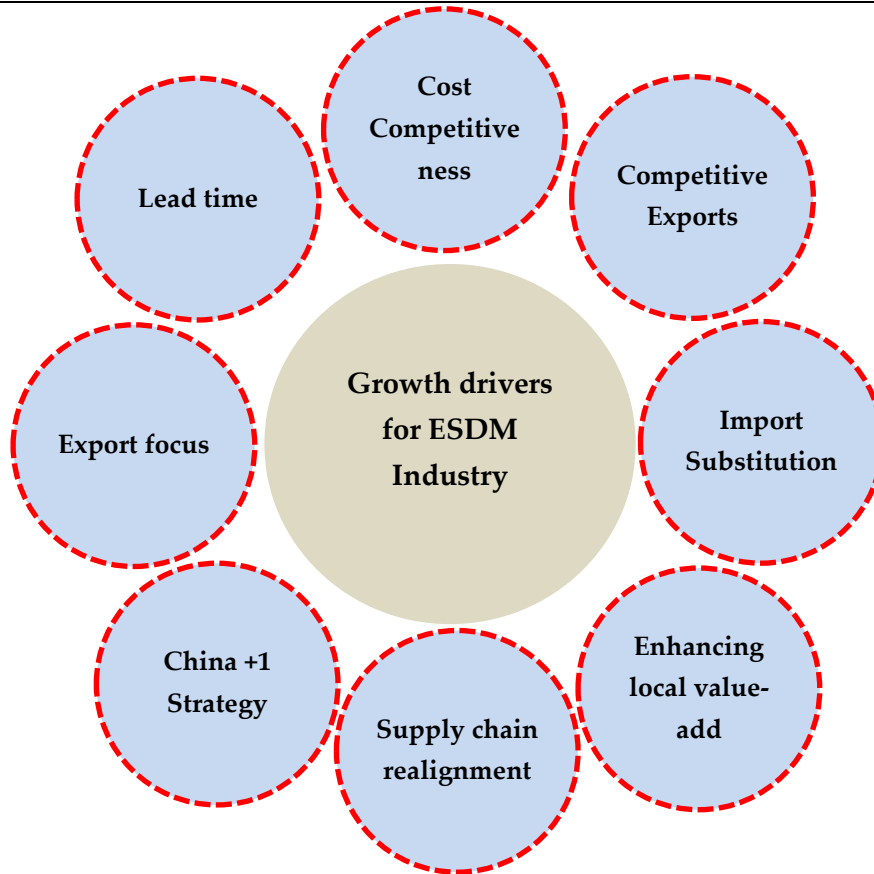
Development of Semiconductors and Display Manufacturing Ecosystem in India

A total of 45 applications have been received under the Programme for Development of Semiconductors and Display Manufacturing Ecosystem in India. This includes five applications for setting up semiconductor Fabs in India, two applications for setting up Display Fabs in India, nine applications for setting up compound and ATMP facilities in India, and 29 applications for the Design Linked Incentive Scheme.

Growth drivers for the Indian ESDM industry

The ESDM industry is growing at a rapid pace and there are several drivers which are structural in nature and will keep the high growth momentum even in the long term. India’s ecosystem is also evolving and many drivers are still at the initial stage of evolution and as the operation levels grow, many more growth drivers will be added. There are still high-end and value-added products/services which are not happening in India and would start driving once the core foundations set up.

Growth drivers for ESDM industry



1. Domestic cost competitiveness in manufacturing

India has one of the lowest labour costs and overheads giving it a considerable advantage over China and most of the other Southeast Asian countries. As per the industry study, India’s wages are >40% cheaper than China's. Labour cost is one of the key costs in manufacturing; thus, it provides a big headroom for cost competitiveness in the global market. Thereby, investments in India are growing and driving demand for ESDM.

2. Competitive exports

Cost competitiveness in domestic manufacturing in India contributes to the growth of exports in electronics from the country. This is supported by favourable policies such as the ASEAN-India Free Trade Agreement coupled with the depreciating value of Indian Rupee (₹), which makes Indian exports competitive.

3. Import substitution

India is highly dependent on the import of electronics products, c.21% of India’s electronic product demand is being contributed by imports. Such a high dependency mix for fast-growing products is also alarming for India. Thereby, import substitution is critical for India, leading to high growth for ESDM.

4. Enhancing local value-add

Sub-assembly modules and the finished goods assemblies are things that are happening currently in India. Even though component manufacturing is currently being dominated by China, Japan, and South Korea, India has showcased strong potential in this part and is on the path to developing a strong component manufacturing base.

5. Supply chain realignment

Local availability of components and chip fabrication are primary activities that determine the strength of the electronics manufacturing ecosystem. India has a very limited component supplier base; a majority of the high-value and critical components are imported. Components that are predominantly imported include ICs, PCBs, and other active components. As supply-chain resilience and localization are becoming more significant, India has had to take the necessary steps to improve the domestic value chain capability for long-term benefits. The introduction of the PLI scheme to promote component sourcing and the relaxing of FDI policies which would facilitate companies to set up bases in India are allowing them to drive product development as well as research and development.

6. China + 1 strategy

China's rising cost structure along with the global need for diversification to avoid any potential risk of product supply in adverse situations like COVID etc. have created a need for China +1. China accounts for 13% of total global exports. However, as a result of the China+1 strategy and the US-China trade dispute, China is gradually losing its global partners. According to a recent global survey, 20-30% of industrial firms will leave China in the next few years. Around USD 4 trillion in manufacturing took place in China in 2020, and it is the world's largest exporter and the US is its top importer, posing a huge challenge for the World Trade Organization to regulate trade under its current rules and regulations.

7. Export focus on USD 5 trillion GDP

India is among the top growing economies and to sustain this outperformance, the government is also emphasizing manufacturing. India has so far struggled to tap the global demand for electronics products due to a variety of reasons i.e. low investment, weak supply chain, more focus on assembly due to lack of manufacturing capabilities, etc. However, incrementally manufacturing sector is seeing more impetus. With a growing economy and large population, India can tap the global demand for electronic products.

8. Component manufacturing/ lead time

Higher local sourcing of components will reduce the lead time of manufacturing high-end products. Several critical components are being imported as of now which is increasing the overall manufacturing process time and leading to higher requirements for import planning.

