



# DCX SYSTEMS LIMITED

### Issue highlights

- DCX Systems Limited (“DCX Systems”) was incorporated on December 16, 2011. DCX Systems is among the leading Indian players for the manufacture of electronic sub-systems and cable harnesses in terms of manufacturing capability and revenue in the defence and aerospace sector. They are preferred **Indian Offset Partner (“IOP”) for foreign original equipment manufacturers (“OEMs”) for executing defence manufacturing projects.**
- DCX Systems primarily engaged in system integration and manufacturing a comprehensive array of cables and wire harness assemblies and is also involved in kitting. They undertake system integration in areas of radar systems, sensors, electronic warfare, missiles, and communication systems. They provide product assembly and system integration services to address customers’ requirements.
- DCX Systems is also one of the largest IOP for ELTA Systems Ltd and Israel Aerospace Industries Ltd, System Missiles and Space Division (together, the “**IAI Group**”), Israel, for the Indian defence market for manufacture of electronic sub-systems and cable and wire harness assemblies.
- Company’s order book has increased from ₹ 1,941.31 crore, as of March 31, 2020 to ₹ 2,369 crore, as of March 31, 2022. As of June 30, 2022, the order book was ₹ 2,563.63 crore to be executed in the Fiscal 2023 to 2025.
- The company operates through their manufacturing facility located at the Hi-Tech Defence and Aerospace Park SEZ in Bengaluru, Karnataka.
- As of June 30, 2022, they had 26 customers in Israel, United States, Korea and India, including certain Fortune 500 companies, multinational corporations and start-ups.** Their customers include domestic and international OEMs, and private companies and public sector undertakings in India across different sectors, ranging from defence and aerospace to space ventures and railways.

### Brief Financial Details\*

(₹ In Cr)

	As at Jun’ 30,		As at Mar’ 31,		
	Consolidated	Standalone	Consolidated	Standalone	
	2022(03)	2021(03)	2022(12)	2021(12)	2020(12)
Equity Share Capital	15.48	3.50	15.48	3.50	3.50
Reserves	107.70	46.55	102.11	43.29	13.67
Net worth as stated	123.18	50.05	117.59	46.79	17.17
Revenue from Operations	213.25	122.91	1,102.27	641.16	449.26
Revenue Growth (%)	73.50%	-	71.92%	42.71%	-
Adj. EBITDA as stated	24.35	11.63	105.90	32.48	45.20
Adj. EBITDA (%) as stated	11.05%	9.03%	9.42%	4.75%	9.72%
Profit/Loss Before Tax	6.47	3.80	75.56	39.81	12.87
Net Profit for the period	5.57	3.35	65.61	29.56	9.74
Net Profit (%) as stated#	2.53%	2.60%	5.84%	4.33%	2.09%
EPS-Basic & Diluted (₹)	0.72^	0.48^	9.19	4.22	1.39
RONW(%)	4.52%^	6.68%^	55.79%	63.18%	56.75%
NAV (₹)	15.92	7.15	15.19	6.68	2.45
ROE (%)	4.52%	6.68%	55.79%	63.18%	56.75%
Adj. ROCE (%) as stated	3.84%	6.80%	16.70%	16.33%	28.86%
Debt-Equity Ratio	4.05	2.25	4.27	2.91	7.80

Source: RHP \*Restated consolidated; EPS, NAV on increased share capital, EBITDA% and Net Profit% on Total Income.

### Issue Details

Fresh Issue of Equity shares aggregating upto ₹ 400 Cr and Offer for sale of Equity Shares aggregating upto ₹ 100 Cr

Issue size: ₹ 500 Cr

No of shares: 25,380,709- 24,154,588 Shares

Face value: ₹ 2/-

Price band: ₹ 197 - 207

Bid Lot: 72 Shares and in multiple thereof

Post Issue Implied Market Cap =

₹ 1,925 – 2,002 Cr

BRLMs: Axis Capital, Edelweiss Financial, Saffron Capital

Registrar: Link Intime India Pvt. Ltd.

Issue opens on: Monday, 31<sup>st</sup> Oct’2022

Issue closes on: Wednesday, 2<sup>nd</sup> Nov’2022

### Indicative Timetable

Activity	On or about
Finalisation of Basis of Allotment	07-11-2022
Refunds/Unblocking ASBA Fund	09-11-2022
Credit of equity shares to DP A/c	10-11-2022
Trading commences	11-11-2022

### Issue break-up

	No. of Shares		₹ In Cr	% of Issue
	@Lower	@upper		
QIB	19,035,533	18,115,942	375	75%
NIB	3,807,106	3,623,188	75	15%
-NIB 1	1,269,036	1,207,730	25	
-NIB 2	2,538,070	2,415,458	50	
RET	2,538,071	2,415,458	50	10%
<b>Total</b>	<b>25,380,710</b>	<b>24,154,588</b>	<b>500</b>	<b>100%</b>

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^
	77,400,000	97,704,568	96,723,671

~@Lower price Band ^@ Upper Price Band

### Shareholding (%)

	Pre-Issue	Post-Issue
Promoters	98.20%	73.58%
Promoters Group	-	-
Public	1.80%	26.42%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

## BACKGROUND

### Company and Directors

The company was incorporated as “DCX Cable Assemblies Private Limited” on December 16, 2011. Dr. H. S. Raghavendra Rao, NCBG Holdings Inc. and VNG Technology Pvt Ltd are the promoters of the company. The promoters collectively hold an aggregate of 76,000,000 Equity Shares, equivalent to 98.20% of the pre-Offer issued, subscribed and paid-up Equity Share capital of the company.

### Brief Biographies of Directors

**Dr H S Raghavendra Rao** is the Promoter, Chairman and Managing Director of the company. He has been the Director of the company since January 16, 2012. His key role in the Company, amongst other things, is to deliver the business plan and conduct the business of the company, ensure client relationship management and coordinate the administrative duties of the company. He has been conferred with an honorary doctorate in business management by the International Peace University, Germany. He has about 21 years of experience in the electronics manufacturing sector and aerospace sector.

