



August 13, 2024

**ASTRA MICROWAVE PRODUCTS LIMITED**

Regd. Office: ASTRA Towers, Survey No. 12(P), Kothaguda Post  
Kondapur, HITEC City, Hyderabad, Telangana, INDIA - 500084  
Tel : +91 40 46618000, 46618001. Fax : +91 40 46618048  
Email : mktg@astramp.com, website : www.astramp.com  
CIN: L29309TG1991PLC013203

To  
The General Manager  
Department of Corporate Relations  
**BSE Limited**  
Sir Phiroze Jeejeebhoy Towers,  
Dalal Street, Fort,  
Mumbai -400 001

To  
The Vice President,  
Listing Department  
**The National Stock Exchange of India  
Limited**  
Exchange Plaza  
Bandra Kurla Complex, Bandra (East)  
Mumbai 400 051

**Scrip code: 532493**

**Scrip code: ASTRAMICRO**

Dear sir,

**Sub: – Intimation pursuant to Regulation 30 of the SEBI (LODR) Regulations, 2015 – Investor Presentation.**

Please find enclosed herewith Investor Presentation for Q1 & FY 25 for your information and records.

We request you to take the above on record and the same be treated as compliance under the applicable regulations of the SEBI (LODR) Regulations, 2015.

Thanking you,

Yours faithfully,  
**For Astra Microwave Products Ltd**

**T.Anjaneyulu**  
**G.M - Company Secretary**

**An ISO 9001, ISO 14001, ISO 45001 and ISO 27001 Certified Company**

Works:

**Unit 1:** Plot No. 12, ANRICH Industrial Estate, Bollaram, Medak Dist., Telangana - 502325

**Unit 2:** Plot No. 56A, ANRICH Industrial Estate, Bollaram, Medak Dist., Telangana - 502325

**Unit 3:** Sy. No. 1/1, Imarath Kancha, Raviryala (V), Maheshwaram (Mdl) R.R.Dist., Telangana - 501510

**Unit 4:** Sy. No. 1/1, Plot No. 18 to 21, Imarath Kancha, Hardware Park, Raviryala (V), Maheshwaram (M), R.R.Dist, Telangana - 501510

**Unit 7:** Sy. No.114/1, Plot No. S-2/9 & 10, E-City, Raviryala & Srinagar (V), Maheshwaram (M), R.R.District, Telangana - 501359

**R&D Centre:** Plot No. 51(P), Bangalore Aerospace Park, Singanahalli Village, Budigere Post, Bangalore North Taluk, Karnataka - 562149



**Astra Microwave Products Ltd.**

**On A Winning Wavelength**



**Investor Presentation – August 2024**

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# Performance Highlights

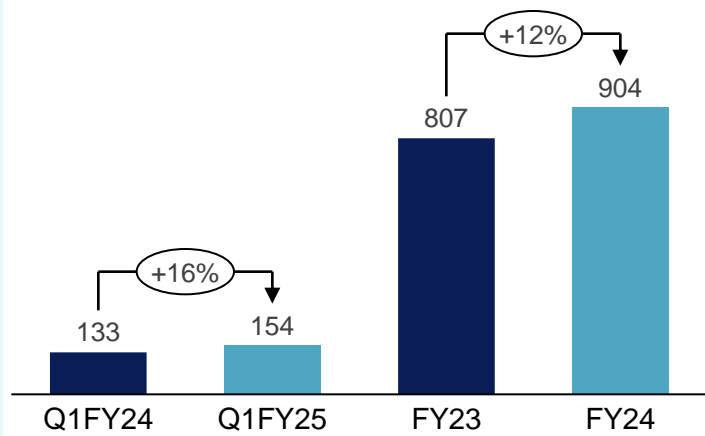


Astra Microwave Products Ltd.