Peer comparison

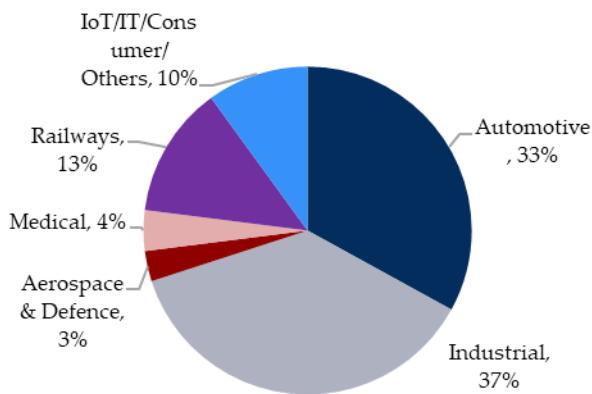
Kaynes boasts of a well-diversified business profile with a portfolio having applications across industry verticals ranging from CEA, Industrial, Telecom, Aerospace & Defence, IT, and Medical to Railway. It has a higher B2B share with industrials (37%)/automotive (33%) and railways (10%) contributing 80% of revenues.

India EMS player's presence across various end-use industry

Company	Mobile Phones	CEA	Automotive	Industrial	Telecom	Aerospace & Defence	IT	Medical	Railway
Kaynes	x	✓	✓	✓	✓	✓	✓	✓	✓
Avalon	x	x	✓	✓	✓	✓	x	✓	✓
Syrma SGS	x	✓	✓	✓	✓	x	x	✓	x
Amber	x	✓	x	x	x	x	x	x	✓
Dixon	✓	✓	x	x	x	x	x	✓	x
Elin Electronics	x	✓	x	x	x	x	x	x	x
Bharat FIH	✓	✓	✓	x	✓	✓	✓	x	x
Sanmina-SCI	x	x	✓	✓	✓	✓	✓	✓	x
SFO Technologies	x	x	✓	✓	✓	✓	x	✓	x
VVDN Technologies	x	x	✓	✓	✓	x	✓	x	x

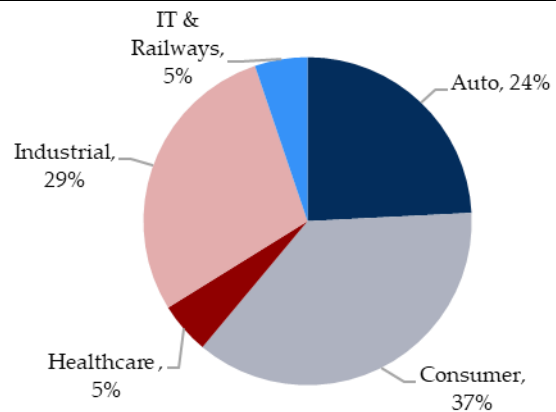
Source: Company, HSIE Research

Kaynes Technology – H1FY24 Revenue Mix (%)



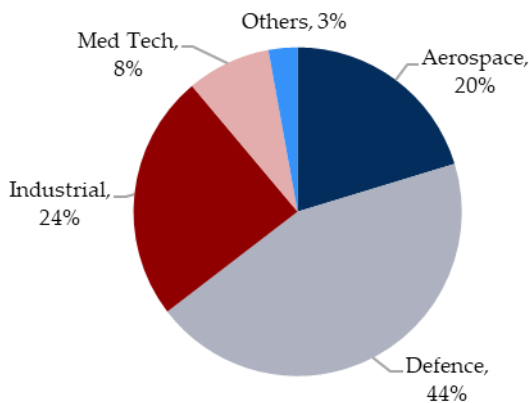
Source: Company, HSIE Research

Syrma SGS – H1FY24 Revenue Mix (%)



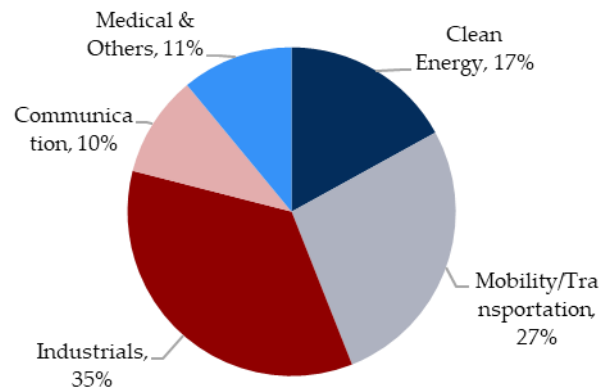
Source: Company, HSIE Research

Cyient DLM – H1FY24 Revenue Mix (%)



Source: Company, HSIE Research

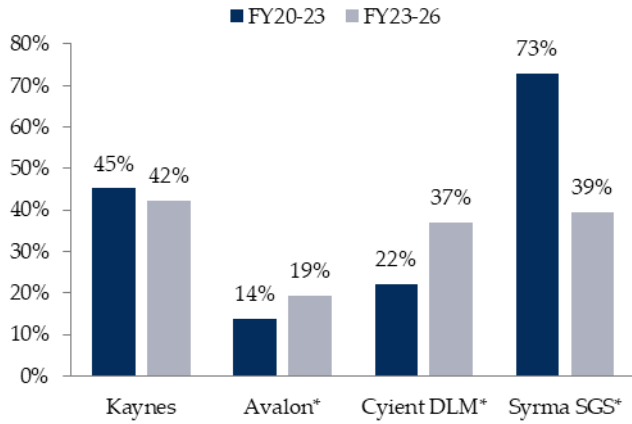
Avalon Technologies – H1FY24 Revenue Mix (%)



Source: Company, HSIE Research

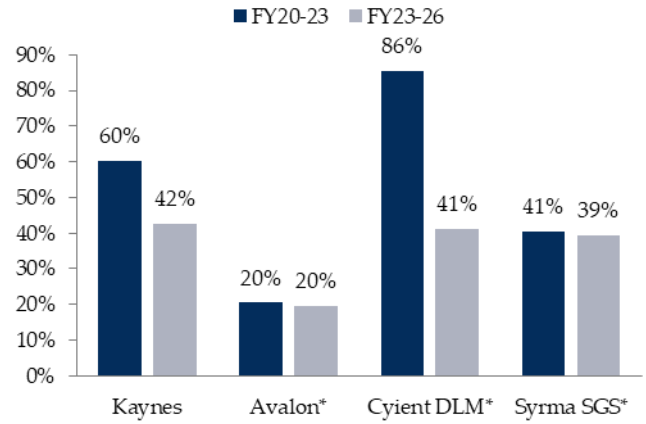
Kaynes has been one of the fastest-growing EMS players, recording revenue/EBITDA/PAT of 45/60/104% over FY20-23. Syrma grew by 73% while Avalon/Cyient saw revenue growth of 14/22%. During the same period, Kaynes' order book has grown c.6x. Given its diverse service offerings and industry tailwinds, we believe Kaynes will continue to grow at a fast clip with its revenue/EBITDA/PAT expected to grow by 42/42/53% over FY23-26E.