**Neal Jeremy Castleman** is the Non-Independent and Non-executive Director of the company. He has been the Director of the company since March 14, 2012. He has over 2 decades of experience in the electronics manufacturing sector. He has been working with DCX-CHOL Enterprises, Inc as a director (president) since 1997.

**Sankar Krishnan Ramalingam** is the Whole-time Director of the company. He has been the Director of the company since January 28, 2022. He has about 26 years of experience in the finance sector. He was previously associated with Hindustan Lever Ltd and Syndicate Bank. He has also been the whole-time director of Saffron Capital Advisors Pvt Ltd and Impetus Arthasutra Pvt Ltd.

**Kalyanasundaram Chandrasekaran** is the Independent Director of the company. He has been the Director of the company since January 28, 2022. He was previously associated with BDA Ltd, Beacon Weir Ltd, Ceeta Springs & Steels Ltd, Associated Construction and Investment Company, LLC, Dubai Lifestyle City and Tracstar Investments Ltd.

**Panchangam Nagashayana** is the Independent Director of the company. He has been the Director of the company since January 28, 2022. He has more than 30 years of experience in the electronics sector. He was previously associated with Canarie International, Canarie Electronics Inc., Plugmetrix Technologies LLP and Cyberstar Infocom Pvt Ltd. He is currently a whole-time director of Avyaya Technologies Pvt Ltd.

**Lathika Siddharth Pai**, is the Independent Director of the company. She has been the Director of the company since February 2, 2022. She has 15 years of experience in management consultancy and has been working with Tekinroads Consulting LLP since 2014 as a partner.

### Key Managerial Personnel

**Ranga KS** is the Chief Financial Officer of the company. He joined the company on December 22, 2021.

**Shiva Kumara R** is the Vice President of the company. He joined the company on October 1, 2021. He has more than 14 years of experience in Supply Chain Management.

**Nagaraj R Dhavaskar** is the Company Secretary, Legal and Compliance Officer of the company. He joined the company on December 1, 2021. He has more than 5 years of experience in legal compliance and corporate sectorial services.

**Pramod B** is the Deputy General Manager- Operations of the company. He joined the company on October 1, 2021. He has more than 14 years of experience in supply chain management.

**Anand S** is the Deputy General Manager- Supply Chain Management of our Company. He joined the company on August 2, 2021. He has about 14 years of experience in supply chain management.

**Kiran Kumar K S** is the Manager-Production. He joined the company on October 3, 2018. He has about 8 years of experience in the field of engineering.

**Atul Dhondiram Mutthe** is the Manager- Quality of the company. He joined the company on December 8, 2021. He has over 9 years of experience in process quality administration and the field of engineering.

**Manjunath G S** is the Manager- HR and Admin of the company. He has more than 18 years of experience in human resources and administration.

**Prasanna Kumar T S** is the Deputy General Manager- Finance and Accounts of the company. He joined the company on April 23, 2012. He has about 10 years of experience in finance and accounts.

**Rajanikanth K N** is the Manager-Logistics of the company. He joined the company on April 23, 2012. He has more than 13 years of experience in logistics.

## OBJECTS OF THE ISSUE

Objects	Amount ( ₹ Cr)
• Repayment/ prepayment, in full or part, of certain borrowings availed of by the company;	110.00
• Funding working capital requirements of the company;	160.00
• Investment in the wholly owned Subsidiary, Raneal Advanced Systems Pvt Ltd, to fund its capital expenditure expenses;	44.88
• General Corporate Purposes	[ • ]
<b>Total</b>	<b>[ • ]</b>

## OFFER DETAILS

Fresh Issue	₹ Cr	No. of Shares	Weighted Average cost of acquisition (₹)
<i>Fresh Issue</i>	₹ 400.00 Cr	<i>Upto 20,304,568<sup>~</sup> - 19,323,671<sup>^</sup> Equity Shares</i>	–
<b>The Offer for Sale by:</b>	<b>₹ 150.00 Cr</b>	<b><i>Upto 7,614,213<sup>~</sup> - 7,246,376<sup>^</sup> Equity Shares</i></b>	
<b>The Promoter Selling Shareholder:</b>			
<i>NCBG Holdings INC</i>	₹ 50.00 Cr	<i>Upto 2,538,071<sup>~</sup> - 2,415,458<sup>^</sup> Equity Shares#</i>	5.65
<i>VNG Technology Pvt Ltd</i>	₹ 50.00 Cr	<i>Upto 2,538,071<sup>~</sup> - 2,415,459<sup>^</sup> Equity Shares#</i>	0.50

(<sup>~</sup> at lower price band and <sup>^</sup> upper price band); # shares are 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
<i>Promoters</i>	76,000,000	98.20%	4,830,917	71,169,083	73.58%
<b>Total for Promoters</b>	<b>76,000,000</b>	<b>98.20%</b>	<b>4,830,917</b>	<b>71,169,083</b>	<b>73.58%</b>
<i>Public</i>	1,400,000	1.80%	0	25,554,588	26.42%
<b>Total for Public Shareholder</b>	<b>1,400,000</b>	<b>1.80%</b>	<b>0</b>	<b>25,554,588</b>	<b>26.42%</b>
<b>Total Equity Share Capital</b>	<b>77,400,000</b>	<b>100.00%</b>	<b>4,830,917</b>	<b>96,723,671</b>	<b>100.00%</b>

\* at <sup>^</sup> upper price band and rounded/adjusted to the nearest

## BUSINESS OVERVIEW

DCX Systems Limited (“**DCX Systems**”) is among the leading Indian players for the manufacture of electronic sub-systems and cable harnesses in terms of manufacturing capability and revenue in Fiscal 2022 in the defence and aerospace sector. They are primarily engaged in system integration and manufacturing a comprehensive array of cables and wire harness assemblies and are also involved in kitting. They commenced operations in 2011 and have been a preferred **Indian Offset Partner (“IOP”) for foreign original equipment manufacturers (“OEMs”) for executing defence manufacturing projects**. They are a rapidly growing company in the Indian defence space and their revenue from operations have grown at a CAGR of 56.64% between Fiscal 2020 and Fiscal 2022. They are also one of the largest IOP for ELTA Systems Ltd and Israel Aerospace Industries Ltd, System Missiles and Space Division (together, the “**IAI Group**”), Israel, for the Indian defence market for manufacture of electronic sub-systems and cable and wire harness assemblies. Over the years, they have expanded their manufacturing capabilities and grown their order book.