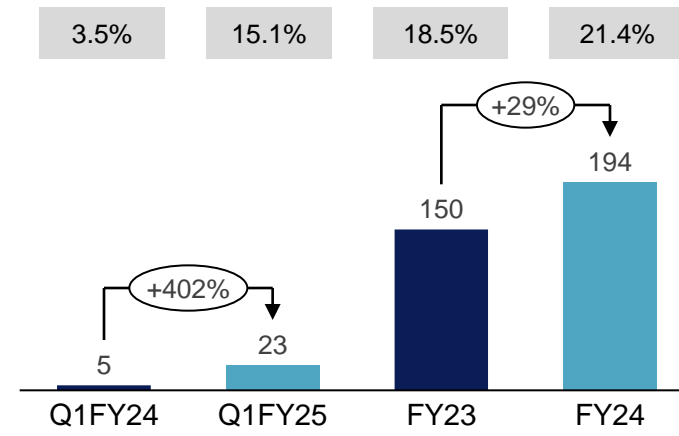
Margins

Standalone

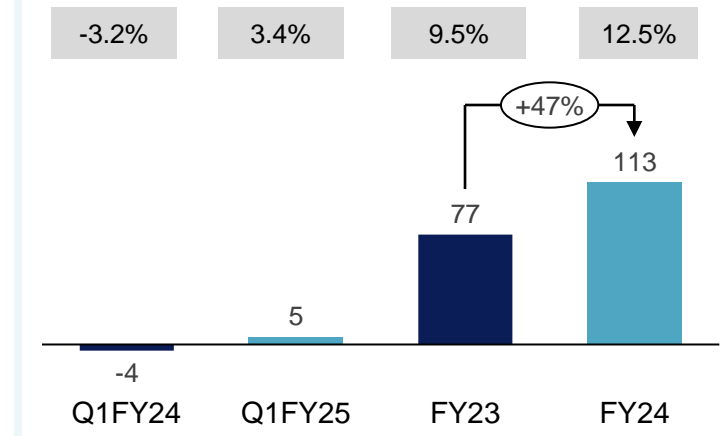
Revenue (Rs. Cr)



EBITDA (Rs. Cr)

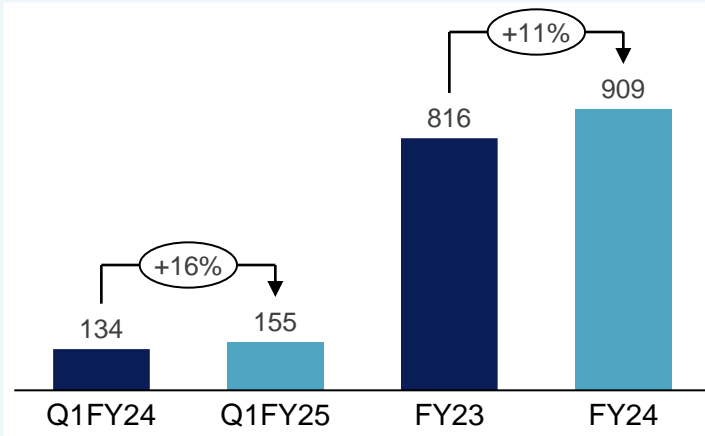


PAT (Rs. Cr)

