

Date: 31.10.2022

<b>To</b> <b>National Stock Exchange of India Limited</b> Exchange Plaza, Bandra Kurla Complex, Bandra(E), Mumbai -400051 NSE Symbol- DATAPATTNS	<b>To</b> <b>BSE Limited</b> 25 <sup>th</sup> Floor, P.J. Towers, Dalal Street, Mumbai- 400 001 Company Code: 543428
---	---

**Sub: Investor's Presentation**

Dear Sir/Madam,

In pursuance to Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find enclosed herewith investor presentation scheduled on 01<sup>st</sup> November, 2022.

This is for your information and record.

Thanking You

For **Data Patterns (India) Limited**

**MANVI  
BHASIN**

Digitally signed by MANVI BHASIN  
DN: cn=MANVI BHASIN, email=manvi@datapatternsindia.com, o=DATA PATTERNS (INDIA) LIMITED, ou=MANVI BHASIN, postalCode=110085, serialNumber=3078248715244019  
[0] MANVI BHASIN, cn=MANVI BHASIN  
Reason: I am the author of this document.  
Date: 2022.10.31 21:17:41  
Full Name Version: 10.0.1

Manvi Bhasin  
 Company Secretary and Compliance Officer

Encl as above



# Data Patterns ( India ) Limited

Investor Presentation

Q2 and H1FY23

31<sup>st</sup> Oct, 2022



This presentation and the accompanying slides (the “Presentation”), which have been prepared by Data Patterns (India) Limited (the “Company”) solely for the information purposes and do not constitute any offer, recommendation or invitation to purchase or subscribe for any securities and shall not form the basis or be relied on in connection with any contract or binding commitment whatsoever.

Certain statements in this presentation concerning our future growth prospects are forward looking statements which involve a number of risks and uncertainties that could cause actual results to differ materially from those in such forward-looking statements. The Risk and uncertainties relating to the statements include, but are not limited to, risks and uncertainties regarding fiscal policy, competition, inflationary pressures and general economic conditions affecting demand / supply and price conditions in domestic and international markets. The company does not undertake to update any forward -looking statement that may be made from time to time by or on behalf of the company.

This Presentation has been prepared by the Company based on information and data which the Company considers reliable. This Presentation may not be all inclusive and may not contain all of the information that you may consider material. Any liability in respect of the contents of, or any omission from, this Presentation is expressly excluded. The Company does not make any promise to update/provide such presentation along with results to be declared in the coming years.

**Chairman's Statement**

**Business Outlook**

**Opportunities in Pipeline and  
Defence Expo Highlights**

**Overview of Half Year**

**Q2 and H1 Financial  
Performance**

**Corporate Overview**



**Mr. Srinivasagopalan  
Rangarajan**  
*Promoter, Chairman &  
Managing Director*

*“Data Patterns is uniquely positioned to benefit from the strong sectoral tailwinds given our R&D strength and our manufacturing capabilities. Our current quarterly performance is one of the best in the history of the company and has surpassed our internal targets. We are confident of delivering on our stated guidance of 25%-30% topline growth given our strong and growing order book”.*

*First private company in India to receive Raksha Mantri Award from Defence Minister in developing Precision Approach Radar*

# Our Achievement in First Half Year

## *Record H1 Profitability*



Strong order book as on 30<sup>th</sup> Sep at Rs 837cr

Record Revenue; grew 62% YoY to Rs 156cr  
EBITDA increased 36%YoY to Rs 51cr

Healthy Gross Margins at 65% and EBITDA Margins at 33%

Strong Balance Sheet; Net Debt Free Company

High Return Ratios - RoE and RoCE at 18% and 25% respectively

New Manufacturing facility is expected to be commenced from Q3 FY23

Order inflow in H1  
of Rs 517cr, **grew 3x  
YoY**

Rs 18cr Dividend  
Paid ; DPS was Rs  
3.5

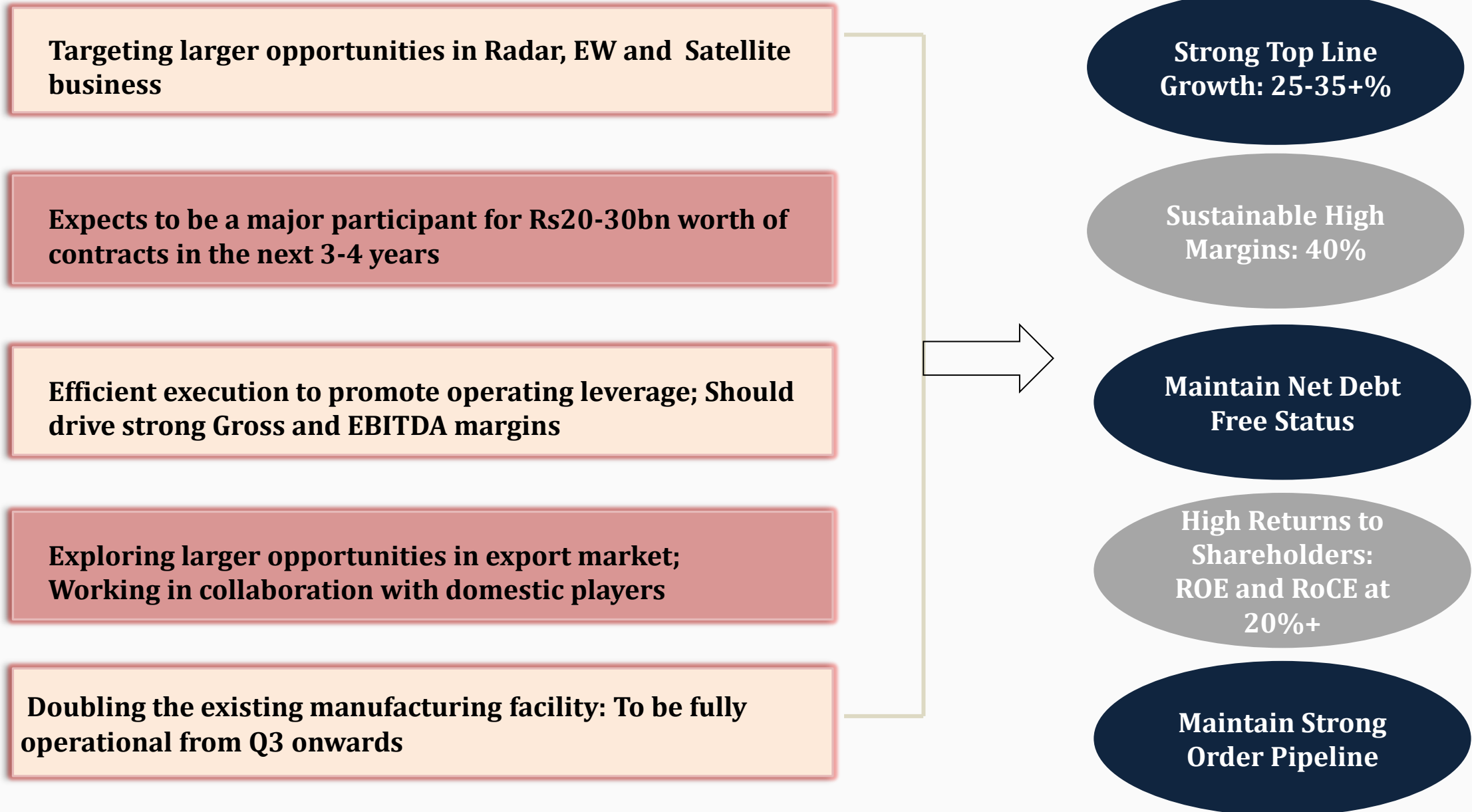
Export revenue and  
order inflow accounts  
to Rs 34cr and Rs  
50cr respectively

Revenue CAGR of  
33% and EBITDA  
CAGR of 73% over  
FY19-FY22

Cash in hand at Rs  
68cr

PAT at Rs 35cr; up  
52% YoY

# What We Look to Achieve in Next Two Years



# Defence Expo'22 Highlights



First Defence expo where only Indian companies participated and featured only Made in India Equipments

1. India targets to achieve Rs 350bn worth exports; equally endorsed by PSUs and private players
2. 4<sup>th</sup> positive Indigenization list includes 400+ items

1. It is in process of building the scaled down version of the space surveillance Radar for DRDO
2. SDRs trails are under way and once it approves, substantial orders would aid further growth

Received The Raksha Mantri Award for excellence for year 2022, becoming the first private company in India to receive this honour in the category under medium scale industry for their best of innovations in development of the Precision Approach Radar (PAR).

**NARENDRA MODI**  
Prime Minister

“ In the coming years, the Defence and Aerospace sectors will be two important pillars for making India 'Atmanirbhar'. By 2025, our defence manufacturing scale would cross \$25 billion. Defence corridors being established in Uttar Pradesh and Tamil Nadu would power this scale. ”



## Order Intake of Rs 471cr- Ahead of Expectations

**Radar**

**Rs 363cr**

Development Orders from DRDO, Bangalore



**Electronic Warfare**

**Rs 30cr**

Development and Production orders from DRDO, Hyderabad



**Avionics and Navy**

**Rs 22cr**

Export production order from UK  
  
Production order from DPSU



**Others**

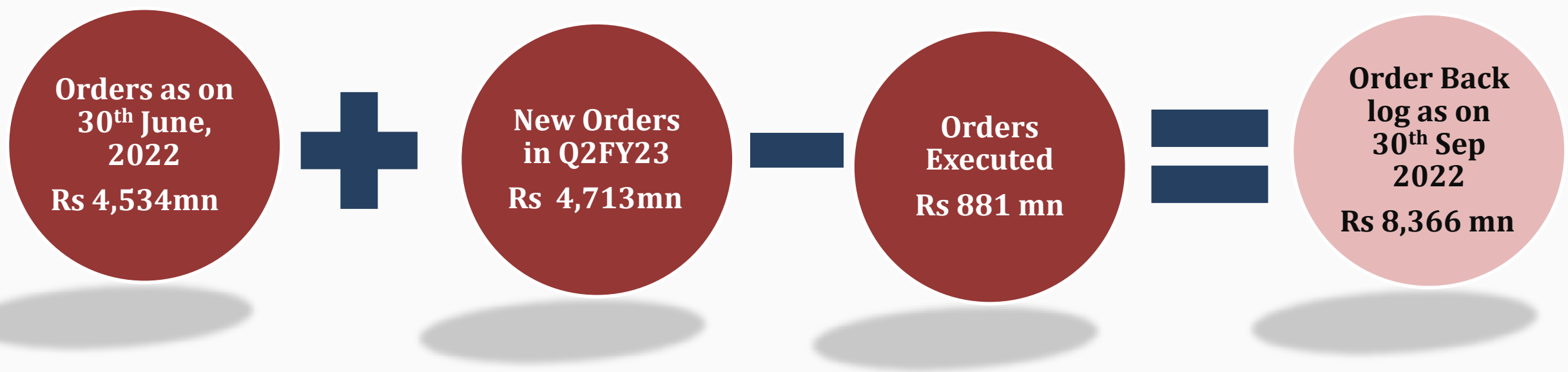
**Rs 56cr**

Development order from DRDO, Dehradun  
  
Production order from BrahMOS



# Order Book Buildup in Q2FY23

*Order Book as on date is Rs 1,012cr including orders received in Oct'22 and those finalised and yet to be received*



*Fire control system for BrahMos Missile, Avionics for LCA, RWR for Fighter Aircraft, ELINT for Airborne and Ground Platform and Radar Subsystems are key orders in pipeline for FY23*