The growing Indian landscape for defence and aerospace serves as a key opportunity for DCX Systems. The Indian aerospace and defence sector has poised to attain a value of USD 70 billion by 2030. Recent initiatives like increase in foreign direct investment (“FDI”) in the Indian defence sector from the current 49% to 74% under the automatic route is anticipated to be a key driver and growth opportunity for the market. The Defence Research and Development Organization (“DRDO”) has announced the indigenous development of roughly 108 systems and sub-systems which is expected to generate demand for cables and connectors across the Indian defence environment. The Indian government has also banned approximately 101 items within the defence-based imports segment and have also introduced the 3<sup>rd</sup> positive indigenization list that bans the import of 780 LRU/components. These initiatives are expected to boost indigenous manufacturing within India. The instating of defence industry corridors across Uttar Pradesh and Tamil Nadu is also poised to improve the market growth dynamics by broadening the opportunities offered to the private sector. All of these in turn, serve as an opportunity for the company to capitalize on the expected growth in this space.

Company’s competitive advantages include their efficiency in operations resulting in timely delivery to their customers, maintaining quality control and product security. This has enabled them to develop long-term and entrenched relationships with their OEM customers that has resulted in growth in their operations and sizeable order book. Their quality management systems will enable their system driven efficiency and continue to attract higher revenues going forward. Given the nature of their operations and industry that they operate in, projects have long lead times and, as such, visibility and predictability of their revenues is high. Company’s order book has increased from ₹ 1,941.31 crore, as of March 31, 2020 to ₹ 2,369 crore, as of March 31, 2022. As of June 30, 2022, the order book was ₹ 2,563.63 crore to be executed in the Fiscal 2023 to Fiscal 2025.

## ORDER BOOK

Particulars	3 Months ended June 30,				Fiscal					
	2022		2021		2022		2021		2020	
	Consolidated		Standalone		Consolidated		Standalone			
	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book
System Integration	2,429.99	94.79%	2,451.12	89.22%	2,230.28	94.14%	2,559.22	89.64%	1,893.81	97.56%
Cable and Wire Harness Assemblies	13.63	0.53%	57.68	2.10%	21.83	0.92%	47.18	1.65%	390.09	2.01%
Kitting	120.02	4.68%	238.10	8.68%	116.90	4.94%	248.62	8.71%	8.42	0.43%
<b>Total</b>	<b>2,563.63</b>	<b>100.00%</b>	<b>2,746.89</b>	<b>100.00%</b>	<b>2,369.00</b>	<b>100.00%</b>	<b>2,855.01</b>	<b>100.00%</b>	<b>1,941.31</b>	<b>100.00%</b>

## CUSTOMER BASE

### Mix of Domestic and International customers

- Elta Systems Ltd,
- Israel Aerospace Industries Ltd – System Missiles and Space Division,
- Astra Rafael Comsys Pvt Ltd,
- Astra Microwave Products Ltd,
- Kalyani Rafael Advanced Systems Pvt Ltd,
- SFO Technologies Pvt Ltd,
- DCX-Chol Enterprises Inc.
- Bharat Electronics Ltd,
- Alpha-Elsec Defense and Aerospace Systems Pvt Ltd,
- Alpha Design Technologies Pvt Ltd,
- Centum Adeno India Pvt Ltd.

The company operates through their manufacturing facility located at the Hi-Tech Defence and Aerospace Park SEZ in Bengaluru, Karnataka. Their facility is spread over an area of 30,000 square feet and is set up for complete in-house environmental and electrical testing and wire processing.

**As of June 30, 2022, they had 26 customers in Israel, United States, Korea and India, including certain Fortune 500 companies, multinational corporations and start-ups.** Their customers include domestic and international OEMs, and private companies and public sector undertakings in India across different sectors, ranging from defence and aerospace to space ventures and railways.

DCX Systems is led by experienced Promoters and a qualified senior management team with significant experience in the aerospace and defence manufacturing industry. Dr. H.S. Raghavendra Rao, their Individual Promoter, Chairman

and Managing Director, has over 2 decades of experience in electronics manufacturing and in the defence and aerospace sectors. Neal Jeremy Castleman, their Non-Independent and Non-executive Director, has a vast experience of more than 2 decades in the field of electronic manufacturing sectors. Their senior management team have demonstrated ability to anticipate and capitalize on changing market trends, manage, and grow their operations and leverage and deepen customer relationships.

## COMPANY PRODUCTS



### System Integration:

DCX Systems undertake system integration in areas of radar systems, sensors, electronic warfare, missiles, and communication systems. They provide product assembly and system integration services to address customers' requirements. System integration services are part of a comprehensive array of electronics and electro-mechanical assembly and enclosure assembly. Their purchasing, logistics, inventory control and production engineering groups work together, supported by engineering expertise in both electrical and mechanical assembly.

As part of their system integration services, they also do in-house testing, including vibration and environmental stress testing of complex radio frequency products to ensure the quality of their final products to be shipped to their customers, and reliability of their products' functioning under varying environmental conditions.