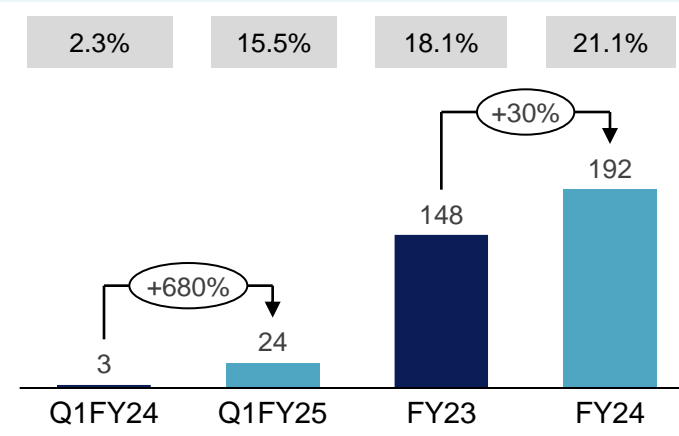


Consolidated

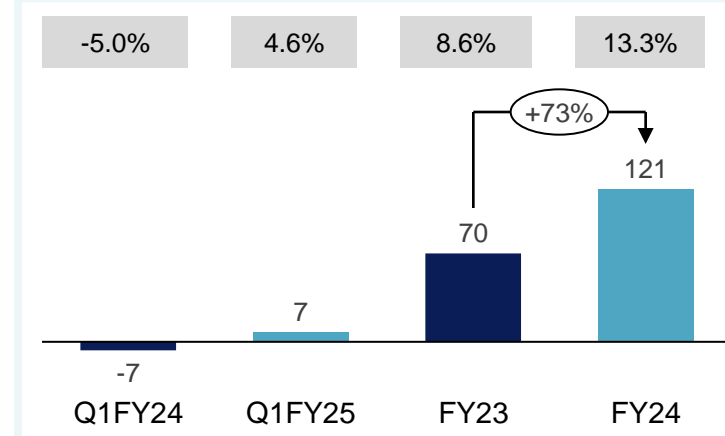
Revenue (Rs. Cr)



EBITDA (Rs. Cr)



PAT (Rs. Cr)



# Robust Order Book



Astra Microwave Products Ltd.

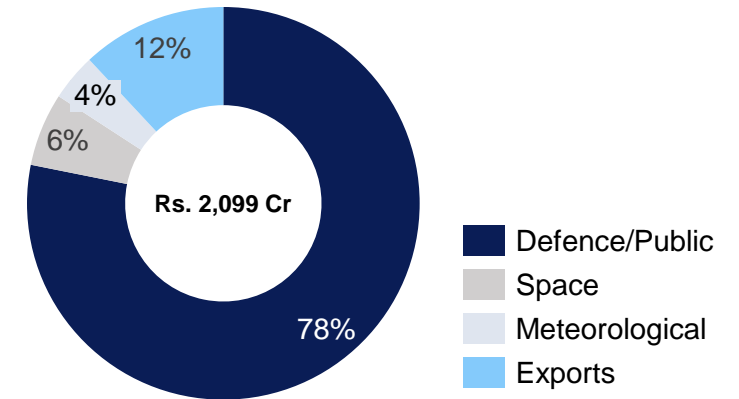
Diversified Orderbook

Total orders received during the quarter

Sno	Segment Name	Amount (Rs. Cr)
1	Defence	239.88
2	Exports	57.66
3	Space	4.59
4	Meteorological	0.05
<b>TOTAL</b>		<b>302.18</b>

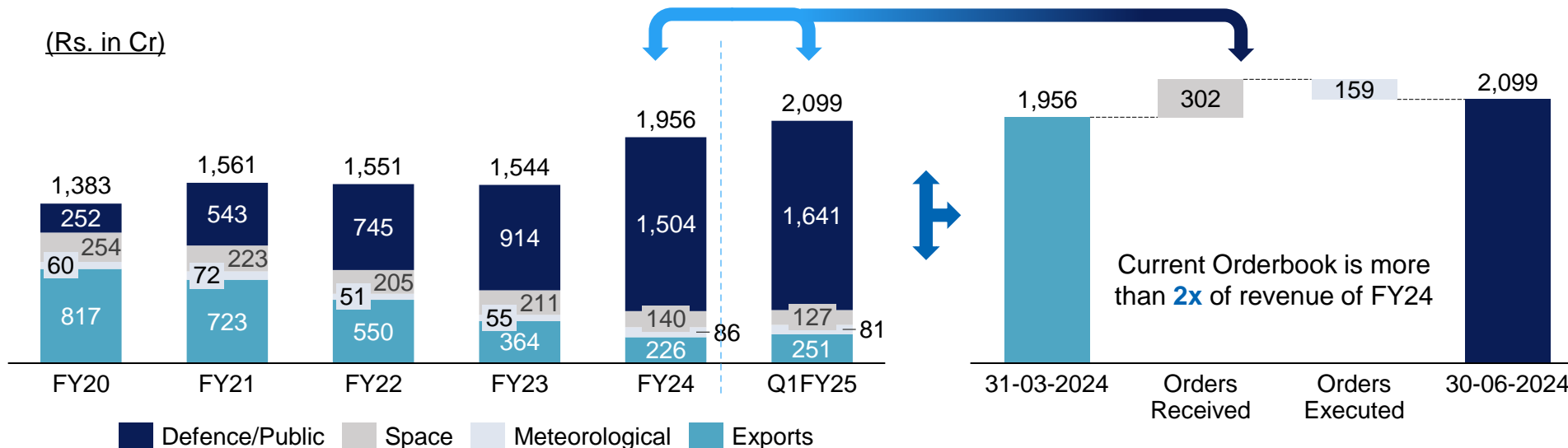
**Rs. 159 Cr**  
worth of orders  
executed in  
Q1FY25