India EMS – Revenue CAGR



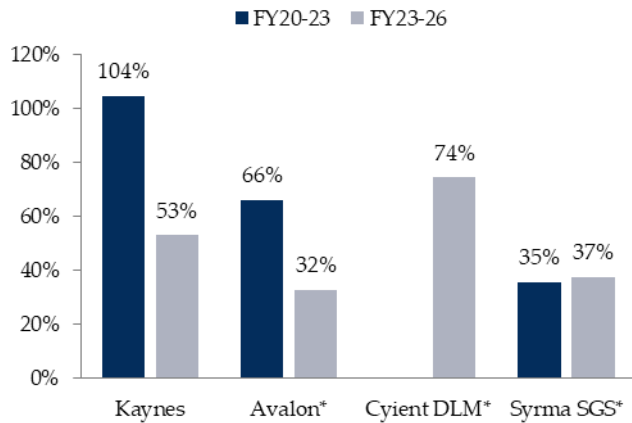
Source: Company, HSIE Research; *Bloomberg estimates

India EMS –EBITDA CAGR



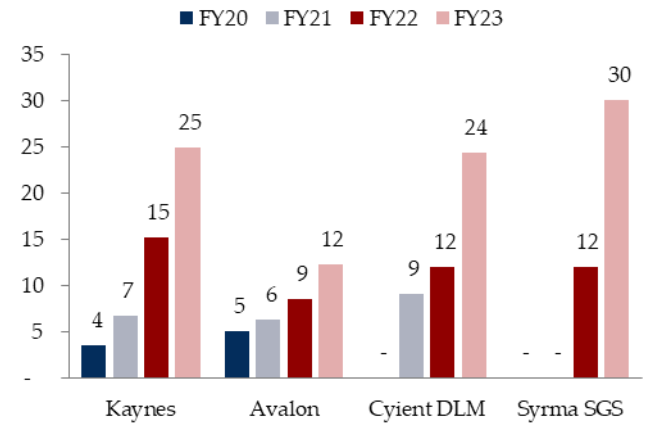
Source: Company, HSIE Research; *Bloomberg estimates

India EMS – PAT CAGR



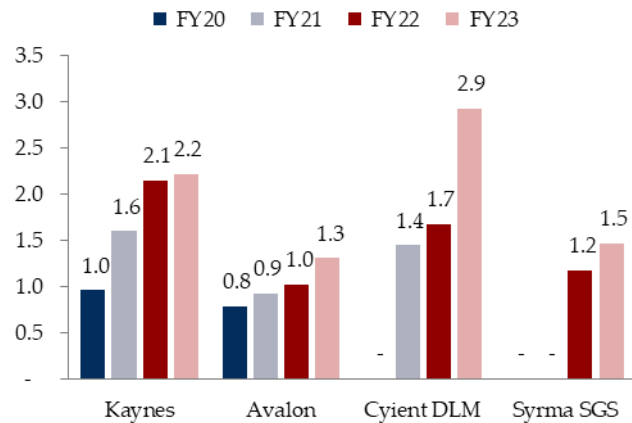
Source: Company, HSIE Research; *Bloomberg estimates

India EMS – Order book



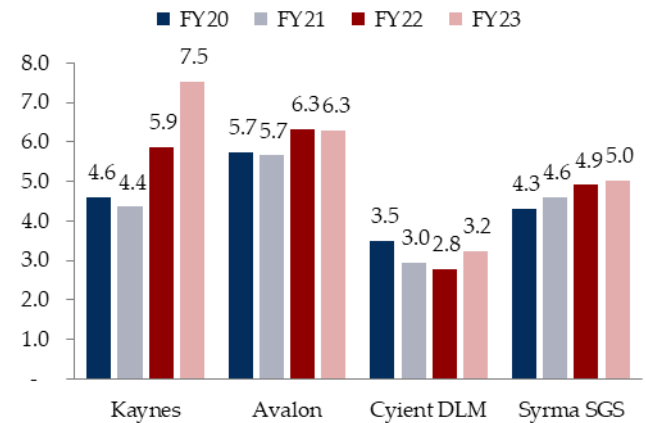
Source: Company, HSIE Research

India EMS – Order book to bill (x)



Source: Company, HSIE Research

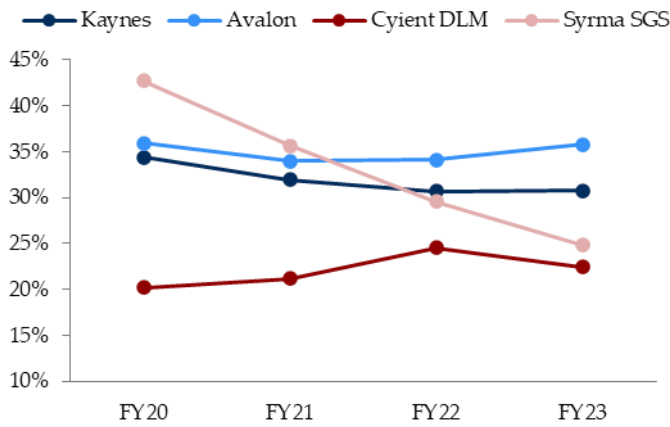
India EMS – Fixed Asset Turnover



Source: Company, HSIE Research

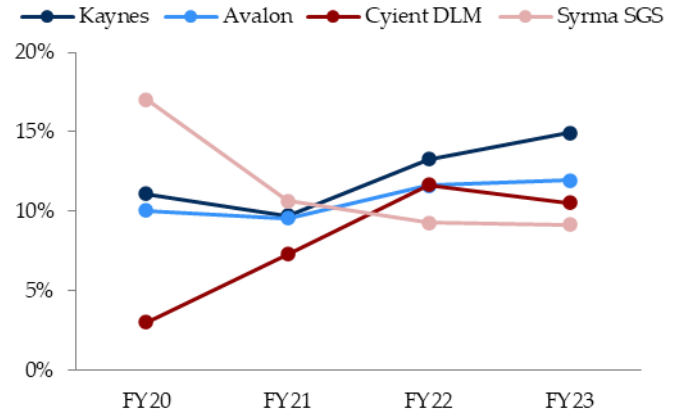
Given its higher industrial mix (low volume high margin), presence across the value chain, level of complexity and execution capabilities, Kaynes enjoys industry-leading margins followed by Avalon and Cyient, all having a higher B2B mix. Given Syrma's higher B2C revenue mix, it has the lowest margins amongst its peers.