The company possesses capabilities to manufacture complex, high-end and high-power microwave modules which have applications in radars, antennas, electronic warfare systems, receiver sub-systems and missile systems. Their capabilities include inspection and test equipment of cable tester, cirrus testers, network analyzer, crimp pull tester, microscope, leak test equipment, high voltage tester, micro-ohm meter, test station for PCBAs, automatic testing equipment for PCBAs and module testing, electrodynamic vibration shaker system, contact retention tester and vernier height gauge.

- **Cable and Wire Harness Assemblies:**

DCX Systems manufactures a comprehensive array of cables and wire harnesses assemblies such as radio frequency cables, co-axial, mixed signal, power, and data cables for a variety of uses including communication systems, sensors, surveillance systems, missile systems, military armored vehicles, and other electronic warfare systems for the aerospace and defence industries as per their customers' requirements.

- ***Fine Wire Cable Assemblies***

Fine cables are light weight, high temperature resistant, radiations resistance, low smoke and zero halogen and strong. Fine wire cable assemblies are extensively used in robotic, aerospace, marine, space and medical applications to obtain high performance.

- ***Flex Flat Cable Assemblies***

Designed for board-to-board interconnections, flexible flat cable is a type of cable that is flat in shape and flexible enough to manoeuvre within tight spaces. Flex cable applications are usually used in small and tight spaces. The construction of a flat cable really helps manage cables because of the uniform, flat shape. Usually, a flexible plastic is used in the base where several different conductors are able to be bonded with the surface. The flat cable provides 3 main advantages over a round cable with space-saving design, improved resistance to electromagnetic interference (“EMI”) or radio frequency interference and helping to avoid any issues related to wire coupling.

- **Electromagnetic Interference Shielded Cable Harness**

EMI shielded cables, harnesses and assemblies are designed to meet electromagnet pulses, electromagnetic compatibility, nuclear, biological and chemical and telecommunications electronics material protected from emanating spurious transmissions or TEMPEST solutions, and their shielded solutions have been used in certain commercial airliner landing gear systems, secure communication systems and others.

- **Wired Enclosure**

The company produces high reliability backplane assemblies, and wired enclosures for the defence and aerospace and industrial market. They specialize in complete turnkey custom electronic wired enclosures, sub-racks, system cabinets, and subsystem chassis. Their capabilities enable them to support portable size units to large consoles with up to 100,000 terminations and allow their customers the flexibility to customize their designs to meet the needs of the application.

- **Conduit Assemblies**

Electrical conduits surround electrical wiring to protect from impact, moisture and chemical vapours. A conduit simplifies a wiring installation by providing an unobstructed path for the wiring to run through. Conduit systems can be waterproof and protect sensitive circuits from electromagnetic interference. Special types of conduits can be made to protect wiring from flammable gases and vapours to protect from fire and explosion. Other types of conduits are made to be directly encased in concrete, allowing for specialized installation of outlets and networking/phone ports and ease of running the wires through the floor.

- **Kitting:**

DCX Systems supply assembly ready kits of electronic and electro-mechanical parts and undertake all aspects of procurement including sourcing components from suppliers approved by their customer along with a ‘Certificate of Compliance’ for traceability, controlled storage of moisture sensitive devices to ensure that customers receive complete, assembly-ready kits when required when they are needed for production. In addition, they also undertake job work services that includes assembly and testing of materials that have been supplied directly by their customers.

## REVENUE FROM OPERATIONS

### Revenue from operations as per the business verticals:

Particulars	3 Months ended June 30,				Fiscal					
	2022		2021		2022		2021		2020	
	Consolidated		Standalone		Consolidated		Standalone			
	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book	Amount (₹ Cr)	% to Total Order Book
System Integration	205.50	96.36%	108.11	87.95%	939.87	85.27%	616.07	96.09%	371.77	82.75%
Cable and Wire Harness Assemblies	6.92	3.24%	4.29	3.49%	29.81	2.70%	19.58	3.05%	33.31	7.42%
Kitting	0.84	0.40%	10.52	8.56%	132.59	12.03%	5.51	0.86%	44.18	9.83%
<b>Total</b>	<b>213.25</b>	<b>100.00%</b>	<b>122.91</b>	<b>100.00%</b>	<b>1,102.27</b>	<b>100.00%</b>	<b>641.16</b>	<b>100.00%</b>	<b>449.26</b>	<b>100.00%</b>

Particulars	3 Months ended June 30,				Fiscal					
	2022		2021		2022		2021		2020	
	Consolidated		Standalone		Consolidated		Standalone			
	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue	Amount (₹ Cr)	% to Total Revenue
Export	100.32	47.06%	56.12	45.66%	611.69	55.73%	380.12	59.59%	337.17	76.45%
Domestic	112.86	52.96%	66.80	54.34%	485.97	44.27%	257.76	40.41%	103.84	23.55%
<b>Total</b>	<b>213.18</b>	<b>100.00%</b>	<b>122.92</b>	<b>100.00%</b>	<b>1,097.67</b>	<b>100.00%</b>	<b>637.87</b>	<b>100.00%</b>	<b>441.01</b>	<b>100.00%</b>

Particulars	3 Months ended June 30,		Fiscal		
	2022	2021	2022	2021	2020
	Consolidated	Standalone	Consolidated	Standalone	
	Amount (₹ Cr)	Amount (₹ Cr)	Amount (₹ Cr)	Amount (₹ Cr)	Amount (₹ Cr)
<b>Revenue from Operations</b>					
- Sale of Products	213.18	122.92	1,097.67	637.87	441.01
- Sale of Services	0.07	0.01	1.75	0.46	1.58
<b>Other Operating Revenue</b>					
- MEIS Incentive	-	-	2.86	2.83	6.68
<b>Total</b>	<b>213.25</b>	<b>122.91</b>	<b>1,102.27</b>	<b>641.16</b>	<b>449.26</b>