Segment Wise Order book



Historical Orderbook

(Rs. in Cr)

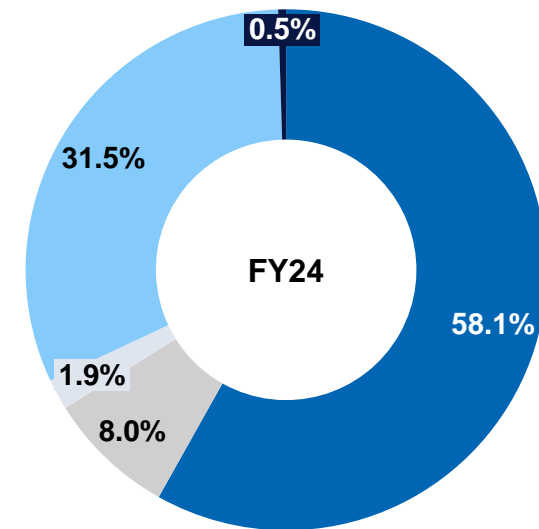
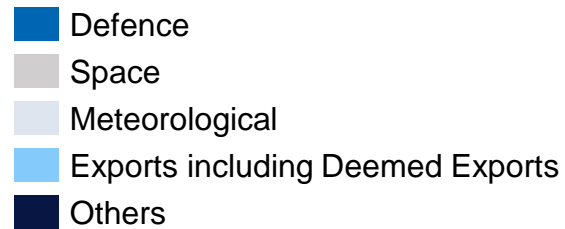
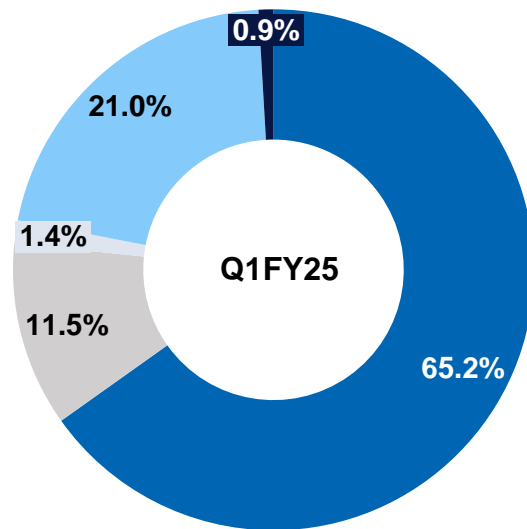


# Segmental Revenue Break-up



Astra Microwave Products Ltd.

Revenue Break-up in %	Q1FY25	Q4FY24	Q3FY24	Q2FY24	Q1FY24
Defence	65.2%	58.0%	72.2%	56.1%	37.0%
Space	11.5%	14.0%	6.1%	3.1%	2.0%
Exports including Deemed Exports	21.0%	24.2%	20.3%	38.8%	59.8%
Meteorological	1.4%	3.5%	0.7%	1.2%	0.8%
Others	0.9%	0.3%	0.7%	0.7%	0.4%



# Standalone Profit & Loss



Astra Microwave Products Ltd.

(Rs. In Cr)	Q1FY25	Q1FY24	YoY	FY24
<b>Revenue from Operations</b>	<b>154</b>	<b>133</b>	<b>15.9%</b>	<b>904</b>
Raw Material Consumption	90	96		551
<b>Gross Profit</b>	<b>64</b>	<b>37</b>	<b>75.9%</b>	<b>353</b>
<b>Gross Profit Margin</b>	<b>41.8%</b>	<b>27.5%</b>		<b>39.1%</b>
Employees Expenses	27	19		104
Other Expenses	14	13		55
<b>EBITDA</b>	<b>23</b>	<b>5</b>	<b>402.2%</b>	<b>194</b>
<b>EBITDA Margin</b>	<b>15.1%</b>	<b>3.5%</b>		<b>21.4%</b>
Other Income	2	2		12
Depreciation	8	6		25
<b>EBIT</b>	<b>17</b>	<b>1</b>	<b>-</b>	<b>181</b>
<b>EBIT Margin</b>	<b>11.3%</b>	<b>0.9%</b>		<b>20.0%</b>
Finance Cost	10	7		30
<b>Profit before Tax</b>	<b>7</b>	<b>-6</b>	<b>-</b>	<b>152</b>
<b>Profit before Tax Margin</b>	<b>4.7%</b>	<b>-4.3%</b>		<b>16.8%</b>
Tax	2	-1		39
<b>PAT</b>	<b>5</b>	<b>-4</b>	<b>-</b>	<b>113</b>
<b>PAT Margin %</b>	<b>3.4%</b>	<b>-3.2%</b>		<b>12.5%</b>
<b>EPS (in Rs.)</b>	<b>0.55</b>	<b>-0.47</b>		<b>12.00</b>