**Mr. Venkat Subramanian**  
**Chief Financial Officer**

*“We have delivered the highest ever second quarter revenue. H1 revenue growth is 62% and we have maintained strong gross margins of 65%. Order inflow is greater than expected which gives us good revenue visibility. We are continuously making efforts on managing the working capital **despite a challenging macro environment**. We have strong balance sheet with zero net debt and are fully poised for next stage of growth”*

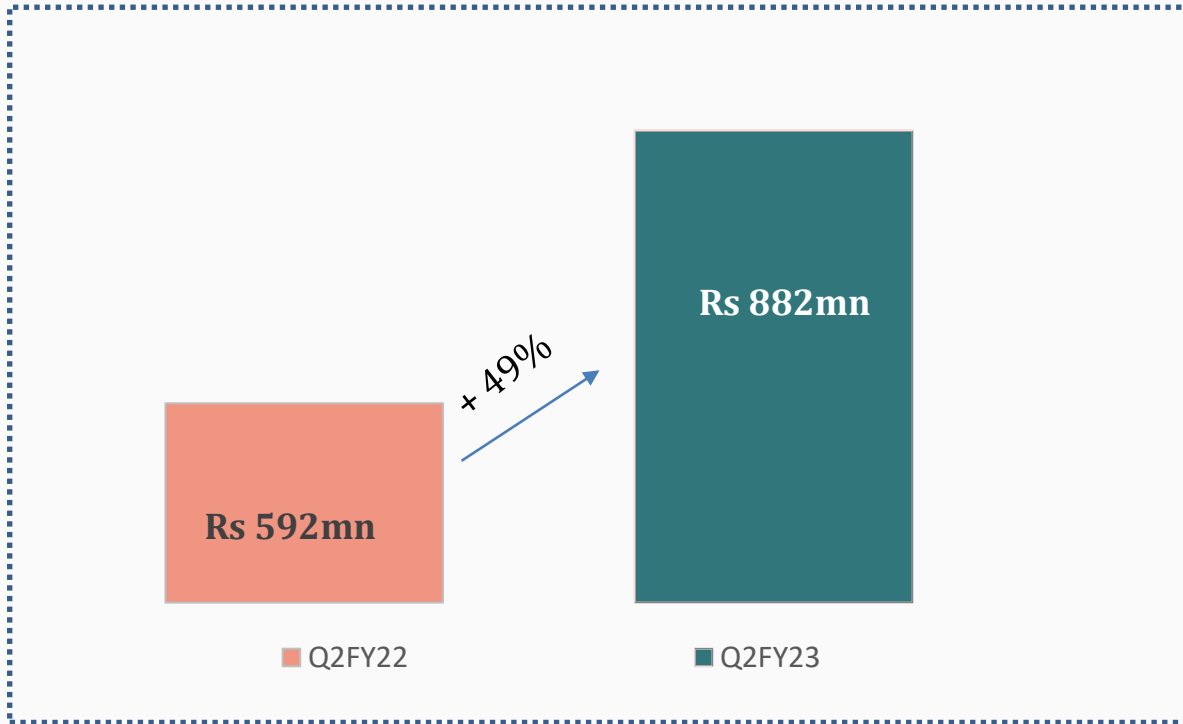
# Q2 and H1FY23: Financial Performance

DATA PATTERNS

Particulars (Rs. Mn)	Q2FY23	Q2FY22	YoY (%)	Q1FY23	QoQ (%)	H1FY23	H1FY22	YoY (%)
<b>Revenue from Operations</b>	<b>882</b>	<b>592</b>	<b>49.0</b>	<b>684</b>	<b>28.9</b>	<b>1,565</b>	<b>965</b>	<b>62.2</b>
<b>Gross Profits</b>	<b>572</b>	<b>418</b>	<b>36.8</b>	<b>242</b>	<b>136.4</b>	<b>1,014</b>	<b>754</b>	<b>34.5</b>
<b>Gross Profit Margin (%)</b>	<b>64.9</b>	<b>70.5</b>		<b>64.7</b>		<b>64.8</b>	<b>78.2</b>	
<b>EBITDA</b>	<b>302</b>	<b>206</b>	<b>46.6</b>	<b>213</b>	<b>41.8</b>	<b>514</b>	<b>378</b>	<b>36.0</b>
<b>EBITDA Margin (%)</b>	<b>34.2</b>	<b>34.7</b>		<b>31.1</b>		<b>32.8</b>	<b>39.2</b>	
Depreciation / Amortization	21	15	40.0	20	5.0	41	30	36.7
<b>EBIT</b>	<b>281</b>	<b>190</b>	<b>47.9</b>	<b>193</b>	<b>45.6</b>	<b>473</b>	<b>349</b>	<b>35.5</b>
<b>EBIT Margin (%)</b>	<b>31.8</b>	<b>32.2</b>		<b>28.2</b>		<b>30.2</b>	<b>36.2</b>	
Other Income	19	3	533.3	17	11.8	36	7	414.3
Finance Cost	12	26	-53.8	16	-25.0	28	48	-41.7
<b>PBT</b>	<b>287</b>	<b>167</b>	<b>71.9</b>	<b>194</b>	<b>47.9</b>	<b>481</b>	<b>308</b>	<b>56.2</b>
Tax expense	76	39	94.9	52	46.2	128	76	68.4
<b>Profit(Loss)for the period</b>	<b>211</b>	<b>129</b>	<b>63.6</b>	<b>142</b>	<b>48.6</b>	<b>353</b>	<b>232</b>	<b>52.2</b>
<b>PAT Margin (%)</b>	<b>23.9</b>	<b>21.8</b>		<b>20.8</b>		<b>22.5</b>	<b>24.1</b>	
EPS (Rs)	4.1	2.8		2.7		6.8	5.0	

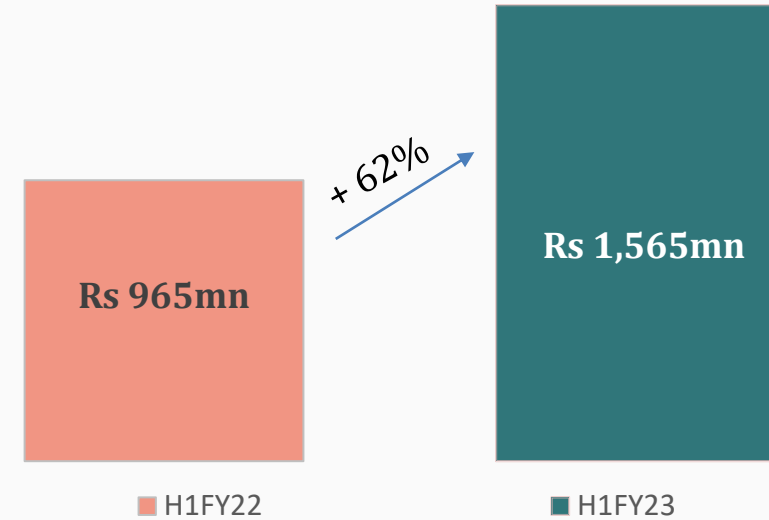
# Record Revenue Growth of 62% YoY in H1

## Revenue - Q2FY23 and H1FY23



### Q2 Highlights

- Revenue growth was 49% to Rs 882mn
- Production revenue was Rs 633mn
- Gross Margin at 65%; EBITDA growth of 47% YoY
- Q2 PAT at Rs 211mn; up 64% YoY



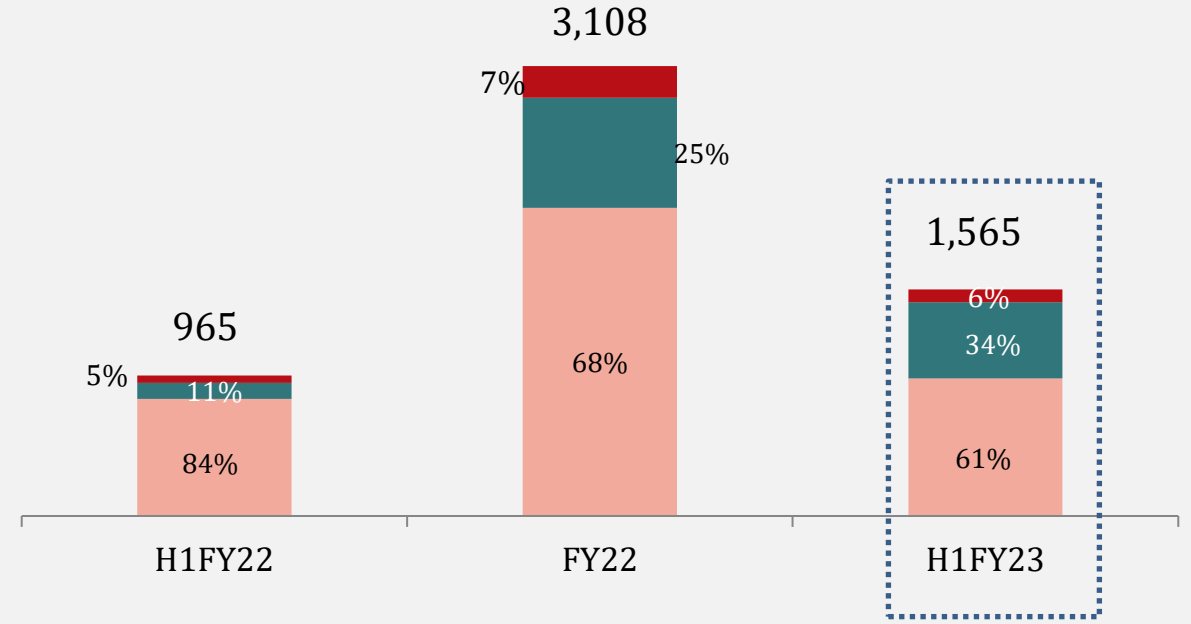
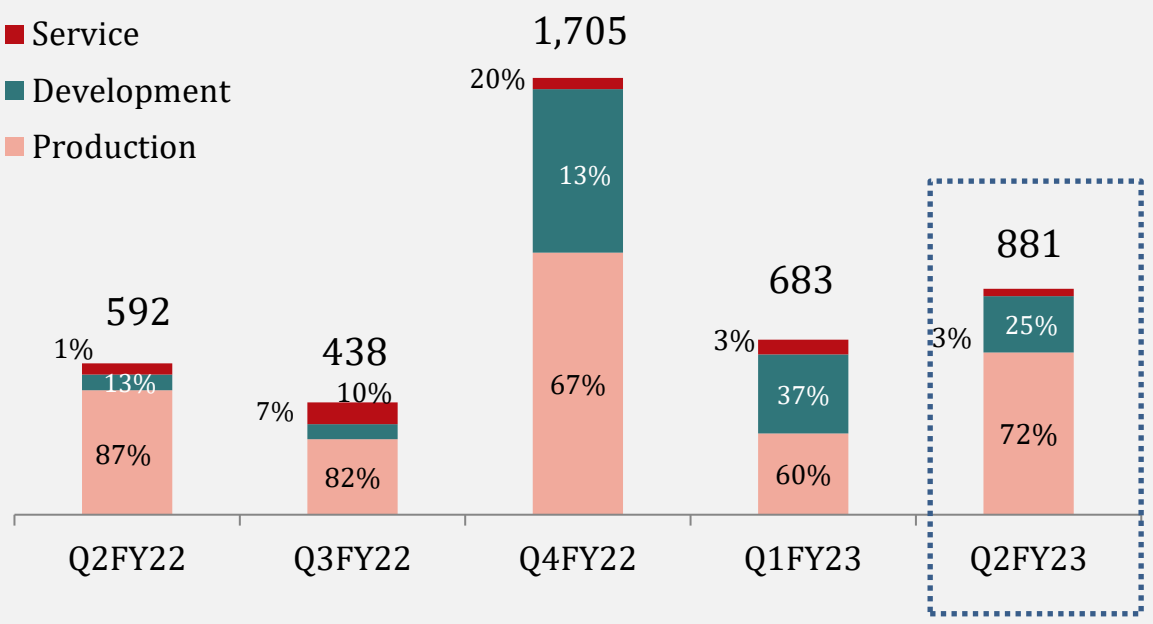
### H1 Highlights