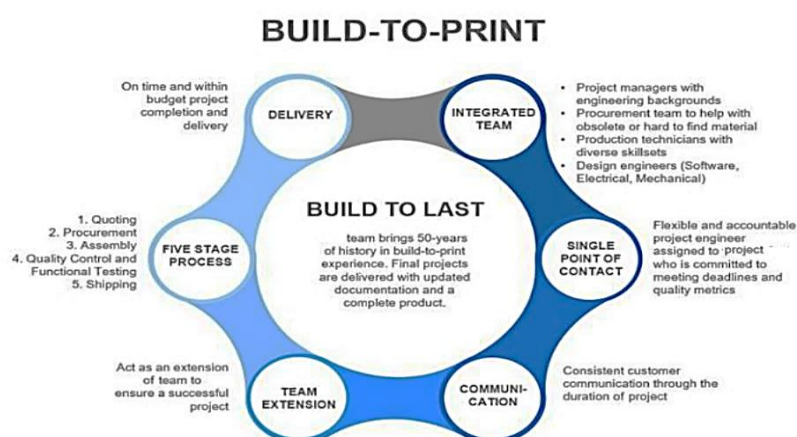
## MANUFACTURING UNITS

The company operates from a single facility which has the capability to provide end-to-end support for assets, including upgrading and modifying assets and equipment. Their facility covers an area of 30,000 square feet which is built on a land of 1.5 acres. Company's manufacturing facility is situated in a special economic zone dedicated for aerospace and defence industry and is completely security fenced, monitored 24/7 basis by KIADB. Company's facility is set up for complete in-house environmental and electrical testing.

The factory contains 2 units of production and 1 unit covering 25,000 square feet in area, and the other unit covering 5,000 square feet in area.

### Build-to-Print Capabilities

Build-to-print is when a supplier produces work instructions, assembly drawings, and calls out specific and detailed manufacturing practices used in building the parts along with the customer's specification of the component's functional requirements. This method requires a little more effort and development costs from the customer, but it is advantageous to them because they maintain control of the intellectual property right while having the flexibility to select appropriate suppliers to produce the parts for them. This approach allows an easier vertical integration for the customer's business because they only need to focus on their core, and this of 10 alleviates the bottlenecks they encounter while trying to do all those processes themselves. They are focused on turnkey – built-to-print projects for their OEM customers.



### Cable and Harness Prototype Manufacturing and Testing

The company also undertake manufacturing of proto-types for their customers to address their requirements to design and develop new products which may give them future opportunities for volume production when the product matures and come for bulk production.

## COMPETITIVE STRENGTHS

- **Among the preferred Indian Offset Partners for the defence and aerospace industry with global accreditations**

DCX Systems is a preferred Indian Offset Partners ("IOP") for foreign OEMs for executing defence manufacturing projects. They undertake "build-to-print" system integration and manufacture cable and wire harness assemblies for both domestic and international OEMs. They are also one of the largest IOP for the IAI Group, Israel, for the Indian defence market for manufacture of electronic sub-systems and cable and wire harness assemblies. They hold a

number of key certifications that include AS-9100:2016 certification for quality management systems for aviation, space and defences products manufacturing and their Defence Industrial License from the Ministry of Commerce and Industry, GoI for the manufacture of defence subsystems that includes microwave components, modules for radar and electronic warfare subsystems, microwave sub-modules, for command and guidance units for missile subsystems only. They also adhere to global standards and have obtained various global certifications. Their global certifications help them serve their customers' stringent quality specifications and assists in new customer acquisition.

As part of their system integration services, their strength includes the manufacturing of complex microwave modules and sub-systems such as transmit receiver modules, receiver subsystems, and antennas used in military applications, space technology and aerospace. They are also engaged in manufacturing a comprehensive array of cables and wire harnesses assemblies such as radio frequency co-axial, mixed signal, power, data and communication cables for a variety of uses including communication systems, sensors, surveillance systems, missile systems, military armoured vehicle, and other electronic warfare systems.

**The information regarding the various projects that DCX Systems have been involved in, as of June 30, 2022:**

Product / Description	Vertical	Offset Value (₹ Cr)
MRSAM / LRSAM - Transmit receiver group module	System Integration	1,444.70
PIDS – Dual transmit receiver module	System Integration	402.02
Air Defence Fire Control Radar - Antenna unit/radar processing unit/transmitter receiving unit	System Integration	100.79
High Power Radars - Dual transmitter receiver module	System Integration	51.84
Thermal Imager Fire Control System	Cable and wire harness	17.81
Long Range Reconnaissance and Observation System	Cable and wire harness	9.08
Thermal Imager Standalone Kit	Cable and wire harness	6.56
Barak-1 and Barak-8 Missile Systems	Cable and wire harness	5.10
Commander Open Architecture Panoramic Sight	Cable and wire harness	3.54

DCX Systems has submitted their acceptance to act as the IOP for upcoming projects for several electronic assemblies, automatic missile detection radars, HERON unmanned aerial vehicle systems, Barak systems, medium range maritime reconnaissance aircraft and short-range surface to air missile. They have, over the years, established and refined their agile assembly, configuration, and testing processes to maintain their focus on quality products and timing of delivery to their customers. They have a team of skilled professionals with experience in the field of engineering, supply chain management, human resources and administration, finance and legal compliance to address the requirements of our customers. They aid their customers by performing activities, including sourcing, purchasing and logistics and development of vendor eco-system both domestically and globally. They have also developed a set of vendors domestically in areas of mechanical components, test fixtures, high-end packaging, special coatings and chemical conversions.

- **Technology enabled and scalable end-to-end capabilities**

As part of their system integration services, DCX Systems also do in-house testing to ensure the quality of their final products, and reliability of their products' functioning under varying environmental conditions. They also specialise in manufacturing assemblies that are used in applications for land, underwater and airborne use. They also manufacture test cables, large mechanical jigs and fixtures, and testing programs to meet desired requirements of customer in testing and qualifying the product. In addition, their products are also subjected to various quality assurance tests.