# Consolidated Profit & Loss



Astra Microwave Products Ltd.

(Rs. In Cr)	Q1FY25	Q1FY24	YoY	FY24
<b>Revenue from Operations</b>	<b>155</b>	<b>134</b>	<b>16.0%</b>	<b>909</b>
Raw Material Consumption	87	96		546
<b>Gross Profit</b>	<b>68</b>	<b>38</b>	<b>80.1%</b>	<b>363</b>
<b>Gross Profit Margin</b>	<b>43.8%</b>	<b>28.2%</b>		<b>39.9%</b>
Employee Expenses	30	21		114
Other Expenses	14	13		58
<b>EBITDA</b>	<b>24</b>	<b>3</b>	<b>679.5%</b>	<b>192</b>
<b>EBITDA Margin</b>	<b>15.5%</b>	<b>2.3%</b>		<b>21.1%</b>
Other Income	2	2		12
Depreciation	8	6		25
<b>EBIT</b>	<b>18</b>	<b>-1</b>	<b>-</b>	<b>178</b>
<b>EBIT Margin</b>	<b>11.5%</b>	<b>-0.4%</b>		<b>19.6%</b>
Finance Cost	10	7		31
<b>Profit before share of profit/loss from JVs</b>	<b>7</b>	<b>-8</b>	<b>-</b>	<b>147</b>
Share of profits from JVs	2	0		12
<b>Profit before Tax</b>	<b>9</b>	<b>-8</b>	<b>-</b>	<b>159</b>
<b>Profit before tax margin</b>	<b>6.0%</b>	<b>-6.1%</b>		<b>17.5%</b>
Tax	2	-1		39
<b>PAT</b>	<b>7</b>	<b>-7</b>	<b>-</b>	<b>121</b>
<b>PAT Margin %</b>	<b>4.6%</b>	<b>-5.0%</b>		<b>13.3%</b>
<b>EPS (in Rs.)</b>	<b>0.76</b>	<b>-1.47</b>		<b>12.80</b>



# Company Overview



## Astra is engaged in the business of designing, developing and manufacturing of Defence, Aerospace & Space Electronics systems, sub-systems and components

- Astra Microwave incorporated in 1991 is one of the few private sector companies in India that:
  - Design & Develop Radar, EW, Strategic & Space Electronics Systems & sub-systems
  - Has in-house capabilities of design, engineering, simulation, manufacturing, functional testing, environmental qualification of Defence, critical microwave and radio frequency-based equipment
- 30+ years of experience in Radar, EW & Strategic Electronics domain
- Astra has moved up the value chain from modules & sub-systems to Systems & System of Systems

## Key projects participated over time

- ✓ LRUs supplied to 3D-CAR Ashlesha & Arudhra Radars
- ✓ Developed & supplied Radar & EW Systems Test & Evaluation Facility (50 MHz – 40 GHz) to DLRL to carry out T&E of EW systems in Radiation mode.
- ✓ Supplied TR Modules & Control Units for LRDE's Long Range Radar (LRR)
- ✓ Developed & supplied a Land-based 7.3m Ground Telemetry Station which is designed to acquire and track airborne targets using five different carriers simultaneously
- ✓ Proto Development & Production of Digital Transmit Receive Units (DTRUs) and Digital Receive Units
- ✓ (DRUs) for Digital Active Phased Array (DAPA) Technology Demonstrator Project
- ✓ Shakti Project Sub-modules & Nayan Project Sub-modules
- ✓ Developed, Supplied & Commissioned 14 DWRs
- ✓ Developed & Supplied Active Array Antenna Unit (AAAU) For Uttam AESA Radar for LCA Mk1A fighter aircraft
- ✓ Developed & Supplied X-band AESA Seeker Head
- ✓ Developed & Supplied complete AAAU for Ship-borne Radar