- Revenue growth was superior at 62% to Rs 1,565mn
- Production revenue was Rs 950mn
- Gross Margin at 65%; EBITDA growth of 36% YoY
- H1 PAT at Rs 353mn; up 52% YoY

*Developmental contracts/order book translates to strong production revenues*

Revenue in INR mn

- Service
- Development
- Production



**Q2 Highlights**

- Revenue from Development contracts showed strong growth from Q2; grew 3x
- Revenues from Production contracts grew by 23% YoY at Rs 633mn ; Q2 order inflow primarily from Development contracts

**H1 Highlights**

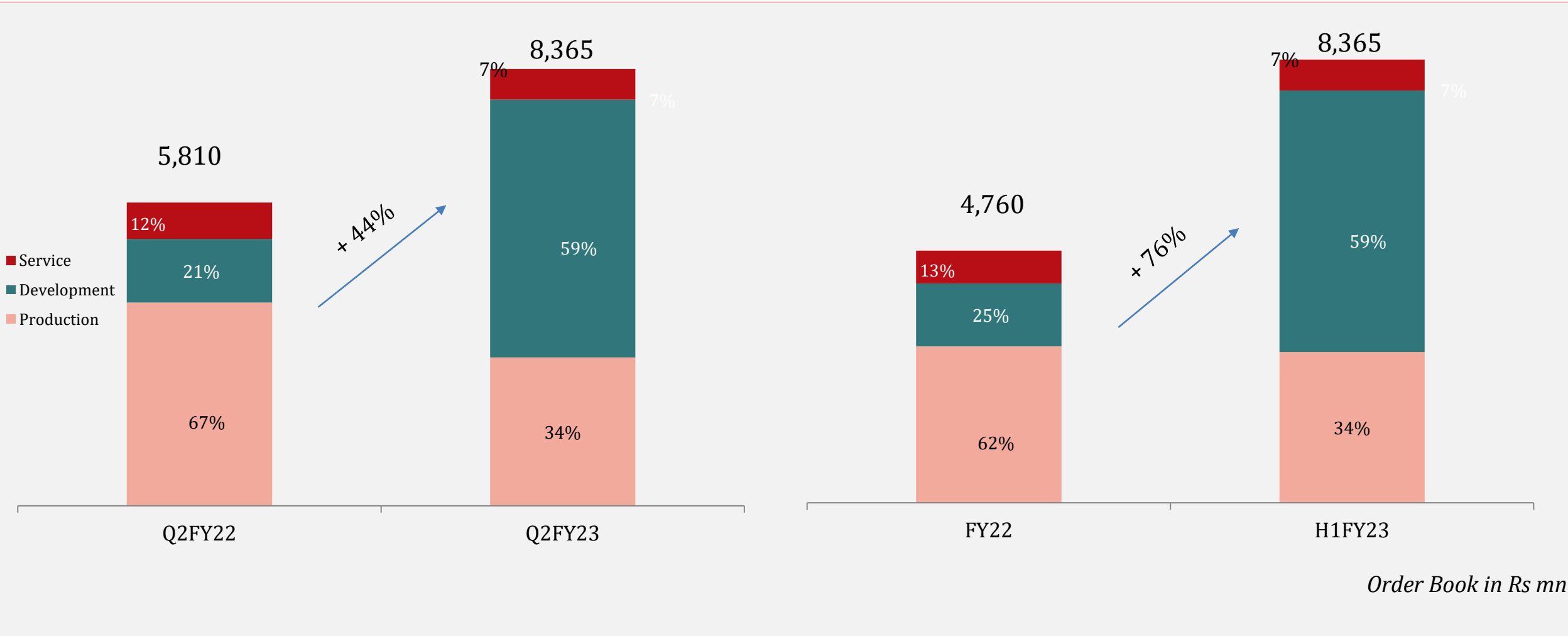
- Revenue from Development contracts showed strong growth from negligible amount in H1FY22; grew 5x
- Revenues from Production contracts grew 17% YoY at Rs 950mn

# Q2FY23: Revenue Breakup

Product	Rs mn
AMC	22.6
ATE	229.4
Avionics	23.3
BTP/Services	2.9
Communication	10.2
EW	169.1
IFF	4.0
Naval System	35.5
Radar	359.9
Radar Processor	21.5
Services	3.0
<b>Grand Total</b>	<b>881.5</b>

Customer	Rs mn
BEL	14.9
BrahMos	14.7
DOS	95.4
DRDO	213.4
DRO	0.2
Export	234.2
HAL	4.6
Indian Navy	4.4
MOD	279.5
Others	20.3
<b>Grand Total</b>	<b>881.5</b>

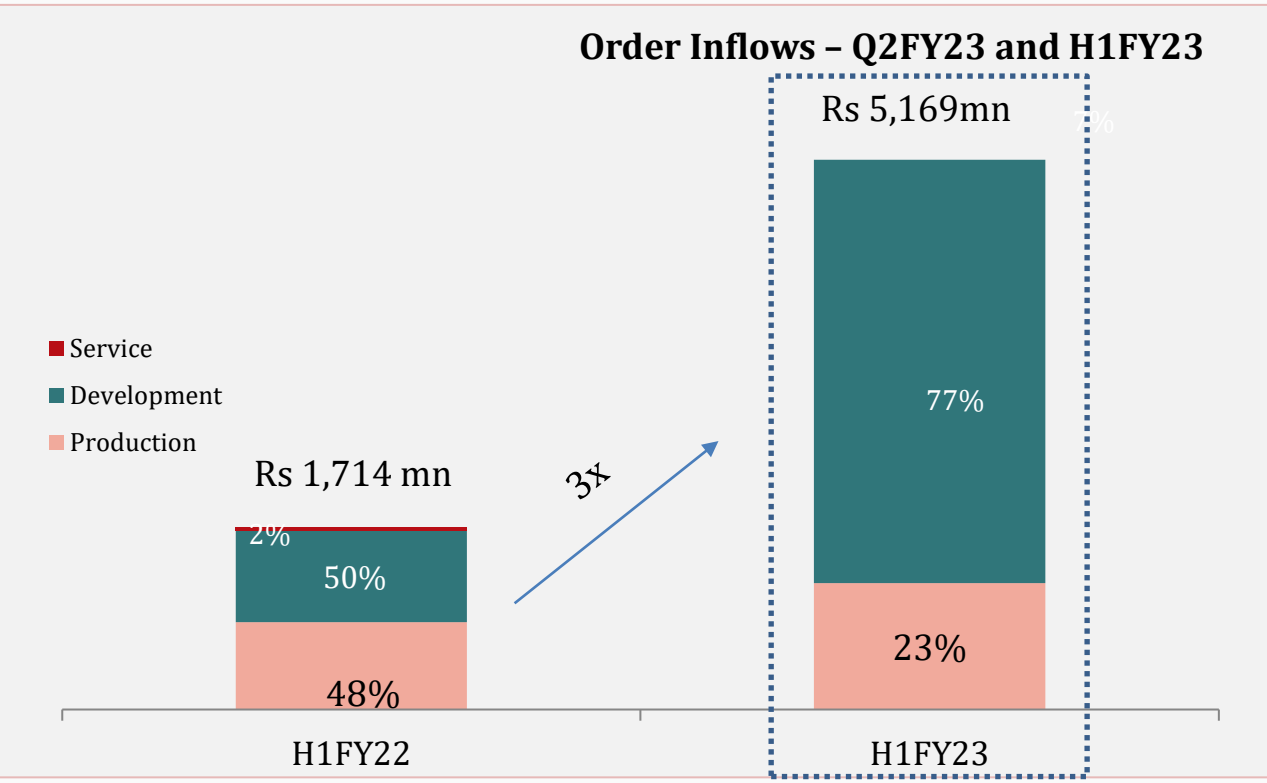
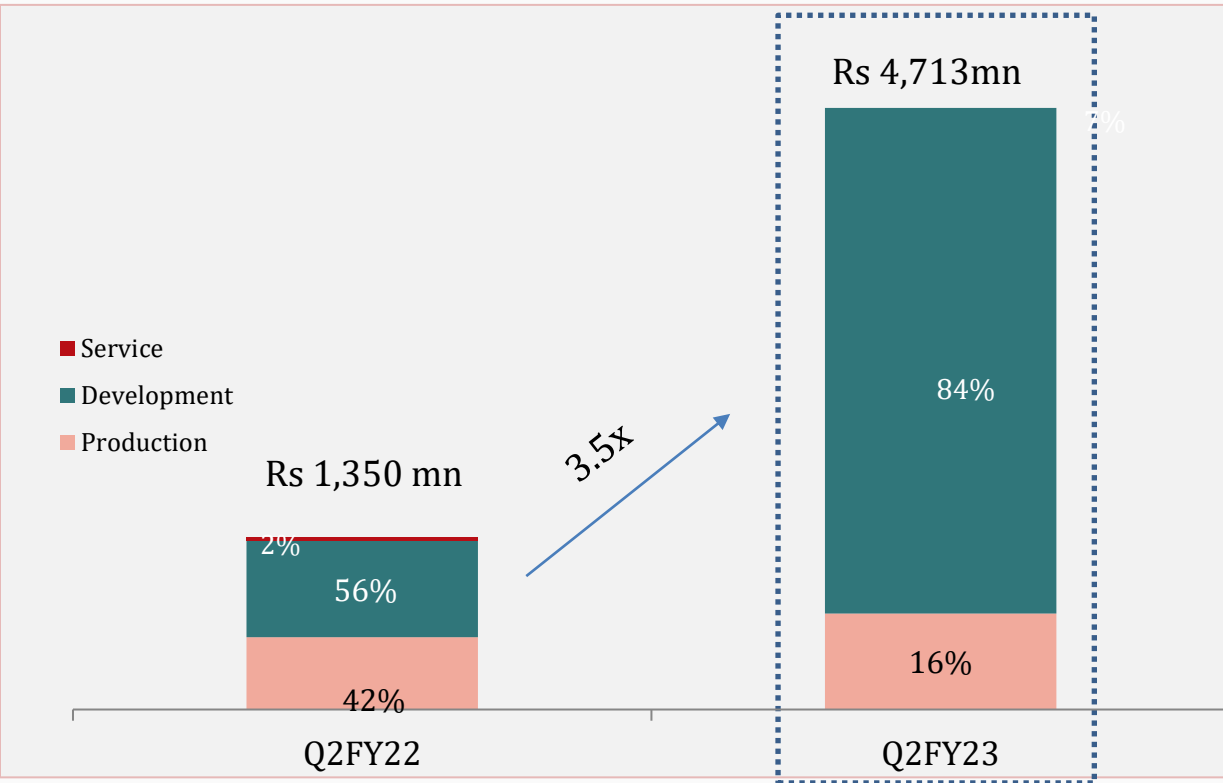
# Order Book grew Exponentially





# Highest Ever Order Inflow in any Quarter

**Expects Further Order Inflow of Rs 300+cr in H2FY23**



## Major order received in Q2FY23

Product	Customer	Order Type	Value (Rs mn)
Communication	DRDO	Development	157
ATE	BrahMos	Production	122
Radar	DRDO	Development	3,624
Avionics	Export	Production	110
EW	DRDO	Development and Production	252