The company provides 12 months warranty to their customers for their system integration and cable and wire harness services. They have supplied over 10,000 units in the last 3 Fiscals and in the 3 months ended June 30, 2022 and have to date not incurred any warranty claims. Their operations are certified with IPC-A-610 for electronic assemblies, IPC-620 for cable and wire harness assemblies and J-STD-001 for soldered electrical and electronic assemblies to meet the quality manufacturing standards of the aerospace and defence industry.

Company's scalability is demonstrated by revenues. The revenue from operations have increased at a CAGR of 56.64% between Fiscal 2020 and Fiscal 2022. Further, in Fiscal 2020, 2021 and 2022, and in the 3 months ended June 30, 2022, their capital expenditure towards additions to fixed assets (property, plant and equipment's and intangible assets) were ₹ 10.28 crore, ₹ 1.58 crore, ₹ 1.62 crore, ₹ 0.02 crore, and ₹ 0.05 crore, respectively.

- **Business model with visibility of cash flows and ability to mitigate operational and technology risk**

Company's manufacturing activity is obsolescence-proof as the technology coupled with intellectual property rights, both vest with their OEM customers. Further, their in-house team monitors the obsolescence factor and provides feedback to their OEM customers for suitable action including drop-in replacements.



Their product portfolio backed by their system integration and manufacturing capabilities has led to their order book growing from 45 orders aggregating ₹ 1,941.31 crore, as of March 31, 2020 to 48 orders aggregating ₹ 2,369 crore, as of March 31, 2022. As of June 30, 2022, their order book comprised 42 orders and was ₹ 2,563.63 crore with orders from several customers for projects to be executed in Fiscal 2023 and Fiscal 2025.

Company's customers typically reimburse them for costs incurred to maintain all buyer furnished equipment to use in manufacturing and qualifying the products in serviceable condition. As of June 30, 2022, we held ₹93.24 crore worth of equipment provided to them by their customers, and such equipment can be used for similar projects, subject to approval from such customers. Suppliers of their raw materials for a particular project are approved and determined by their customers prior to commencement of the project. The company and their customer jointly monitor and ensure the quality of items. Their customers also provide technical training to their employees to ensure efficient project execution.

- ***Strategically located in aerospace SEZ with an advanced and modern manufacturing facility***

In 2020, DCX Systems commissioned their new manufacturing facility at the Hi-Tech Defence and Aerospace Park SEZ in Bengaluru, Karnataka. Their facility is spread over an area of 30,000 square feet and is located in the same city as their key domestic customers which ensures shorter delivery times. The facility is secured by digital security cameras coupled with alarm systems with restricted access control for individual manufacturing divisions. Their facility is situated within a SEZ that offers them duty free imports, exemption from GST and supplies that are zero rated under extant regulations. Being situated in an SEZ ensures that they are also not subject to levies imposed by the state government and their operations are eligible for single-window clearance by the relevant authority.

Company's facility is equipped with advanced machinery and equipment including laser wire maker, automatic wire cutting and stripping machine, coaxial stripping machine, crimp tools, controlled torque tools, vacuum pump and desiccator, tinned welding machine and temperature controlled soldering station. Their facility is set up for complete in-house environmental and electrical testing and contains the latest inspection and testing equipment. Their manufacturing line and equipment meets the standards prescribed by the Institute for Printed Circuit ("IPC").

- ***Well-positioned to capitalize on industry tailwinds***

DCX Systems has established a leadership position in the Indian aerospace and defence industry amongst other companies, in the segment of system integration business as a result of their operating history and the experience of their management team. Their in-depth knowledge base and understanding of the aerospace and defence industry, particularly in India positions them to take advantage of the growth in these sections. Their relationship with OEMs serves as a strategic advantage in catering to government contracts. As a Defence Industrial Licence holder for microwave modules for radar and electronic warfare sub-systems, microwave modules for command and guidance units for missile sub-systems, they are well-positioned to take advantage of various initiatives of the Govt.

- ***Track record of consistent financial performance***

DCX Systems has been delivering consistent financial performance, despite the impact of the COVID-19 pandemic on their business operations. In Fiscal 2020, 2021 and 2022 and in the 3 months ended June 30, 2021 and June 30, 2022, their revenue from operations were ₹ 449.26 crore, ₹ 641.16 crore ₹ 1,102.27 crore, ₹ 122.91 crore and ₹ 213.25 crore, respectively. The revenue from operations grew at a CAGR of 56.64% between Fiscal 2020 and Fiscal 2022. The total assets have grown from ₹ 698.85 crore, as of March 31, 2020 to ₹ 942.62 crore, as of March 31, 2022, respectively and was ₹ 763.41 crore, as of June 30, 2021 and ₹ 1,011.61 crore, as of June 30, 2022.

- ***Experienced and qualified Promoters and senior management team supported by a committed employee base***

DCX Systems possess a qualified senior management team with considerable industry experience. Their Promoter, Chairman and Managing Director, Dr. H.S. Raghavendra Rao, is an industry veteran with over 2 decades of experience in electronic manufacturing and in the defence and aerospace sectors. Their Non-Independent and Non-executive Director, Neal Jeremy Castleman, has been involved in the electronics industry since 1997 and possesses extensive electronics manufacturing experience. Their Key Managerial Personnel team includes a combination of management executives who bring in significant business expertise including in the areas of finance and accounts, supply chain management, logistics, production, quality, and human resources, which positions them well to capitalize on the current and future growth opportunities.