### Sectors

- Defence
- Aerospace
- Space
- Metrology
- Telecom

### Projects with

- Various DRDO Labs
- Defense PSUs
- Various ISRO Centers
- MoD & MHA
- Many foreign OEM's

### Facilities

- Five facilities in Hyderabad & one in Bengaluru
- Continuous investment in World Class Infrastructure for manufacturing, Assembly & testing
- Functional and Environment testing

### Key Financials

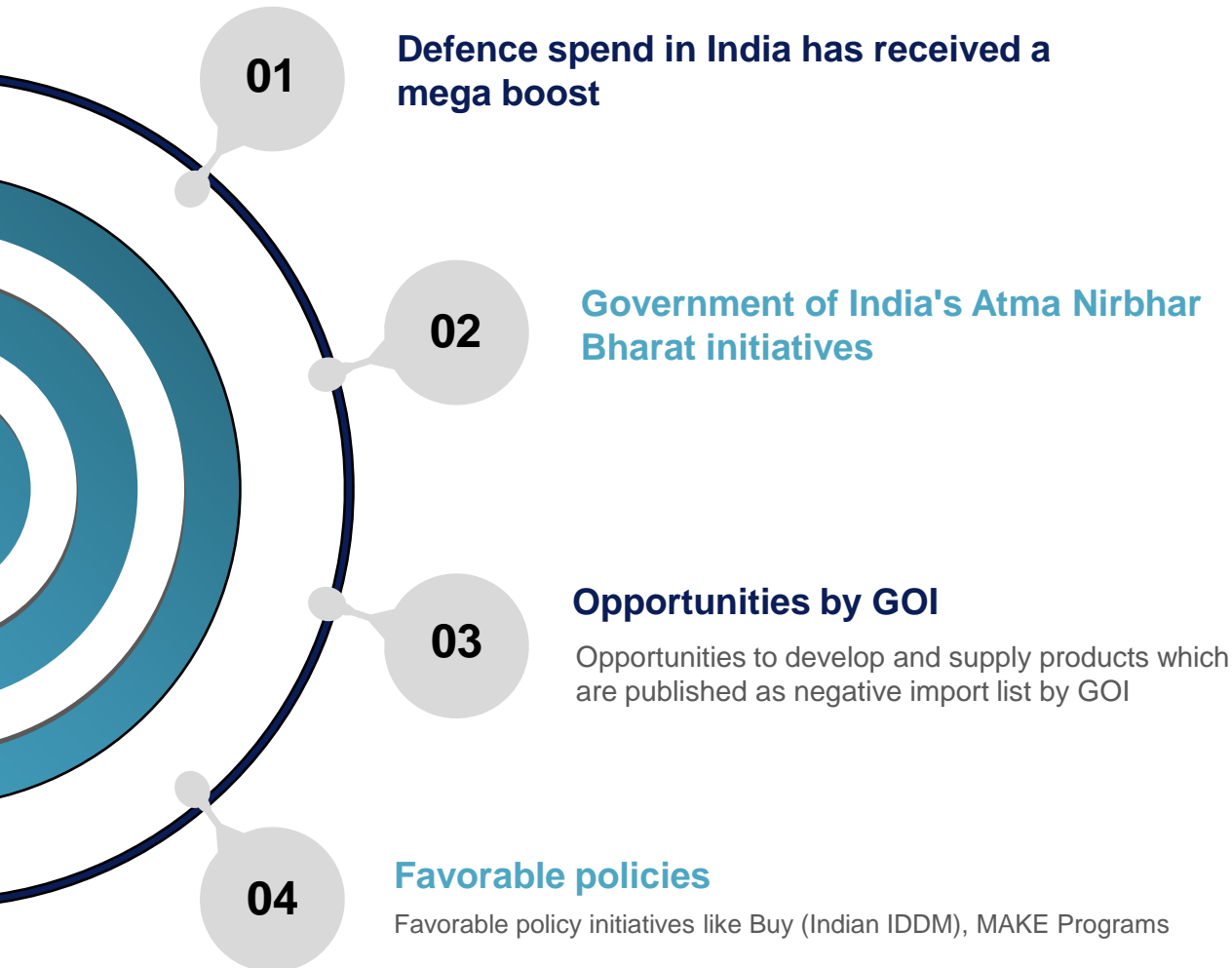
- Revenue Rs. 904 Cr.
- Gross Margins 39.1%
- EBITDA Rs. 194 Cr.
- PAT Rs. 113 Cr.