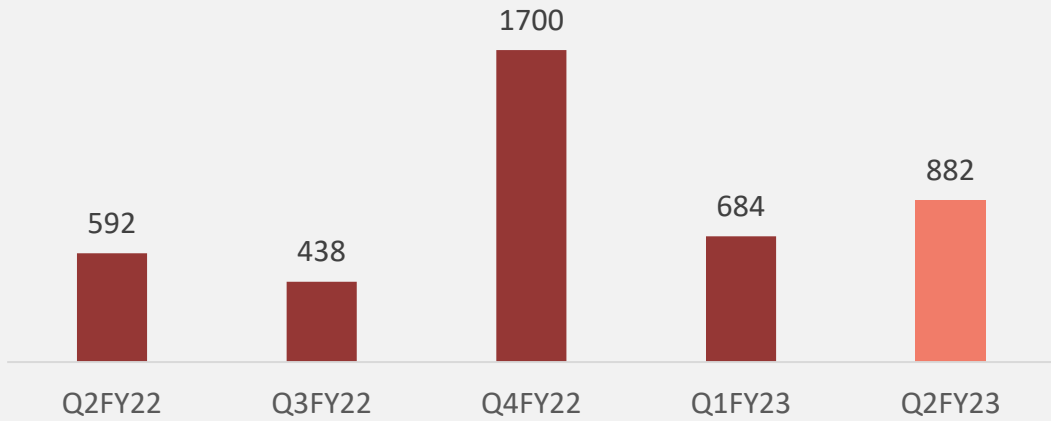
## Major order received in H1FY23

Product	Customer	Order Type	Value (Rs mn)
Avionics	DRDO, HAL& Export	Production	389
Communication	DRDO	Development	157
ATE	BrahMos	Production	123
Radar	DRDO	Development	3624
EW	DRDO	Development and Production	252

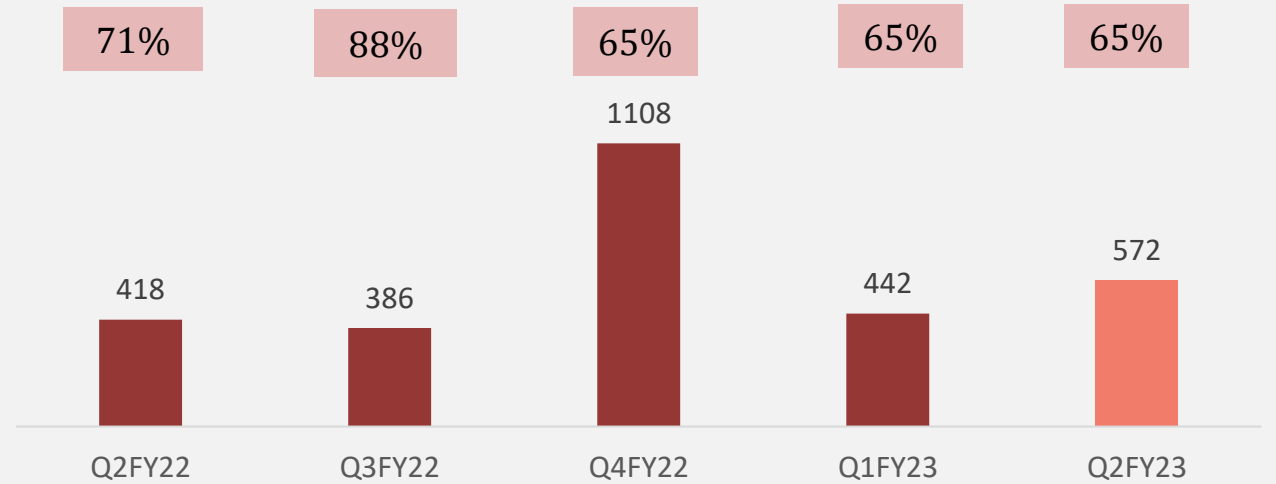
# Robust Performance : Supported by Strong Financials



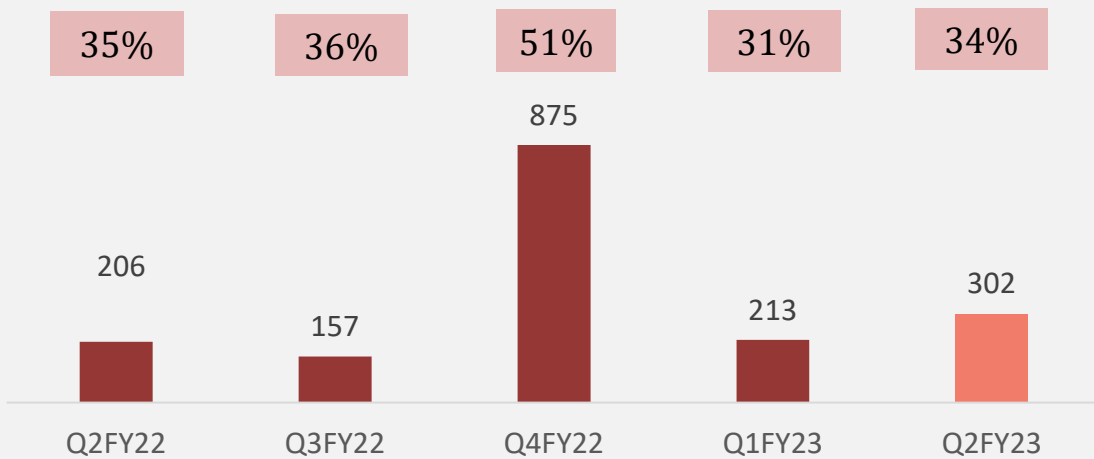
Revenue (INR Mn)



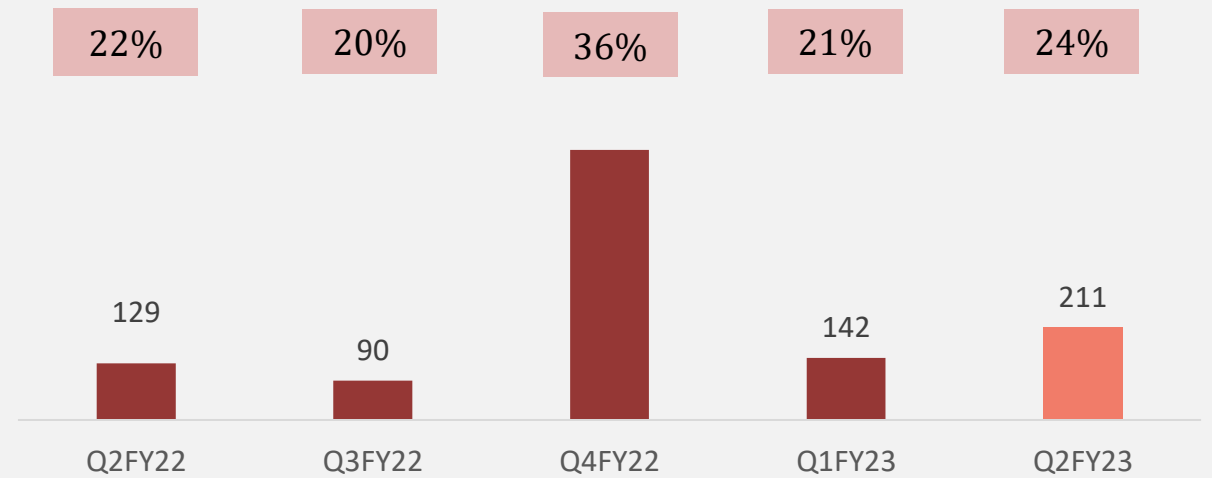
Gross Profits (INR Mn) and Margins (%)



EBITDA (INR Mn) and Margins (%)



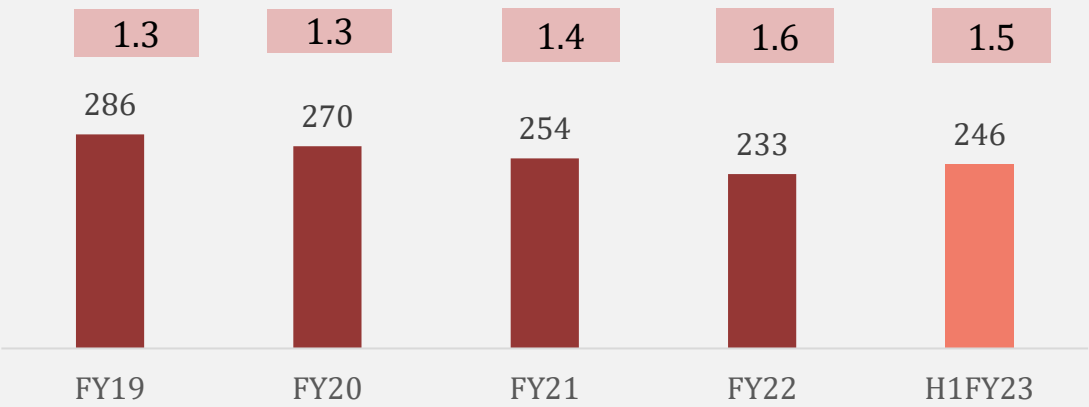
Net Profit (INR Mn) and Margins (%)