India EMS – Gross Margin %



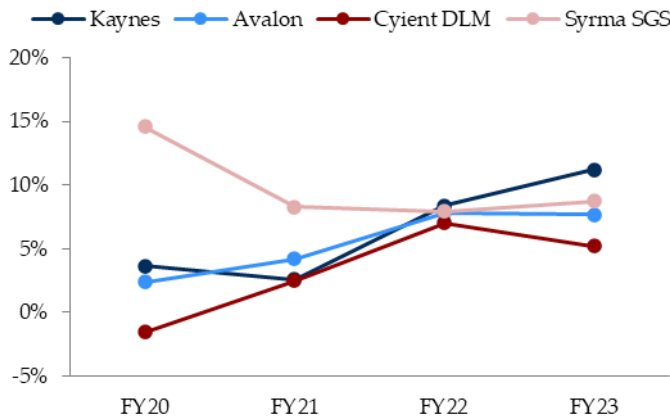
Source: Company, HSIE Research

India EMS – EBITDA Margin %



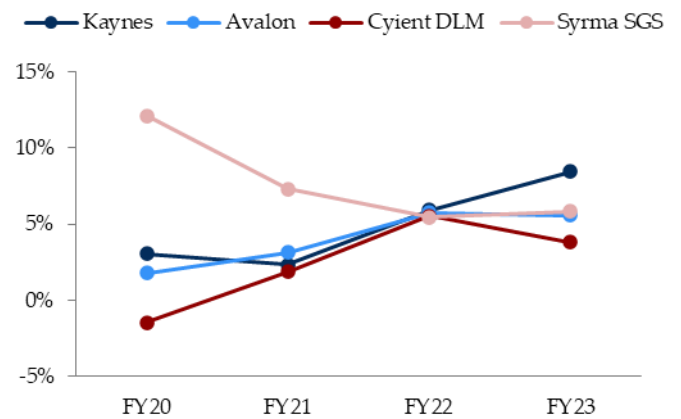
Source: Company, HSIE Research

India EMS – PBT Margin %



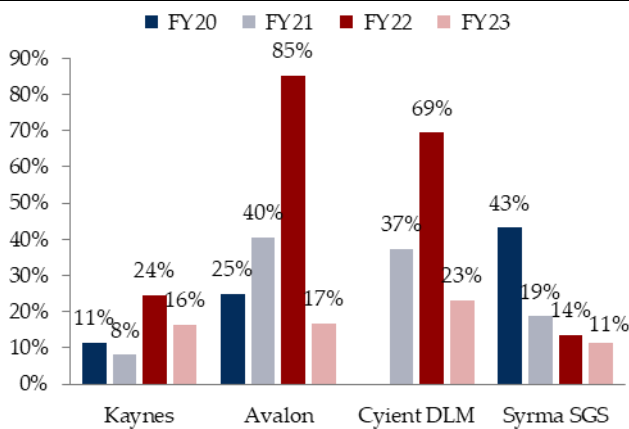
Source: Company, HSIE Research

India EMS – PAT margin %



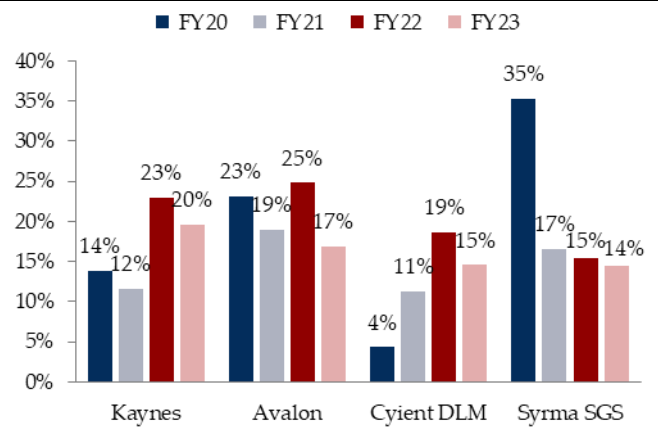
Source: Company, HSIE Research

India EMS – RoE %



Source: Company, HSIE Research

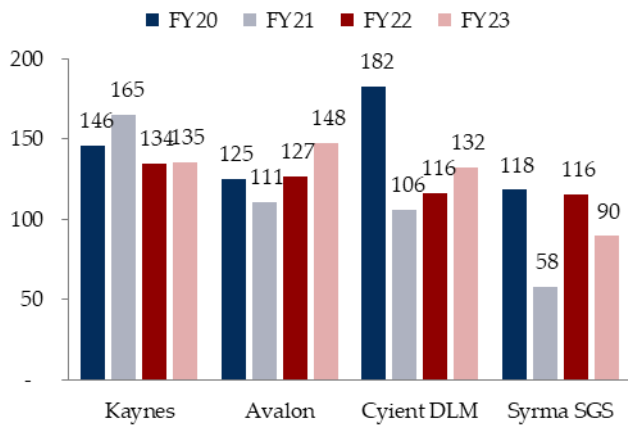
India EMS – RoCE %



Source: Company, HSIE Research

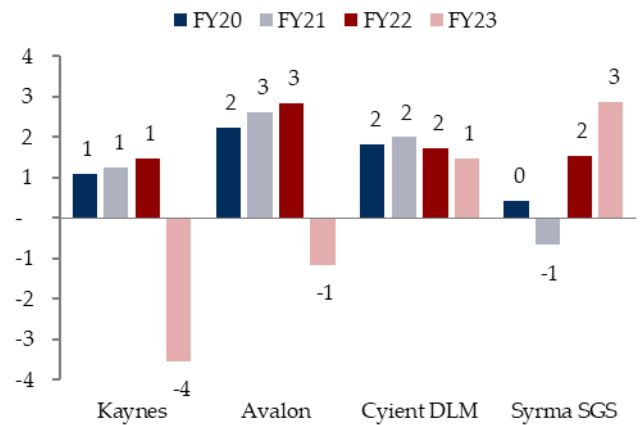
With the absence of a local component manufacturing ecosystem, most of the raw materials are imported. Moreover, given the large number of SKUs/components being dealt with, there is a high requirement to stock sufficient inventory. This leads to higher working capital requirements for all EMS players. Kaynes has one of the highest NWCs at 135 days as of Mar'23. Here Syrma has the best working capital days cycle followed by Cyient.