## **KEY BUSINESS STRATEGIES**

- ***Strengthen the system integration operations and further expand the cable and wire harness assembly business***

To expand within their existing verticals, they intend to collaborate with OEMs in Israel and United States that possess high-end technologies in areas such as radars, electronic warfare, missile systems, sensors, and communication

systems. Another driver of defence electronics and associated integration opportunities in India is the proliferation of more advanced intelligence, surveillance, and reconnaissance solutions and in particular, radar systems. Several Indian combat aircraft continue to use passive radar solutions. Moving forward, passive radars will be replaced with indigenous active electronically scanned array radar systems. The shift from passive to active radar solutions will thus provide opportunities for the manufacture, assembly, and integration of electronic radar modules, as well as related cabling. This is another opportunity that the company intends to capitalize on based on their existing capabilities.

They also intend to expand their existing cable and wire harness assembly operations to better serve the requirements for our global customers. The major focus of their proposed expansion would be on sectors such as telecom, medical, power, industrial and automotive, amongst others as they result in high volume business along with high EBITDA and profit after tax margins.

- ***Focus on adjacent industry verticals leading to expansion of customer base***

DCX Systems intends to focus on adjacent industry verticals like EMS and Maintenance, Repair and Overhaul (“MRO”) services. They are well positioned to capitalize on the potential growth opportunities in these segments. They intend to focus on the products identified in the Positive Indigenization List by the Ministry of Defence, GoI, which will provide opportunities to obtain transfer of technology. Transfer of technology is poised to be one of the key factors which is anticipated to drive the market for the hardware components vertical. Connectors and cables are used across various turnkey and subsystems assembly; hence an increased number of technology transfer contracts on both national as well as global basis are poised to boost the demand for cables and connectors. Technology transfer agreements have a major advantage in terms of defence offsets. Manufacturing companies in India would gain potential opportunities to explore international markets through this. They are in the process of evaluating options for the transfer of technology, and in particular, from key markets that they serve, such as Israel and the United States.

- ***Strengthen relationships with the existing customers and expand customer base***

DCX Systems has a comprehensive business model with strict adherence to quality standards and time-line based deliveries which in their experience enables them to offer end-to-end solutions to OEMs. They have established long-term relationships with their customers, which has led to recurring business engagements with such customers. In Fiscal 2020, 2021, 2022 and in the 3 months ended June 30, 2021 and June 30, 2022, repeat orders from Top-3 customers amounted to ₹ 1,611.09 crore, ₹ 2,524.12 crore, ₹ 2,326.60 crore, ₹ 2,404.59 crore and ₹ 2,381.15 crore, respectively and accounted for 82.99%, 88.41%, 98.21%, 87.54% and 92.88%, respectively, of their total orders.

They plan to continue to focus on strengthening their existing relationships with their customers with a view of entering into more sophisticated, higher value projects with them. Their focus area is on the 209 items identified for indigenous manufacturing announced by GoI and advanced technology for civilian applications. They intend to focus on certain items within this list for the transfer of technology including long-range glide bombs and small UAVs for surveillance.

- ***Penetrate into new geographies through an increase in exports***

Owing to relaxation of export limitations and policy changes, Indian defence exports are expected to rise rapidly. This is supported by the expanding capabilities of Indian defence suppliers. In comparison to defence public sector entities, the private sector now dominates Indian defence exports, which is expected to drive income prospects. They are well positioned to capture this expected growth in exports. Their export revenues grew at a CAGR of 34.69% between Fiscal 2020 to Fiscal 2022.

Over the years, they have supplied electronic sub-systems, cable and wire harness assemblies primarily to Israel, the United States and Korea. They intend to expand their international operations to enhance their global presence in the aerospace and defence sectors. They intend to enter new markets such as Europe where they can provide cost and operational advantages to their customers, and where they will be able to distinguish themselves from other companies with similar offerings. In Europe, a higher number of NATO members met the Alliance’s guideline aim of spending at least 2% of GDP on their military in 2020, compared to just 9 countries in 2019. Further, spending on defence is expected to increase with the ongoing conflict between Ukraine and Russia.

They are focused on expanding the verticals that they will cater to and also implement forward and backward integration strategies. Given their design and manufacturing capabilities, there is significant potential for them to move into newer geographies and markets. They intend to identify opportunities in such overseas jurisdictions and tie up with local partners to utilise their existing product portfolio and further develop products suitable for meeting the respective country’s native requirements.

- **Continue to improve operational efficiencies through economies of scale, supply chain rationalization and effective resource planning**

DCX Systems intends to continue to maintain and improve their operational efficiencies, with a focus on their supply chain. In addition, they also intend to focus on cycle time reduction by adopting advanced technologies that will also result in process optimization, increasing company's capacity to undertake more projects and thereby increase their revenues and margins. They intend to continue to maintain flexibility in their manufacturing lines for their different business verticals.

Further, they intend to leverage technology to effectively utilise their machinery through digital solutions, enabling effective monitoring of machines, allowing them to study shop floor patterns to address potential bottlenecks, thereby improving their output efficiency.

- **Pursue inorganic growth through selective acquisitions**

DCX Systems intends to pursue inorganic growth opportunities through selective strategic acquisitions in the aerospace and defence segment to complement the scale of their operations and growth in recent periods. They are currently engaged in discussions for opportunities that will enable them to gain access to new technologies, geographies, categories and an opportunity for EMS.

They are also exploring potential opportunities for expansion of their operations in the railways sector. They have entered into non-disclosure agreements and are undertaking due diligence of the acquisition targets. On satisfactory conclusion of the diligence exercise, they would enter into definitive agreements after the approval of their Board and the shareholders, if required. Currently, while they have identified potential target for acquisition, they have not entered into any definitive agreements.