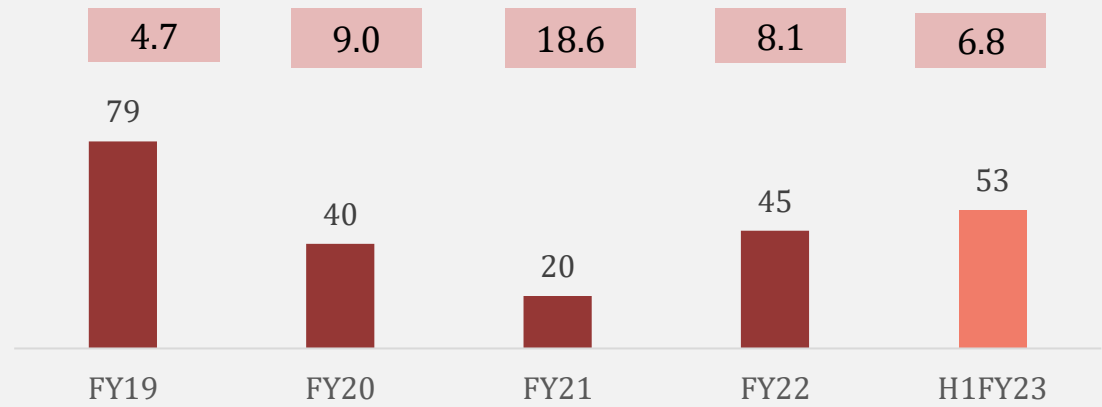
# Well Managed Working Capital



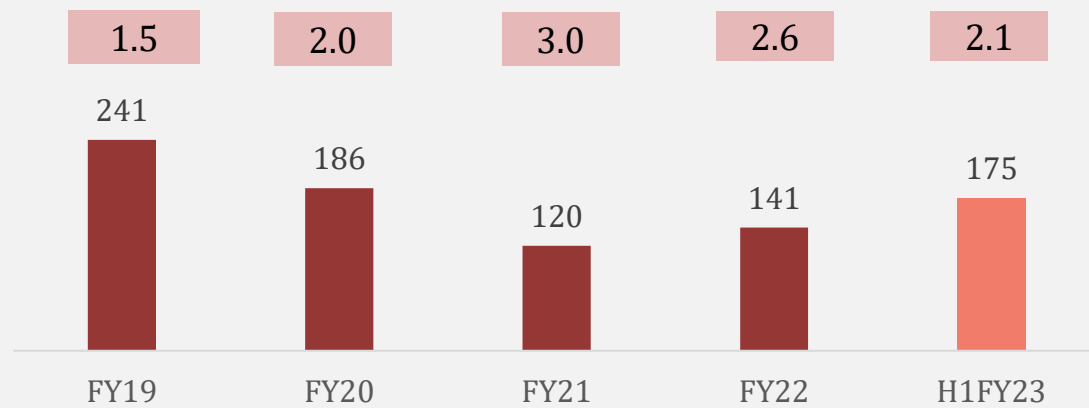
### Debtor Days and T/O Ratio



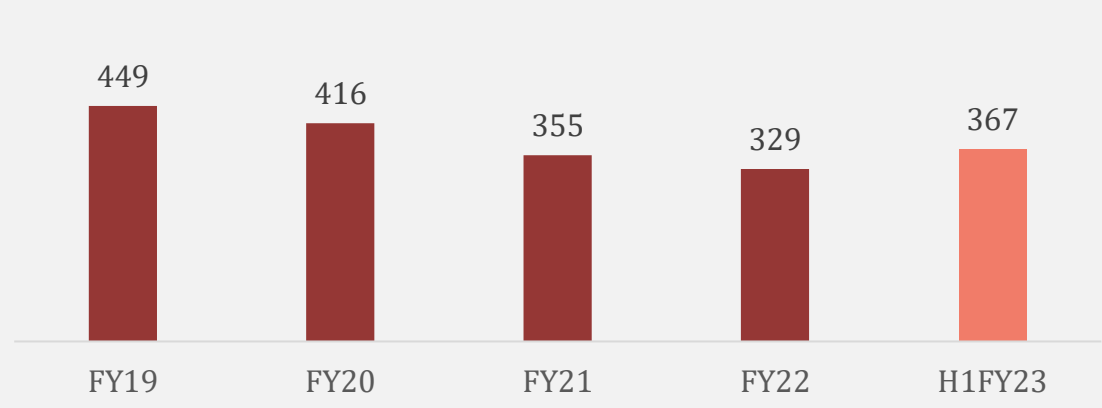
### Creditor Days and T/O Ratio



### Inventory Days and T/O Ratio



### Cash Conversion Cycle



\*All Days are calculated on revenue on TTM basis

### Investment in Our People



- ✓ We hired 200+ engineers in first half of year
- ✓ Plans to hire 100 more freshers in the remaining part of year

### Investment in Facility



- ✓ Spent Rs 300cr till now for expansion of the new facility
- ✓ By the end of Q3 it will get fully operational

### Investment in Technology



- ✓ Successfully completed site acceptance test of Precision Approach Radar
- ✓ Successfully completed FAT and delivery of Doppler Weather Radar



DATA PATTERNS

**Corporate Overview**

# Data Patterns – One of the fastest growing companies in the Defence and Aerospace Electronics sector in India...

Among the few vertically integrated defence and aerospace electronics solutions providers catering to the indigenously developed defence products industry

<p><b>1</b> Vertically integrated defence and aerospace electronics solutions with end to end capabilities and a large addressable market</p>	<p><b>Defence Aerospace</b></p>	<p><b>30+</b> Years of experience</p>			
<p><b>2</b> Focused on in-house development and manufacturing facilities led by innovation and design and development efforts</p>	<p><b>Design to Delivery</b></p>	<p>Products supplied for programmes <b>LCA-Tejas, Light Utility Helicopter, BrahMos missile</b></p>			
<p><b>3</b> Beneficiary of shifting procurement trends in Defence – Aatma Nirbhar Bharat , Make in India, new defence acquisition policies among others</p>	<p><b>TAM of USD 4.65 bn by 2030</b> growing at CAGR – 9% from 2020*</p>	<p>Increasing indigenization, Domestic defence procurement, Higher share of electronics in warfare</p>			
<p><b>4</b> Diversified order book with marquee customers along with state of the art manufacturing facilities</p>	<p><b>Rs. 1,787 mn</b> Order book as of Apr'18 <span style="font-size: 2em; color: red;">➔</span> <b>CAGR – 45+%</b> <span style="font-size: 2em; color: red;">➔</span> <b>Rs. 8,365mn</b> Order book as on Sep '22</p>				
<p><b>5</b> Experienced management team and skilled workforce</p>	<p><b>Many senior personnel associated with Company</b> for more than <b>2 decades</b></p>	<p><b>884</b> employees with more than <b>485</b> qualified engineers</p>			
<p><b>6</b> Highest Revenue growth, EBIDTA margin, ROCE and ROE (for FY21 &amp; FY22) amongst key Indian defence and aerospace companies</p>	<p><b>33%</b> Revenue CAGR (FY19-FY22)</p>	<p><b>72%</b> Gross Margin% (FY22)</p>	<p><b>45%</b> EBITDA% (FY22)</p>	<p><b>24%</b> RoCE (FY22)</p>	<p><b>33%</b> RoE (FY22)</p>

**One of the fastest growing companies in the Defence and Aerospace Electronics sector in India**

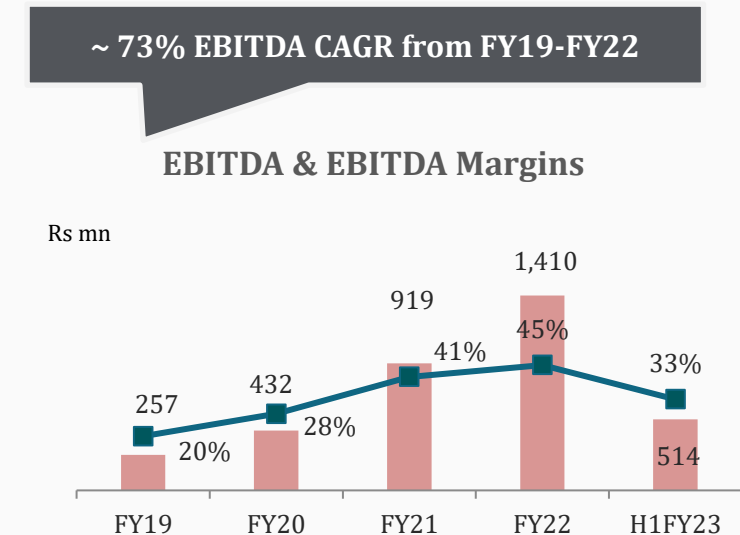
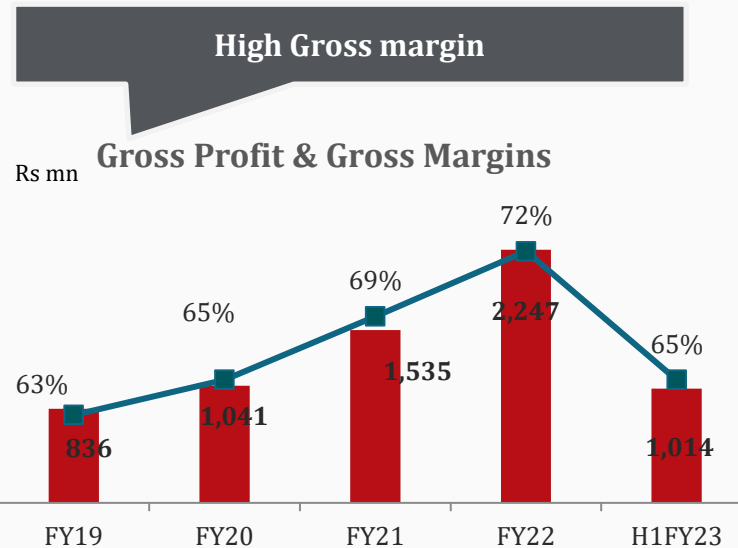
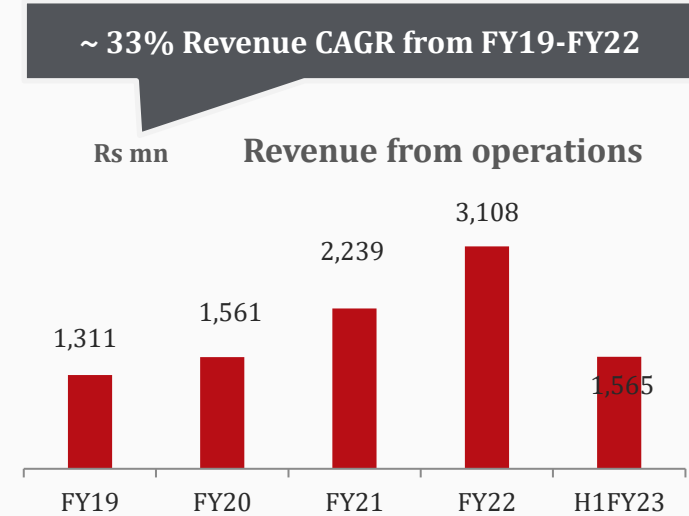
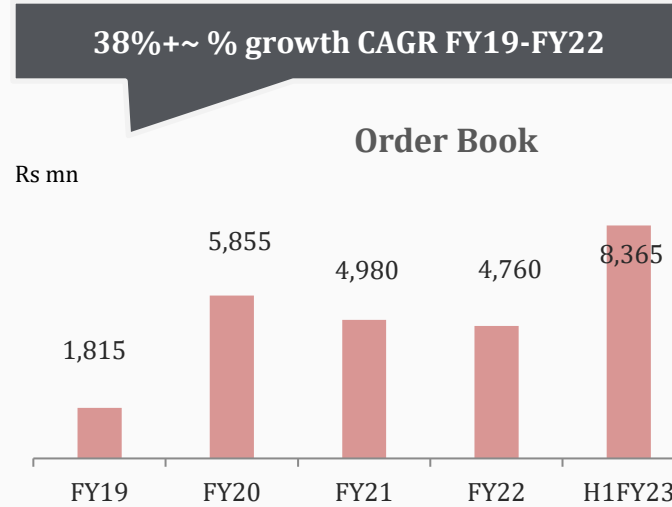
\*addition of market size of specific industries from the DRHP

# With a Consistent Track Record of Profitable Growth



Robust revenue and order book growth

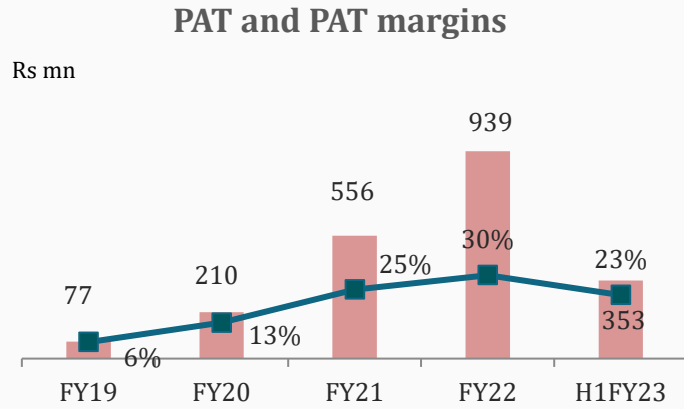
Consistently higher gross margins and improving EBITDA margin%