India EMS – Net Working Capital Days



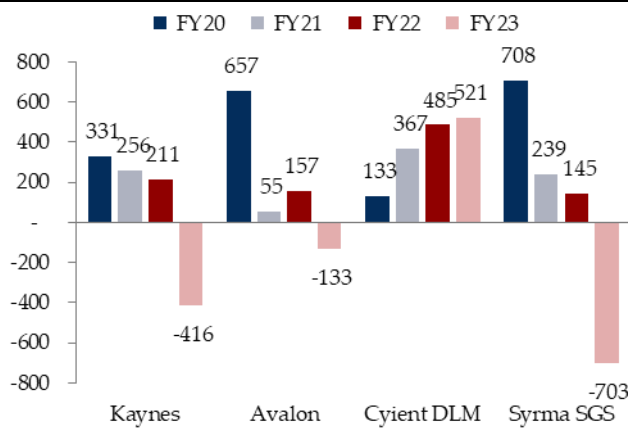
Source: Company, HSIE Research

India EMS – Net Debt/ (Cash)



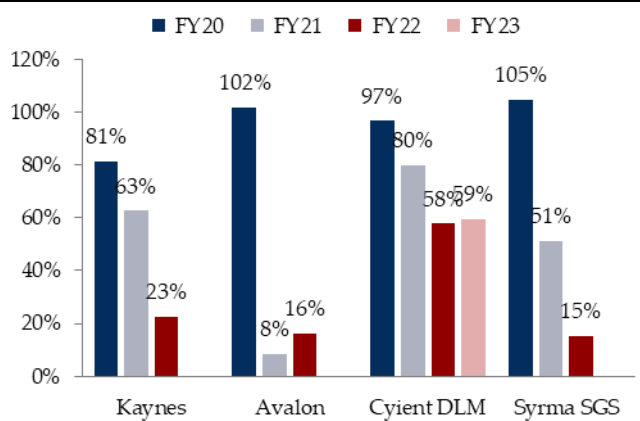
Source: Company, HSIE Research

India EMS – OCF



Source: Company, HSIE Research

India EMS – OCF/EBITDA %



Source: Company, HSIE Research

Backward integration into OSAT

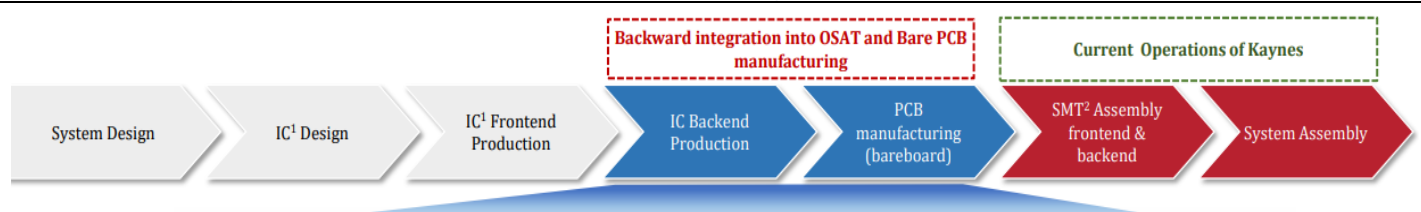
Government incentivizing development of semiconductor ecosystem

- GoI remains focused on building the overall semiconductor ecosystem, which in turn will help catalyze India’s rapidly expanding electronics manufacturing and innovation ecosystem. In its bid to do so, GoI has approved the Semicon India programme with a total outlay of INR 760bn for the development of the semiconductor and display manufacturing ecosystem in the country. Four schemes have been introduced, which are:
 1. **Semiconductor fabs:** Fiscal support of 50% of the project cost.
 2. **Display fabs:** Fiscal support of 50% of the project cost.
 3. **Compound Semiconductors/ Silicon Photonics/ Sensor fabs/ ATMP/ OSAT:** Fiscal support of 50% of the capital expenditure.
 4. **Design-linked incentive:** 50% of eligible expenditure subject to a ceiling of INR 150mn per application. Deployment Linked Incentive of 4-6% of net sales turnover over five years subject to a ceiling of INR 300mn per application.
- Development of a domestic component ecosystem will help (1) improve time to market/lead time; (2) reduce component and logistics costs; (3) improve foreign exchange savings; and (4) make electronic products more affordable.

Backward integration to provide strategic benefits to Kaynes

- Keeping in mind the larger opportunity at hand, Kaynes has taken baby steps by getting into Outsourced Semiconductor Assembly and Test (OSAT) and bare PCB manufacturing.

To backward integrate into OSAT and Bare PCB manufacturing



Source: Company

- In addition to GoI incentives, in order to promote manufacturing, certain states are giving additional incentives. Kaynes has already signed MoUs with Telangana and Karnataka state governments. Their first phase is expected to come up in Telangana where they have acquired 46 acres of land near Hyderabad airport.
- In terms of project timelines, Kaynes expects to begin trial runs for the first line by Apr’24 and begin commercial production by H2FY25. They are looking to install 12 lines by FY25. The total investment required is envisaged to be INR 28.5bn.
- Kaynes has entered into a technology tie-up with a Globetronics, a global OSAT/ ATMP player with over three decades of experience. Also, they have signed MOUs with three customers already.
- The key challenge here remains the availability of skilled labour. Kaynes will look to build up a team in India because currently only very low-end OSAT is being done. In order to do that, they will bring in some expatriates who will come here, train people, and build a team. This process can take one year.