## COMPETITION

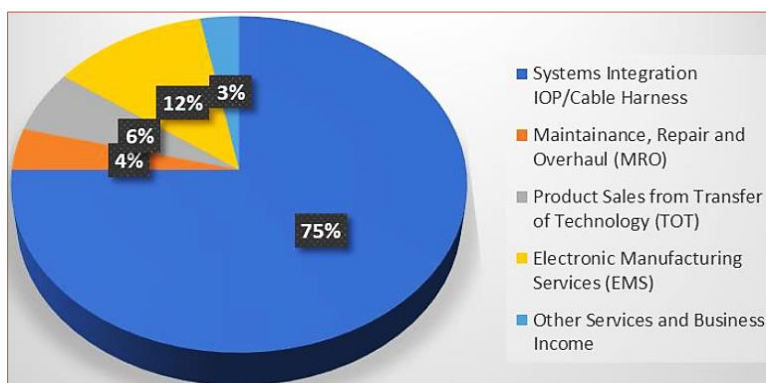
DCX Systems operates in the highly competitive system integration and cable and wire harness assemblies industry. To remain competitive in their markets which varies by geographic areas and type of products manufactured, they must continuously strive to reduce their costs of production, transportation and distribution and improve their operating efficiencies. They compete with both domestic and international companies, primarily on the basis of product quality, technology, cost, delivery and service, as well as quality and depth of senior level relationships as well as the operating level relationships.

Company's current product portfolio allows them to cater to various segments in the system integration, wires and cable harnesses and kitting verticals and as a result, they compete with various companies for each of their business verticals. Their main competitors include **Data Patterns Pvt Ltd, Astra Microwave Products Ltd, Centum Electronics Ltd, Bharat Electronics Ltd, and Paras Defence and Space Technologies Ltd**. Certain of these entities are also their customers.

## INDUSTRY PEERS

### Competitive Profile

Peer Entity/Capability Matrix	System Integration	Cable & Wire Harness Assembly	MRO	EMS	Electro-Mechanical Assembly
<b>DCX Systems Ltd</b>	✓	✓	✓	✓	✓
Astra Microwave Products Ltd	✓	X	✓	✓	✓
Alpha Design Technologies Pvt Ltd	✓	X	✓	X	✓
Bharat Electronics Ltd – Bangalore	✓	X	✓	X	✓
Centum Electronics	X	X	X	✓	✓
Cyient DLM Pvt Ltd	✓	✓	X	✓	✓
Sasmos HET Technologies	X	✓	X	X	X
Almphenol Interconnect India Pvt Ltd	X	✓	X	X	X
Data Patterns	✓	X	X	✓	✓
Hela Systems Pvt Ltd	✓	X	✓	X	✓
Kaynes Technology India	X	X	X	✓	X
Rossel Techsys	✓	✓	X	✓	✓
Apollo Micro Systems	X	X	X	✓	✓
Paras Defence	✓	X	X	✓	✓

**DCX Business Strategy Growth Focus Fiscal 2022-2026**

**Financial Data for Companies, Fiscal 2022**

Company	Revenue (₹ Cr)	Net Profit (₹ Cr)	Net Profit/Revenue (%)	EBITDA	EBITDA Margin (%)	ROCE (%)	ROE (%)
Data Patterns	311.0	94.0	30.2%	141.0	45.4%	24.0%	33.0%
Astra Microwave Products	735.0	40.0	5.4%	94.9	12.9%	15.9%	8.8%
Apollo Micro Systems	243.9	14.6	6.1%	38.5	15.8%	11.6%	4.5%
Centum Electronics	353.0	11.8	3.3%	48.3	13.7%	11.7%	4.4%
Paras Defence	182.5	26.9	14.8%	51.9	28.4%	10.4%	9.3%
BEL	15,314.0	2,349	15.3%	3,309.0	21.6%	26.2%	19.6%
<b>DCX Systems</b>	<b>1,102.0</b>	<b>65.61</b>	<b>5.95%</b>	<b>83.9</b>	<b>7.6%</b>	<b>13.2%</b>	<b>55.80%</b>

**COMPARISON WITH LISTED INDUSTRY PEERS (AS ON 31<sup>ST</sup> MARCH 2022)**

Name of the Bank	Consolidated/ Standalone	Face Value	Total Income for FY 2022 (₹ Cr)	EPS		NAV <sup>^</sup>	P/E <sup>*</sup>	RoNW (%)
				Basic	Diluted			
<b>DCX Systems Ltd</b>	<b>Standalone</b>	<b>2</b>	<b>1,124.33</b>	<b>9.19</b>	<b>9.19</b>	<b>15.19</b>	<b>[ • ]</b>	<b>55.8%</b>
Bharat Electronics Ltd	Consolidated	1	15,599.72	3.28	3.28	16.83	33.84	19.5%
Data Patterns (India) Ltd	Consolidated	2	314.81	19.48	19.48	110.72	60.65	16.4%
Paras Defence and Space Technologies	Consolidated	10	185.53	7.78	7.78	97.06	97.21	7.2%
Astra Microwave Products Ltd	Consolidated	2	756.84	4.37	4.37	67.61	78.79	6.5%
Centrum Electronics Ltd	Consolidated	10	787.96	(23.70)	(23.70)	154.07	NA	(26.9)%

Source: RHP; \*P/E Ratio has been computed based on the closing market price of the equity shares (NSE) on September 15, 2022.

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DCX Systems Limited is proposing, subject to receipt of requisite approvals, market conditions and other considerations, to make an initial public offer of its equity shares and has filed the RHP with the RoC and thereafter with SEBI and the Stock Exchanges. The RHP is available on the website of Securities and Exchange Board of India at [www.sebi.gov.in](http://www.sebi.gov.in), on the websites of the Stock Exchanges at [www.bseindia.com](http://www.bseindia.com) and [www.nseindia.com](http://www.nseindia.com) as well as on the websites of the BRLMs, Axis Capital Limited at [www.axiscapital.co.in](http://www.axiscapital.co.in). Investors should note that investment in equity shares involves a high degree of risk and for details relating to such risk, see "Risk Factors" of the RHP. Potential investors should not rely on the DRHP filed with SEBI for making any investment decision.

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