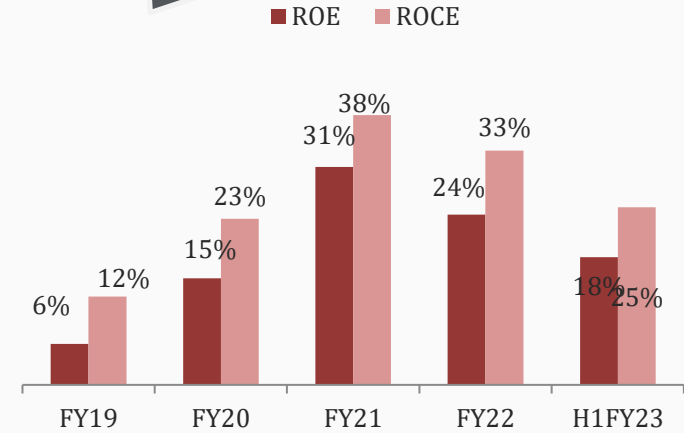
# Growing Profitability

Improving PAT margins and high ROCE

## Improving PAT Margins

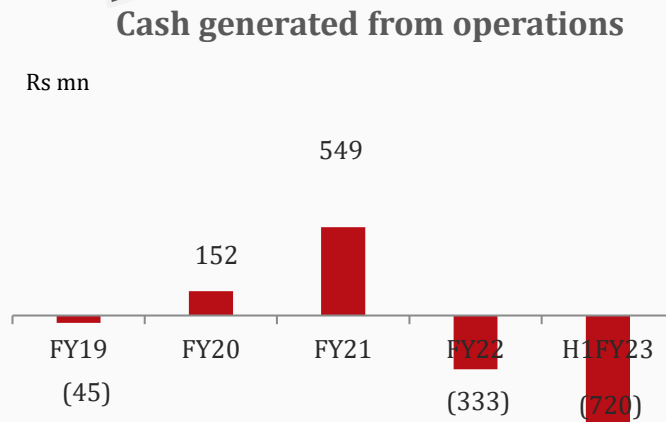


## Improving ROE and ROCE

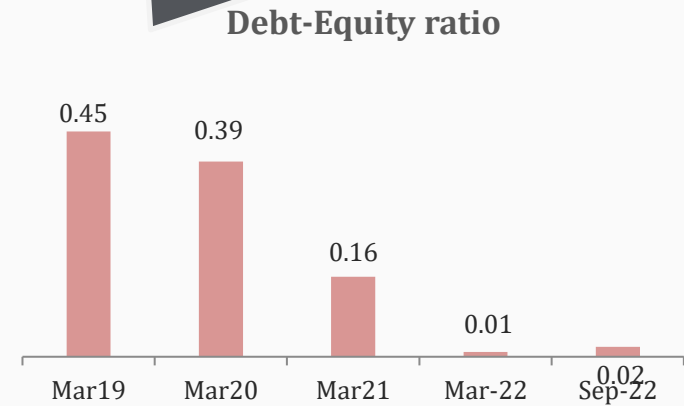


Strong cash flow generation and low leverage

## Strong operating cash flow generation



## Lower debt levels/ leverage





# Through Well-Invested and State of the Art Manufacturing Facilities

~ 5.75 Acres

Of land in Chennai, SIPCOT area

~ 100,000 sq. ft

Aggregate of built up area of manufacturing facility

~2.81 acres

Land for proposed expansion



## Environmental Certification

- JSS55555

- MIL-STD-461

- MIL-STD-810 including for Highly Accelerated Life Test / Highly accelerated stress screening.

## Key features of manufacturing facility

- ✓ 100,000 class clean room
- ✓ Electronic assembly facility
- ✓ BGA repair work station with display
- ✓ Manual soldering certified to Space grade standards
- ✓ EMS assembly capacity of 600 boards per day
- ✓ Capability to handle complex boards with 22 layer, 6k components and 21k solder points
- ✓ Dedicated 70 work stations for testing modules and small systems
- ✓ Harness preparation of 2k points per day
- ✓ 20 Dedicated Mechanical assembly stations to assemble small and large systems

and various others...

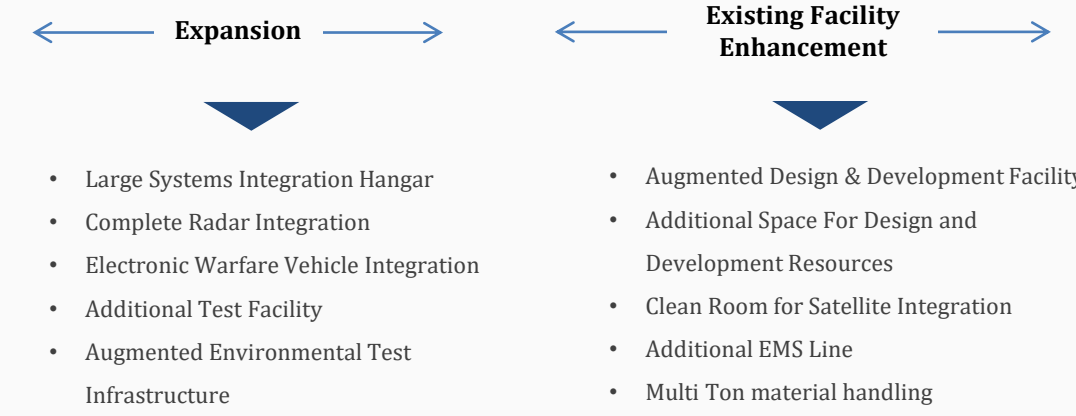
## Our systems and processes are subject to periodic audit by customer such as

- ✓ Indian Government Space Organization
- ✓ Hindustan Aeronautics Limited (HAL)
- ✓ Other Government departments

## Proposed expansion

- ✓ Spend Rs 3000mn towards upgrading and expanding existing facilities
- ✓ Proposed doubling of floor area and manufacturing capacity
- ✓ Addition of large & heavy equipment, integration of large radars & mobile electronic warfare systems.

## Manufacturing facility at Chennai, India



EMS Line


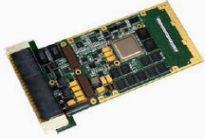





















Multizone Reflow Oven



X ray inspection system

# Diverse Product Offering

Category	Select Product offerings	Category	Select Product offerings
<p><b>Commercial off the shelf (COTS)</b></p> 	<p>COTS modules designed in context of reusable building blocks for building Military Electronics systems with a quick turnaround time</p>    <p><i>VPX Multi core SBC</i>      <i>VPX Zynq MPSoC based Quad Core</i>      <i>High Density DIU</i></p>	<p><b>BrahMos Programme</b></p> 	<ul style="list-style-type: none"> <li>• Fire control systems</li> <li>• Mobile autonomous launcher</li> <li>• Airborne launcher and</li> <li>• Other electronic systems</li> </ul>   <p><i>Air Version Launcher for Brahmos Sukhoi-30</i>      <i>Missile Checkout System</i></p>
<p><b>Avionics</b></p> 	<p>Avionics displays used on :</p> <ul style="list-style-type: none"> <li>• Light Combat Aircraft (“LCA”),</li> <li>• Intermediate Jet Trainers</li> <li>• Light Utility Helicopters (“LUH”)</li> </ul>  <p><i>Light Utility Helicopter Cockpit display</i></p>	<p><b>Electronic Warfare</b></p> 	<ul style="list-style-type: none"> <li>• Surveillance and intelligence gathering (“SIGINT”)</li> <li>• Further divided into COMINT and ELINT</li> </ul>   <p><i>Digital Direction Finder</i>      <i>Radar Warning Receiver</i></p>  <p><i>Airborne Radar Warning Receiver</i></p>
<p><b>Communications, ATEs and Satellites</b></p> 	<ul style="list-style-type: none"> <li>• Underwater electronics / Communications / Other Systems</li> <li>• Automated Test Equipment (ATE)</li> <li>• Small and Nano Satellites</li> </ul>   <p><i>Oceanography Product</i>      <i>Automated Test equipment for INS Shikra</i></p>	<p><b>Radars</b></p> 	<p>Surveillance radars      Weather radars      Coastal Surveillance Radar</p>    

# Over Last Three Decades



Launch pad countdown system



Fixed Wing Cockpit Displays



TERLS Tracking Radar



C-Band Tracking Radar



Wind Profile Radar



Micro Satellite Designed wide open **RWR and ELINT** for airborne platforms

2021

- Initiated expansion of manufacturing facility with **doubling of available floor area**
- Building of capacity to handle **large and heavy equipment and integration** of large radars and mobile EW systems, satellite integration facility

Developed **Glass Cockpit Displays / Avionics**

Designed and developed complete Radar Capability

- Data Patterns has a long history of association with India Space Organization. Data Patterns built a Nano Satellite which was deployed in 2017.
- Developed **EW receivers, Satellite and Ground Station**



Expanding capacity

2001

- Developed a **Fire Control System** for Brahmos
- Designed & developed the **launch pad countdown system**

- Upgradation of **Tracking Radars**
- Developed **RF and Microwave capabilities** allow entry to building complete systems



Mobile Autonomous Launcher

Fire control system for the BrahMos



RF & Microwave Products



Coastal Surveillance Radar (Dept. of Space)



Wideband Fast Scan receiver  
V/UHF Monitoring Receiver



Real Time Monitoring Receiver  
V/UHF Search Receiver



Precision Approach Radar

## 1 Developmental Contracts



Projects leads to Production / Repeat requirements  
 Programs leads to Annuity requirements

## 5 Exports / Offsets

Available Products / Systems

Radars, Electronic Warfare, Fire control systems, Avionics, Missile Seekers, Communications, Small satellites

## 2 MoD Tenders

Available Products / Systems Partnership with OEM



Requirements is for large numbers and longer timeframe

## 4 Civilian Requirements

Satellites and Wind profile radars



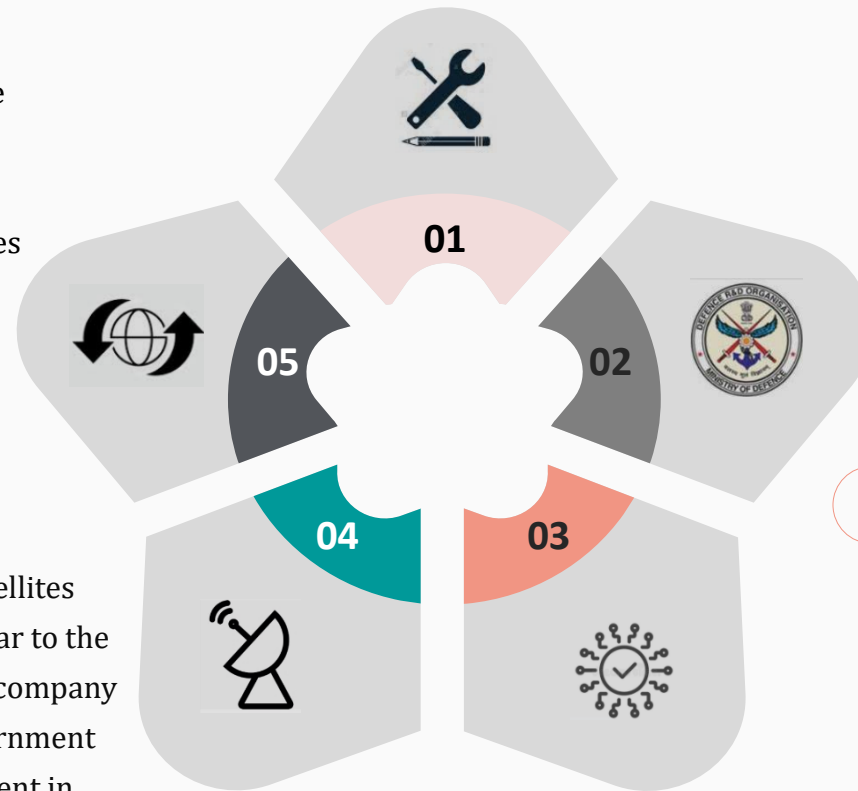
- Ability to build nano satellites
- Wind profile radar similar to the radar developed by our company is now required by government meteorological department in the civilian space

## 3 Indian Defence Eco-system

Platform / Weapon System Development






- Develop Sensors, Electronics, Avionics
  - In-house
  - In partnership with OEM