OSAT project execution plan

Raw Material Sourcing Plan

Partnering with RM vendors to establish manufacturing facility/ecosystem in India

Raw Material	Country
Silicon Wafer	Fabs in Taiwan, Germany etc.
Lead Frame / Substrate	Singapore, Malaysia, Hong Kong, China
Backgrind / Dicing Tape	Japan
Silver Epoxy	Japan
Gold Wire, Copper Wire	Japan
Mold Compound	Japan
Plating Chemicals	Singapore

Utility Sourcing Plan

Electricity	State governments to support power requirements while offering power incentives
Raw Water	Met with municipal/corporation water supply post necessary approvals from local authorities
De-ionized (DI) water	DI plant converting raw water to de-ionized water will be set up at the production facility
Various Gases (N2, CO2, Argon etc.)	Captive production of Nitrogen while other gases which (required in small quantities) will be procured via cylinders

Production Plan

Application filed with India Semiconductor Mission

46 Acres of land acquired

State government approvals obtained

April 2024 POC¹ to start with customer

Upcoming facility near Hyderabad Telangana

INR 28,497mn Investment required

12 OSAT Lines (By FY25)

Overview of Products Offerings

Packaging Technologies	QFN packaging	FCBGA ²	Global SOT Packaging
Product Offerings	<ul style="list-style-type: none"> QFN / QFN Stack Die 	<ul style="list-style-type: none"> BGA / BGA Stack Die / SIP³ / FC BGA 	<ul style="list-style-type: none"> SOT
Potential target applications	<ul style="list-style-type: none"> Programmable modules and microcomputers (computing equipment) Miniaturization of wireless devices & communication equipment 	<ul style="list-style-type: none"> Telecommunication equipment, mobiles, laptops, desktops servers etc. Automotive industry, for ADAS and infotainment functions 	<ul style="list-style-type: none"> Consumer electronics products
Potential target geographies	<ul style="list-style-type: none"> North America, APAC, Europe 	<ul style="list-style-type: none"> North America, Europe, Asia Pacific and EMEA, South America 	<ul style="list-style-type: none"> North America, Europe, Asia Pacific and LAMEA

Source: Company

- In bare PCB manufacturing, rather than pursuing conventional (low margin) PCB, Kaynes will focus on high-end PCBs (HDI, multi-layers) which are high margin. Kaynes has been allotted 20 acres of land over which it will build a 25k sq.m facility for a total investment of INR 14bn.
- Kaynes expects to deliver 18-20% EBITDAM on these businesses once they stabilise.

PCB project execution plan

Execution Plan

- The proposed project will have manufacturing capabilities of Advanced HDI PCBs
- HDI PCBs have been the key driving factor behind the reducing size and weight of consumer electronic products while improvising the speed, performance and power consumption
- Utilizes thin materials and minimum layers for their composition compared to standard PCB boards increasing performance and efficiency of the PCB
- Enable packing of all functions in one board rather than using several boards as in standard PCBs. This results in reducing the size and overall costs compared to the traditional PCBs.
- The components in an HDI PCB are densely packed with versatile routing which results in faster transmission of the signal and better signal quality.
- Provide designers with the freedom to design and place more components on both sides of the PCB. This is due to the higher wiring density with finer track arrangements on PCBs

Overview of Products Offerings

Proposed Products	Description
DS	Standard Double Side PCB
ML4	4 Layer PCB
ML6	6 Layer PCB
ML8	8 Layer PCB
ML10	10 Layer PCB
HDI 6	6 Layer Standard HDI PCB
HDI 8	8 Layer Standard HDI PCB
HDI 10	10 Layer Standard HDI PCB
1-n-1	Simple advanced HDI PCB
2-n-2	Complex advanced HDI PCB

Source: Company

Raw Material Sourcing & Production Plan

- Currently, raw materials are sourced from vendors in APAC countries. The company continues to identify alternative sources who can provide better quality and competitive prices
- Plans to establish Raw material (RM) manufacturing ecosystem in India

Upcoming facility near Mysore, Karnataka

20 Acres of land allotted

INR 13,957mn Project Cost

25k sq.m. Manufacturing Facility

Utility Sourcing Plan

Electricity	State governments to support power requirements while offering power incentives
Raw Water	Met with municipal/corporation water supply post necessary approvals from local authorities
Filtered Water	Necessary RO plant will be set up at the site with raw water as input requirement

Valuation and recommendation

Kaynes registered revenue of INR 11bn in FY23 with 33% revenue CAGR during FY19-23. Automotive remained a key contributor with c.38% mix followed by industrial at 27%, railways at 12%, consumer at 9%, medical at 6% and IOT at 6% respectively.

Kaynes clocked 10x improvement in its order book in the last 3 years. The company has also de-risked its business model by diversified client/suppliers mix. We model revenue/EBITDA/PAT CAGR of 42/42/53% over FY23-26E.

Besides traditional business, Kaynes has announced its forays into OSAT (phase-1 in Telangana, proof of concept by Apr'24, phase-2 in Karnataka), benefits to begin from FY25 onwards. Major benefits will be back ended but considering its potential to achieve >INR 30bn revenue with c.18% EBITDA margin at full efficiency (with both phases), we assign INR 23bn value in our SoTP (with discounting of 18%). We value traditional business at 45x P/E on Dec-24 EPS and add INR 400/share value of OSAT (link). **We initiate coverage on Kaynes with BUY rating with TP of INR 2,850.**

TP table

Valuation	Dec-24
Traditional Business	
EPS (Dec-24)	54.3
P/E (x)	45.0
Value per share	2,450
OSAT	
Value of business	23,000
Value per share	400
Target Price	2,850
Implied P/E (x)	52.5
CMP	2,450
Up	16%

OSAT assumption, discounting and valuation

Particulars (INR mn)	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E
Revenue	472	3,220	8,400	12,220	18,338	25,628
EBITDA	(236)	225	1,008	1,833	3,301	4,613
EBITDAM	-50%	7%	12%	15%	18%	18%
PBT	(461)	(321)	(124)	267	1,140	2,148
ETR %	17%	17%	17%	17%	17%	17%
Tax	-	-	(21)	45	194	365
PAT	(461)	(321)	(103)	222	947	1,783
Toal investment	1,150	5,250	10,850	17,150	20,450	28,450
Asset Turns (x)		0.1	0.4	0.6	0.7	0.8
Kaynes investment	288	1,313	2,713	4,288	5,113	7,113

OSAT valuation

PAT (FY30E)	1,783
P/E (x)	30
Value (INR mn)	53,481
Disc rate (%)	18%
Disc value (INR mn)	₹ 23,000
Value per share	₹ 400

India EMS – Earnings Summary

Company	Revenue CAGR %		EBITDA CAGR %		PAT CAGR %		RoE %			
	FY20-23	FY23-26E	FY20-23	FY23-26E	FY20-23	FY23-26E	FY23	FY24E	FY25E	FY26E
Kaynes	45.2	42.3	60.4	42.5	104.3	52.8	16	17	20	22
Amber*	20.0	18.1	10.6	25.1	-0.3	37.1	9	10	13	15
Dixon*	40.5	35.8	32.2	35.3	28.5	44.7	22	27	30	29
Avalon*	13.8	19.3	20.5	19.6	65.7	32.5	17	11	15	16
Cyient*	22.1	36.9	85.6	41.2	na	74.2	23	11	11	15
Elin*	11.0	9.5	5.5	16.5	-0.8	36.5	7	4	9	12
PG Electroplast*	49.4	26.6	64.0	24.1	209.4	42.2	22	18	19	21
Syrma SGS*	72.8	39.5	40.5	39.4	35.4	37.2	11	10	13	16

Source: Company, HSIE Research; *Bloomberg estimates

India EMS – Valuation Summary

Company	P/E (x)				EV/EBITDA (x)				EV/Revenue (x)			
	FY23	FY24E	FY25E	FY26E	FY23	FY24E	FY25E	FY26E	FY23	FY24E	FY25E	FY26E
Kaynes	149.6	83.0	55.3	37.6	83.8	55.1	39.3	29.0	12.5	8.4	5.9	4.3
Amber*	70.0	53.7	35.8	27.2	29.1	22.4	18.0	14.9	1.8	1.5	1.3	1.1
Dixon*	122.7	77.6	53.8	41.1	62.2	43.6	31.7	25.1	2.6	1.8	1.3	1.0
Avalon*	51.7	45.8	30.1	23.5	27.8	29.3	20.7	16.3	3.3	3.0	2.4	2.0
Cyient*	83.2	80.4	44.2	30.1	61.1	45.3	30.2	21.7	6.5	4.6	3.3	2.5
Elin*	24.2	39.1	15.5	11.1	10.5	14.9	8.3	6.6	0.6	0.7	0.6	0.5
PG Electroplast*	66.6	48.3	34.3	27.3	35.1	27.8	21.7	18.4	2.9	2.2	1.7	1.4
Syrma SGS*	73.8	64.9	43.7	31.4	55.1	42.7	27.8	20.3	5.0	3.4	2.5	1.9

Source: Company, HSIE Research; *Bloomberg estimates

Key Assumptions

Segmental Performance and Assumptions

Year End (March)	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Automotive	747	1,004	2,370	4,279	5,777	7,221	8,665
YoY growth %	4	34	136	81	35	25	20
Industrial	1,178	1,394	2,119	3,041	5,929	8,893	12,006
YoY growth %	2	18	52	44	95	50	35
Aerospace, Defence & Others	200	135	212	225	541	811	1,095
YoY growth %	245	(32)	56	6	140	50	35
Medical	230	462	706	676	608	912	1,231
YoY growth %	48	101	53	(4)	(10)	50	35
Railways	631	596	706	1,351	2,162	3,243	4,378
YoY growth %	(33)	(6)	18	91	60	50	35
IoT	403	247	353	676	709	1,277	2,682
YoY growth %	20	(39)	43	91	5	80	110
Consumer	293	368	565	1,014	1,064	1,596	2,394
YoY growth %	8	25	54	79	5	50	50
Total	3,682	4,206	7,032	11,261	16,790	23,954	32,452
YoY growth %	1	14	67	60	49	43	35
Revenue Mix %							
Automotive	20	24	34	38	34	30	27
Industrial	32	33	30	27	35	37	37
Aerospace, Defence & Others	5	3	3	2	3	3	3
Medical	6	11	10	6	4	4	4
Railways	17	14	10	12	13	14	13
IoT	11	6	5	6	4	5	8
Consumer	8	9	8	9	6	7	7
Total	100	100	100	100	100	100	100

Consolidated P&L

Year End (March)	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Net Revenues	3,682	4,206	7,062	11,261	16,790	23,954	32,452
Growth (%)	1.1	14.2	67.9	59.4	49.1	42.7	35.5
Material Expenses	2,417	2,861	4,894	7,801	11,753	16,708	22,635
Employee Expense	415	459	602	771	1,007	1,497	2,028
Other Expenses	442	477	629	1,006	1,469	2,156	2,921
EBITDA	408	409	937	1,683	2,561	3,593	4,868
EBITDA Growth (%)	16.4	0.2	129.1	79.7	52.1	40.3	35.5
EBITDA Margin (%)	11.1	9.7	13.3	14.9	15.3	15.0	15.0
Depreciation	65	101	132	187	255	392	524
EBIT	343	308	805	1,496	2,306	3,202	4,344
Other Income (Including EO Items)	18	40	41	114	383	400	400
Interest	227	240	256	349	451	499	501
PBT	135	109	590	1,260	2,238	3,102	4,243
Total Tax	23	11	174	308	492	651	849
RPAT	112	97	417	952	1,745	2,451	3,394
Adjusted PAT	112	97	417	952	1,745	2,451	3,394
APAT Growth (%)	14.7	(12.8)	328.2	128.4	83.3	40.4	38.5
EPS	16.4	2.3	9.0	16.4	30.0	42.2	58.4
EPS Growth (%)	14.7	(85.7)	285.5	81.3	83.3	40.4	38.5

Consolidated Balance Sheet

Year End (March)	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
SOURCES OF FUNDS							
Share Capital - Equity	68	79	465	581	581	581	581
Reserves	976	1,308	1,560	9,009	10,754	13,205	16,600
Total Shareholders Funds	1,044	1,387	2,026	9,590	11,336	13,787	17,181
Long Term Debt	98	171	293	150	150	150	150
Short Term Debt	1,125	1,224	1,403	1,209	2,500	2,500	2,500
Total Debt	1,223	1,395	1,695	1,359	2,650	2,650	2,650
Net Deferred Taxes	83	52	68	77	75	74	72
Other Non Current Liabilities	33	131	248	252	261	271	281
TOTAL SOURCES OF FUNDS	2,383	2,965	4,037	11,278	14,322	16,781	20,184
APPLICATION OF FUNDS							
Net Block	502	649	820	1,072	1,567	2,876	2,852
Goodwill	23	23	23	23	23	23	23
CWIP	119	126	83	293	200	200	200
Intangible assets	45	127	290	221	221	221	221
Non Current Investments	16	17	15	33	34	36	38
Other Non Current Assets	80	59	129	236	236	236	236
Total Non-current Assets	786	1,002	1,361	1,879	2,283	3,593	3,571
Inventories	1,511	1,639	2,264	4,132	5,980	8,400	11,203
Debtors	950	1,217	1,977	2,271	3,220	4,463	6,046
Other Current Assets	350	193	407	1,046	1,563	2,098	2,753
Cash & Equivalents	123	143	216	4,860	5,613	4,410	4,988
Total Current Assets	2,934	3,192	4,864	12,308	16,376	19,371	24,990
Creditors	992	954	1,641	2,229	3,680	5,250	7,113
Other Current Liabilities & Provns	346	275	546	680	656	932	1,263
Total Current Liabilities	1,337	1,229	2,187	2,909	4,336	6,183	8,376
Net Current Assets	1,597	1,963	2,677	9,399	12,040	13,189	16,613
TOTAL APPLICATION OF FUNDS	2,383	2,965	4,037	11,278	14,322	16,781	20,184