# Well-Positioned to benefit from Make in India Opportunity

Focused on designing & developing indigenized products making it a beneficiary of India's "AtmaNirbhar" defence structural reforms

-  Focused on designing and building own products across the manufacturing value chain to developing products and sub-systems
-  Well positioned to rapidly commercialise or **scale-up a number of existing products or building blocks to end systems** or complete solutions
-  Concentrate on building complete systems from the building blocks and sub-systems already developed, provides a **higher value addition while distributing development costs**

**Examples:**



**Wind profile radar built for Cochin University of Science and Technology** is the world's first 205MHz radar – complete in house development



Using the experience of working with DRDO and development of wind profile radar, the company successfully bid and won a contract of Rs 380Cr from **Ministry of Defence for nine precision approach radars** for Navy and Airforce which are currently at delivery stage



**Developed and deployed our first Nano Satellite in 2017**



Subsequently received contracts to build 2 more Nano Satellites



**Developed and supplied Military COTS type processor for DRDO**



Subsequently redeployed for other projects by various DRDO laboratories including in naval applications in ships & helicopters

**Defence Modernization Program**



Arudhra Radar



Light weight EW requirements



Ashwini LLTR



Airborne surveillance radar



Dharashakti programme




Radar Warning Receivers

# Driven by Innovation Focused Business Model


**Focused on in-house development led by innovation and design and development efforts**



**Building complete systems from the building blocks and sub-systems already developed**



**Partner with customers through the life cycle of a product, from conception till deployment and thereafter**



**450+ engineers, most of whom have served in design and development departments**

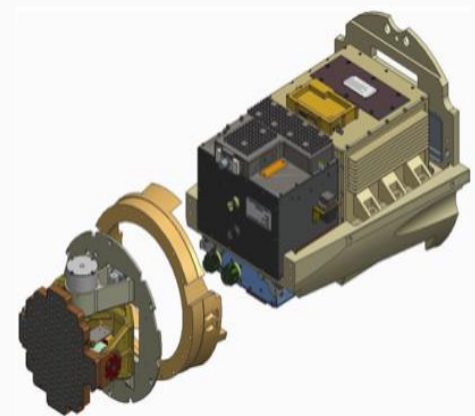
Track record of utilizing pre-developed building blocks and sub-systems in the development of complete systems

Present programmes with building blocks Designed & Developed by Data Patterns...

... along with "Future Ready" products already designed and developed by the company

- Military grade processor modules,
- Cockpit displays,
- Actuator controllers for missiles and torpedoes,
- Flight control computers,
- Digital receivers and
- Up/Down converters for radars

- Airborne phased array radar
- Frequency hopping radio relays
- Next generation EW products
- Integrated EW solution for national security



**Key Products manufactured and delivered by Data Patterns**

S.No	Product(s)	Details
1.	Monopulse RF Seeker	Delivered prototypes to DRDO
2.	X-Band Doppler Weather Radar	Prototype installed in Chennai for meteorology department
3.	205MHz Wind Profile Radar for CUSAT	Installed at Cochin for a government owned university
4.	Radar for Naval Utility Helicopter	Prototype delivered to LRDE
5.	A Next-Generation Software Defined Radio for fighter aircrafts	Prototype developed for DEAL
6.	A Next-Generation Radar Warning Receiver for fighter aircrafts	Prototype developed for DLRL
7.	A Next-Generation COMINT	Prototype developed for DLRL
8.	Precision Approach Radar	Delivered to AF
9.	Nano Satellite	Being delivered to industry
10.	Power PC Card	190 nos delivered to HAL
11.	WBLRU	Delivered to DRDO

## Marquee customers in the Indian defence & aerospace ecosystem

### Government Departments

Ministry of Defence



Indian government space organisation

### Indian DPSU



### Others



## History of business continuity & reliable product service for marquee customers



### History of reliable product service for several customers

Supplying products to Indian govt. space org. for 20+ years; which continue to be under AMC  
Products supplied to BrahMos operational from 2006



### Invest in product development ensuring continuity of business

Developed cockpit displays for LUH, which has potential to generate additional annuity revenues from the new units



### Products form critical components

Launch systems for ground based BrahMos missile launcher, “take me home” displays for the Tejas



### Supply of products to prestigious defence projects in India

Like LCA, the HAL Dhruv, LUH and the BrahMos missile programme

# Led by a Highly Reputed and an Experienced Management Team

DATA PATTERNS



**Mr. Srinivasagopalan Rangarajan**

*Promoter, Chairman & Managing Director*

- Over 3 decades of experience in business development, corporate affairs, finance and marketing
- B.Tech in Chemical Engineering from University of Madras, M.S from IIT, Madras



**Ms. Rekha Murthy Rangarajan**

*Promoter, Whole Time Director*

- Over 2 decades of experience in administration, facility maintenance, HRD, process engineering and special projects
- B.A from Bangalore University, M.A in applied Psychology from Madras University



**Mr. Venkata Subramanian Venkatachalam**

*Chief Financial Officer*

- Over 2 decades of experience in finance sector
- B.Com from Madurai Kamaraj University, Member of ICAI
- *Associated with Data Patterns – 20+ years*



**Mr. Vijay Ananth K**

*COO and Chief Information Security Officer*

- Over 2 decades of experience in software engineering and product management
- BCS from Manomanian Sundaranar University and Masters degree in computer applications from the University of Madras
- *Associated with Data Patterns – 20+ years*



**Mr. Desinguraja Parthasarathy**

*Chief Technology Officer*

- 32 years experience in product development
- B.E from University of Madras
- *Associated with Data Patterns – 30+ years*



**Mr. Thomas Mathuram Susikaran**

*SVP – Business Development*

- 21 years of experience in Business Development and marketing
- B.E from Madurai Kamaraj University and a Masters' degree of tech in electrical engineering, IIT – Madras
- *Associated with Data Patterns – 20+ years*



**Ms. Nandaki Devi Ramachandracharya**

*DGM and Management Representative Quality Management System*

- 22 years of experience in test engineering
- B.E in electronics and communications and Advanced Diploma in Software Quality Management from AmitySoft Education.
- *Associated with Data Patterns – 15+ years*



**Ms. Manvi Bhasin**

*Company Secretary and Compliance Officer*

- 3 years of experience in legal and secretarial matters
- PGDM from Lal Bahadur Shastri Institute,, Associate of the ICSI
- *Joined Data Patterns in 2021*





**Mr. Prasad Raghava Menon**

*Non-executive, Independent Director*

- Served as Managing Director of Tata Chemicals Ltd and Ex-Tata Power Company Ltd.
- Bachelor's degree from IIT, Kharagpur



**Mr. Sowmyan Ramakrishnan**

*Non-executive, Independent Director*

- Ex-Executive Director and CFO of Tata Power.
- Bachelor's degree in technology (mechanical engineering) from IIT-M and a PG Diploma in Business Administration from IIM-A and M.A from Department of Oriental Studies and Research



**Mr. Vadlamani Venkata Rama Sastry**

*Non-executive, Independent Director*

- Retired Chairman and M.D of Bharat Electronics Limited and ex-Executive Director of Centre for Development of Telematics
- B.Sc and B.E in electronics and communication from Andhra University



**Ms. Sabitha Rao**

*Non-executive, Independent Director*

- Working with Cerebrus Consultants Pvt Ltd; PG Diploma in Management from IIM-C



**Mr. Mathew Cyriac**

*Nominee Director*

- 23 years of experience in investment banking and private equity.
- Previously associated with Blackstone Advisors, Bank of America, DLJ Merchant Banking Partners and Credit Suisse
- Bachelor's degree in technology (mechanical engineering) from Anna University and Post graduate diploma in management from IIM-B (gold medalist)



DATA PATTERNS

**Appendix**

# Historical Statement of Profit and Loss

Particulars (Rs. Mn)	FY20	FY21	FY22	H1FY23
Revenue from Contract with Customers	1560.98	2239.50	3108.55	1565.30
Other Income	40.94	26.00	39.70	35.50
<b>Total Revenue</b>	<b>1601.92</b>	<b>2265.50</b>	<b>3148.11</b>	<b>1600.80</b>
Expenses:				
a) Cost of materials consumed	532.13	629.78	915.90	749.60
b) Changes in inventories of FG, WIP and SIT	28.76	74.25	-55.20	-198.30
c) Employee benefits expenses	422.71	484.21	623.50	366.40
d) Finance cost	133.43	145.02	109.90	27.70
e) Depreciation / Amortization	54.78	55.52	66.30	41.10
f) Other expenses	145.82	131.38	213.90	133.60
<b>Total Expenses</b>	<b>1317.63</b>	<b>1520.16</b>	<b>1874.30</b>	<b>1120.10</b>
<b>Profit before tax</b>	<b>284.29</b>	<b>745.34</b>	<b>1273.80</b>	<b>480.80</b>
Tax expense	73.81	189.63	334.20	127.90
<b>Profit(Loss)for the period</b>	<b>210.48</b>	<b>555.71</b>	<b>939.70</b>	<b>352.90</b>
Other Comprehensive Income	(0.37)	(9.56)	-(11.50)	-0.0600
<b>Total Comprehensive Income for the year</b>	<b>210.11</b>	<b>546.15</b>	<b>928.2</b>	<b>352.30</b>
PAT%	13.14%	24.53%	30.20%	22.50%
<b>EBITDA</b>	<b>432.50</b>	<b>919.40</b>	<b>1409.90</b>	<b>514.00</b>
EBITDA margin%	27.7%	41.10%	45.36%	32.80%
Return on Net Worth	14.71%	30.70%	24.01%	18.00%
Total Debt	605.66	332.21	67.70	119.00
Debt to Equity	0.39	0.16	0.01	0.02

# Historical Balance Sheet

Particulars (Rs. Mn)	Mar20	Mar21	Mar22	Sep22
<b>ASSETS</b>				
Non-current assets				
(a) Property, Plant and Equipment	278.21	292.08	441.60	476.10
(b) Capital Work in Progress	-	-	173.00	247.70
(c) Intangible Assets	1.59	5.60	13.50	17.40
(d) Right of Use Assets	53.68	34.40	19.70	192.00
(e) Other Financial Assets	464.75	340.71	1220.40	1091.50
<b>Total non-current assets</b>	<b>798.23</b>	<b>672.80</b>	<b>1868.20</b>	<b>2068.20</b>
Current assets				
(a) Inventories	794.14	737.45	1197.70	1777.90
(b) Financial Assets				
(i) Trade receivables	1,156.34	1,559.35	1983.10	2496.50
(ii) Cash and cash equivalents	15.11	88.06	1770.80	684.90
(iii) Other Financial Assets	37.24	50.96	90.00	672.80
(c) Other current assets	152.57	177.34	158.30	138.50
<b>Total current assets</b>	<b>2,155.40</b>	<b>2,613.16</b>	<b>5199.80</b>	<b>5190.60</b>
<b>TOTAL ASSETS</b>	<b>2,953.63</b>	<b>3,283.71</b>	<b>7068.00</b>	<b>7258.80</b>