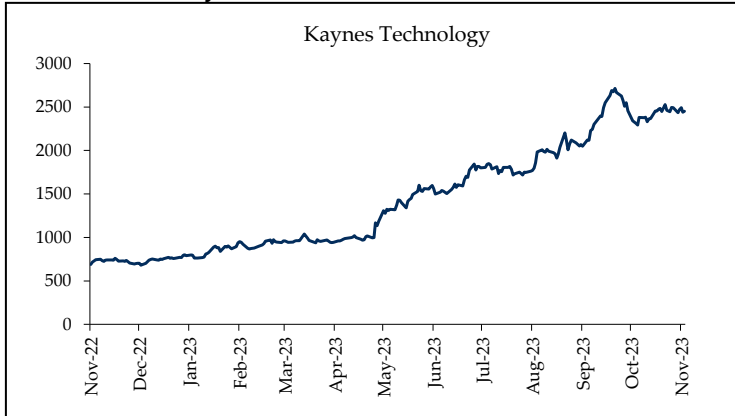
Consolidated Cash Flow

(Rs mn)	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Reported PBT	135	109	590	1,260	2,238	3,102	4,243
Non-operating & EO Items	14	15	(2)	(84)	(2)	(2)	(2)
Interest Expenses	221	214	256	349	451	499	501
Depreciation	65	101	132	187	255	392	524
Working Capital Change	(79)	(138)	(743)	(1,626)	(1,888)	(2,352)	(2,847)
Tax Paid	(25)	(45)	(22)	(503)	(492)	(651)	(849)
OPERATING CASH FLOW (a)	331	256	211	(416)	561	988	1,570
Capex	(208)	(250)	(422)	(581)	(657)	(1,700)	(500)
Free Cash Flow (FCF)	123	6	(211)	(997)	(95)	(712)	1,070
Investments	(3)	9	(23)	(4,355)	(2)	(2)	(2)
Non-operating Income	-	-	-	-	-	-	-
INVESTING CASH FLOW (b)	(211)	(241)	(445)	(4,937)	(658)	(1,702)	(502)
Debt Issuance/(Repaid)	(117)	(44)	301	(336)	1,301	10	10
Interest Expenses	(221)	(218)	(256)	(349)	(451)	(499)	(501)
FCFE	227	181	345	(984)	1,656	(203)	1,581
Share Capital Issuance	0	270	228	6,229	-	-	-
Dividend	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-
FINANCING CASH FLOW (c)	(337)	8	272	5,543	850	(489)	(491)
NET CASH FLOW (a+b+c)	(217)	23	38	191	753	(1,203)	577
EO Items, Others	-	-	-	-	-	-	-
Closing Cash & Equivalents	123	143	216	4,860	5,613	4,410	4,988

Ratios

KEY RATIOS	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
PROFITABILITY (%)							
GPM	34.4	32.0	30.7	30.7	30.0	30.3	30.3
EBITDA Margin (%)	11.1	9.7	13.3	14.9	15.3	15.0	15.0
EBIT Margin	9.3	7.3	11.4	13.3	13.7	13.4	13.4
PBT Margin	3.7	2.6	8.4	11.2	13.3	13.0	13.1
APAT Margin	3.0	2.3	5.9	8.5	10.4	10.2	10.5
RoE	11.3	8.0	24.4	16.4	16.7	19.5	21.9
RoIC (or Core RoCE)	12.6	10.9	17.1	22.1	23.8	24.0	25.2
RoCE	11.4	10.3	16.2	14.8	14.1	16.3	18.8
EFFICIENCY							
Tax Rate (%)	17.2	10.5	29.4	24.5	22.0	21.0	20.0
Fixed Asset Turnover (x)	4.3	3.9	5.3	6.8	7.0	5.8	7.0
Inventory (days)	150	142	117	134	130	128	126
Debtors (days)	94	106	102	74	70	68	68
Other Current Assets (days)	35	17	21	34	34	32	31
Payables (days)	98	83	85	72	80	80	80
Other Current Liab & Provns (days)	34	24	28	22	14	14	14
Cash Conversion Cycle (days)	146	158	127	147	140	134	131
Net D/E (x)	1.1	0.9	0.7	(0.4)	(0.3)	(0.1)	(0.1)
Interest Coverage (x)	1.5	1.3	3.1	4.3	5.1	6.4	8.7
PER SHARE DATA (Rs)							
EPS	16.4	2.3	9.0	16.4	30.0	42.2	58.4
CEPS	26.0	4.8	11.9	19.6	34.4	48.9	67.4
Book Value	153.5	33.4	43.9	164.9	195.0	237.1	295.5
VALUATION							
P/E (x)	149.3	1,046.0	271.4	149.6	81.6	58.1	42.0
P/BV (x)	16.0	73.4	55.8	14.9	12.6	10.3	8.3
EV/EBITDA (x)	43.5	252.0	122.3	82.6	54.5	39.2	28.8
EV/Revenues (x)	4.8	24.5	16.2	12.3	8.3	5.9	4.3
OCF/EV (%)	1.9	0.2	0.2	(0.3)	0.4	0.7	1.1
FCF/EV (%)	0.7	0.0	(0.2)	(0.7)	(0.1)	(0.5)	0.8
FCFE/Mkt Cap (%)	1.4	0.2	0.3	(0.7)	1.2	(0.1)	1.1
Dividend Yield (%)	-	-	-	-	-	-	-

1 Yr Price History



Rating Criteria

- BUY: >+15% return potential
- ADD: +5% to +15% return potential
- REDUCE: -10% to +5% return potential
- SELL: >10% Downside return potential

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