Particulars (Rs. Mn)	Mar20	Mar21	Mar22	Sep22
<b>EQUITY AND LIABILITIES</b>				
<b>Equity</b>				
(a) Share capital	17.00	17.00	103.80	103.80
(b) Other Equity	1,517.95	2,060.70	5641.30	5811.70
<b>Total equity and liabilities</b>	<b>1,534.95</b>	<b>2,077.70</b>	<b>5745.10</b>	<b>5915.50</b>
<b>Liabilities</b>				
Non-current liabilities				
(a) Financial Liabilities				
(i) Borrowings	5.53	97.70	7.300	5.00
(ii) Lease Liabilities	38.46	24.35	11.10	8.50
(b) Provisions	56.38	85.15	111.60	119.00
(c) Deferred Tax Liability (Net)	7.60	8.13	-	-
(d) Other Non Current liabilities	143.24	273.68	157.00	88.20
<b>Total non-current liabilities</b>	<b>251.21</b>	<b>489.01</b>	<b>287.00</b>	<b>220.70</b>
Current liabilities				
(a) Financial Liabilities				
(i) Borrowings	600.13	234.51	60.40	114.40
(ii) Trade payables	172.58	119.95	381.50	541.80
(iii) Other Financial Liabilities	79.15	40.05	220.70	125.50
(iv) Lease Liabilities	20.83	15.15	13.20	12.80
(b) Other current liabilities	224.7	246.41	226.80	313.10
(c) Provisions	14.85	9.59	7.20	7.60
(d) Current tax Liabilities	55.23	51.34	126.10	7.40
<b>Total current liabilities</b>	<b>1,167.47</b>	<b>717.00</b>	<b>1035.90</b>	<b>1122.60</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>2,953.63</b>	<b>3,283.71</b>	<b>7068.00</b>	<b>7258.80</b>

# Historical Cash Flow

Particulars (Rs. Mn)	Mar20	Mar21	Mar22	Sep22
Net Profit before tax	284.29	745.34	1273.80	480.80
<b>Adjustments for :</b>				
Add : Depreciation	54.78	55.52	66.30	41.10
Add : Interest And Finance Charges	133.43	145.02	109.90	27.70
Less: Profit on sale of assets	(1.78)	(1.24)	-	
Less: Interest Income	(25.64)	(22.21)	(39.70)	(35.00)
Less: Gain/ loss on disposal of Right of Use of Asset	-	-		
<b>Operating Profit Before Working Capital Changes</b>	<b>445.08</b>	<b>922.43</b>	<b>1410.40</b>	<b>514.600</b>
Adjustments For Working Capital Movements :	(264.29)	(189.58)	(1461.30)	(994.80)
<b>Cash Generated From Operations</b>	<b>180.79</b>	<b>732.84</b>	<b>(50.90)</b>	<b>(480.2)</b>
Direct Taxes (Paid) /adjusted	(28.41)	(189.79)	(282.30)	(240.40)
<b>Net Cash flow From Operating Activities (A)</b>	<b>152.38</b>	<b>543.05</b>	<b>(333.20)</b>	<b>(720.80)</b>
<b>Cash Flow From Investing Activities (B)</b>	<b>14.10</b>	<b>(27.40)</b>	<b>(342.20)</b>	<b>(612.20)</b>
<b>Cash Flow From Financing Activities (C)</b>	<b>(154.47)</b>	<b>(442.71)</b>	<b>2358.50</b>	<b>(332.90)</b>
<b>Net Increase in Cash &amp; Cash Equivalents (A+B+C)</b>	<b>11.99</b>	<b>72.95</b>	<b>1682.80</b>	<b>(1665.9)</b>
Cash & Cash Equivalent At The Beginning Of The Year	3.12	15.11	88.00	1770.80
<b>Cash &amp; Cash Equivalent At The End Of The Year</b>	<b>15.11</b>	<b>88.06</b>	<b>1770.80</b>	<b>104.90</b>



### Arudhra Radar

- Expected to supply ~55 units of AGRU/ Arudhra radar
- Likely to generate revenues in the next 3-4 years based on the requirement projection of IAF



### Ashwini LLTR

- Partner in development of these radars as a single vendor incl. TR modules, AGRU, signal processor, etc
- Expected to realise revenue between \$10-30 million in the next few years.



### Dharashakti programme

- Has received single vendor orders from DLRL for development and supply of all of the COMINT search receivers, Direction Finder & Monitoring receivers.
- In a position to be an OEM for the entire receiver systems with likely revenues of \$ 50 million on complete execution



### MI 17 Upgrades, Dornier Upgrades, Aerostat upgrades,

- Expertise gained in the Dharashakti project would also position to cater for airborne COMINT and ELINT equipment for various upgrades of any new rotary wing programmes



### Light weight EW requirements

- EW capability will help in supplying products for Light weight EW products which have a heavy requirement in mountainous borders as they are not adequately covered, and the same has been prioritised due to the increased geo-political tension



### Airborne surveillance radar

- Has delivered an airborne surveillance radar (all of the hardware) to LRDE which is expected to be flight tested in the next few months and will be likely inducted in Navy's Dornier upgrade and new helicopter programmes



### Radar Warning Receivers

- Also a part of the Radar Warning Receivers for the Airborne Early Warning System ("AEW &C") to DLRL which has been fitted on the Embraer early warning radar developed by Centre for Air Borne System ("CABS")



### Next Gen completely wide open for LCA Mk IA and Sukhoi 30 platforms

- Likely to deliver Next Gen completely wide open for LCA Mk IA and Sukhoi 30 platforms subject to flight testing.
- After flight testing, these can be fitted on the 83 LCA MK IA on order as well as the Sukhoi 30 upgrades (approximately 270 numbers), attack helicopters, etc.

# Core groups & departments for design and development of products

**Total Employee Strength**



Department	# of Employees
Design & Engineering (D&E)	520
Manufacturing	311
Support	96
Marketing & Customer support	56
<b>Total</b>	<b>983</b>

**more than 500 qualified Engineers out of 983**  
 Our senior members in hardware, design and development have been with us for more than **15 years**

Group/Department	Responsibility / Scope
<b>Hardware Development Department</b>	Design and development of all types of high-end and complex electronics modules and building blocks. Includes Single board computers, Field Interface modules, Communication Modules, Custom I/O Modules, Mezzanine modules, Signal conditioning modules etc.
<b>Software Development Department</b>	Design and development all types of embedded, real-time and application software. Includes devices drivers, Operating system porting, real-time data transfer, GUI application for various Operating systems and hardware.
<b>Mechanical Engineering Department</b>	Design and development of all types of mechanical packaging, big structure systems and jigs and fixtures. Incudes standard ATR chassis, heat spreaders, structural and thermal analysis etc.
<b>CAD / CAM Group</b>	PCB schematics, Artwork, signal analysis, power analysis, electrical wiring, all modules/systems performance, and maintenance statistics like MTBF etc. Includes up to 26 Layer PCB design, hybrid electrical interface design etc
<b>Algorithm Development Group</b>	Design and development of various domain algorithms for RADAR, Electronic Warfare, Communication waveform etc. Uses all types of algorithm development including mathematical modelling, statistical modelling, feedback modelling etc.
<b>Radio Frequency Modules Group</b>	Design and development of all types of RF modules and sub-systems. Includes simple RF receiver/exciter, filters, upconverters/downconverters, synthesizers etc.

Group/Department	Responsibility / Scope
<b>DOMAIN Systems Groups</b>	Design and Development of product verticals as a system. Including RADAR, EW, Communication, ATEs, Fire-control systems, Satellite, Avionics etc.
<b>Production Department</b>	All the products are functionally and environmentally tested by this department. Includes testing of modules and sub-systems, wiring, mechanical assembly, and integration etc.
<b>Electronics Manufacturing Services (EMS)</b>	Fabrication of all electronics modules. Including automated pick-n-place, manual soldering, conformal coating etc.
<b>Harnessing Group</b>	Fabrication of all types of cable harness including internal wiring, external interface wiring, testing of cables for continuity, impedance etc.
<b>Mechanical Integration Group</b>	Assembly and integration of all types of mechanical parts. Including various types like LRU assembly, board assembly, system assembly, system integration etc.
<b>Project Management Group</b>	Responsible for Delivering all the orders both internal and external. Vertical integration of groups and product development responsibilities. Includes all types of projects from simple module delivery to full system delivery. Utilizes, project plan, metrics, GANNT charts, budgeting and control, optimal execution methods etc

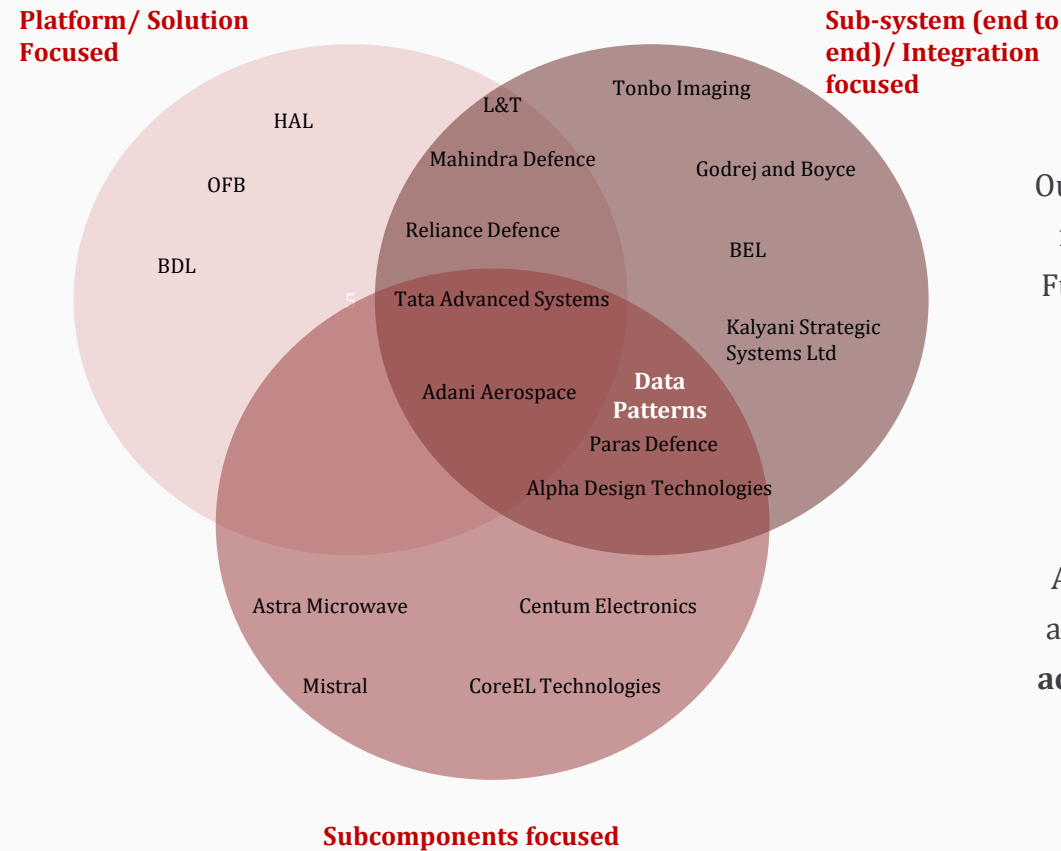
# Indian defence and aerospace industry is rapidly evolving into a self sustaining **DATA PATTERNS**

## Competition at two levels for Data Patterns

During **development stage** in DRDO requirements **from small and medium size companies** building custom solutions and/or integrating solutions around imported COTS products

From **large corporates** offering complete systems, often under a **partnership with International OEMs**, for products and programmes directly procured by the Indian government space organization

## Indian defence suppliers - Anticipated Future Positioning



## We are poised to take up emerging opportunities

Our products are **developed to compete with international and domestic equivalents**. Further, we offer **end to end solutions** to the customer

Ability to offer **wide range of products**. We also have **strong and balanced capabilities across 12 defence and aerospace segments**



# Thank You

For further information, please get in touch with:

Monali Jain  
[monali@GoIndiaadvisors.com](mailto:monali@GoIndiaadvisors.com)  
M:+91 7597304020

Sheetal Khanduja  
[sheetal@GoIndiaadvisors.com](mailto:sheetal@GoIndiaadvisors.com)  
M:+91 9769364166