FY24

# Strong Sectoral Tailwinds



Astra Microwave Products Ltd.



Healthy Order Book Order Book worth  
Rs. 2,099 (Jun-24)

Sound visibility of revenues: Order book as on Jun-24 is  
more than 2x of revenue of FY24

AMPL has a proven track record of making high value-added SYSTEMS, RF and microwave super components and sub-systems which are becoming more relevant due to various government initiatives like IDDM, MAKE-II.

AMPL has been able to create a diversified and healthy order book on the back of its strong capabilities.

AMPL is very well placed to capture a bigger pie of the growing Indian defence sector with deep domain expertise, seasoned promoters, high focus on R&D and robust strategy in place.

## Managing Director



### Mr. S. Gurunatha Reddy

- Graduate in Science and Mathematics and Fellow Chartered Accountant.
- Worked in private sector industry and gained over 33 years of experience in accounting, finance, taxation, secretarial etc

## Executive Director Strategy & Business Development



### Mr. Atim Kabra

- Founder and Managing Director of Frontline Strategy Funds Pte. Ltd., a Singapore registered & licenced VCFM
- Over 25 years of well rounded "equities exposure" including Portfolio Management, Equity Sales and Equity Research with global institutions like ABN AMRO Bank, ANZ Grindlays Bank

## Chairman & Independent Director



### Dr. Avinash Chander

- Doctorate from JNTU Hyderabad
- Retired Secretary, Defence R&D and Director General DRDO

## Non-Executive Director



### Mr. Suresh Somani

- Businessman, investor and philanthropist with a substantial experience of over 40 years in equity markets
- He is the director of M/s. Ratnabali Investment Private Limited

## Joint Managing Director



### Dr. Maram Venkateshwar Reddy

- Graduate in Engineering (Electronics) and a Postgraduate in Business Administration.
- 28 years of experience in handling Marketing and Business operations in the domain of Defense, Space and Telecom segment in India and Overseas Market

## Non-Executive Director Head of R&D



### Mr. P. A. Chitrakar

- Associated with the Defence Electronics Laboratory, Hyderabad, as a scientist for over 20 years before co-founding Astra Microwave
- An MSc (Physics) from Mysore University and an MTech (Advanced Electronics) from JNTU, Hyderabad.

## Independent Director



### Mrs. Kiran Dhingra

- 38 years of experience in governance and have held senior positions in decision making capacities in practically all sectors-the developmental, agricultural, social, industrial, infrastructural, transportation, economic and regulatory
- Joined Government in 1975, after standing first in the combined merit list for IFS / IAS and opting to serve in the IAS

## Independent Director



### Mr. S. Varadarajan

- Retired Director of the Electronics & Radar Development Establishment (LRDE), Bengaluru
- B.E (Hons) in ECE from Madras University in 1972
- M.E with Distinction in ECE from Indian Institute of Science in 1974

# Key Team Members



Astra Microwave Products Ltd.

www.amp.astramw.com



**LGM Prakasam**  
VP - Radar Systems

**M Pravin**  
VP - Design (EW)

**V Sudhakar**  
Associate VP -  
Design

**BM Chandrakanth**  
Sr. GM – Marketing  
& Sales

**GR Shinde**  
Sr. GM – Design

**Balachary**  
GM - Antenna  
Design

**T.N. Ramesh**  
GM – Production

**Dr. P Srinivasulu**  
Sr. GM - Design

**L Sudhakar**  
GM – Test Facility

**V Venkatesh**  
GM - Quality

**CV Rao**  
GM - Mech.  
Systems

**S Naveen Kumar**  
GM - Digital &  
Software

**R Narasimhan**  
GM - Production  
(Special Products)

**Vikram**  
GM - Production

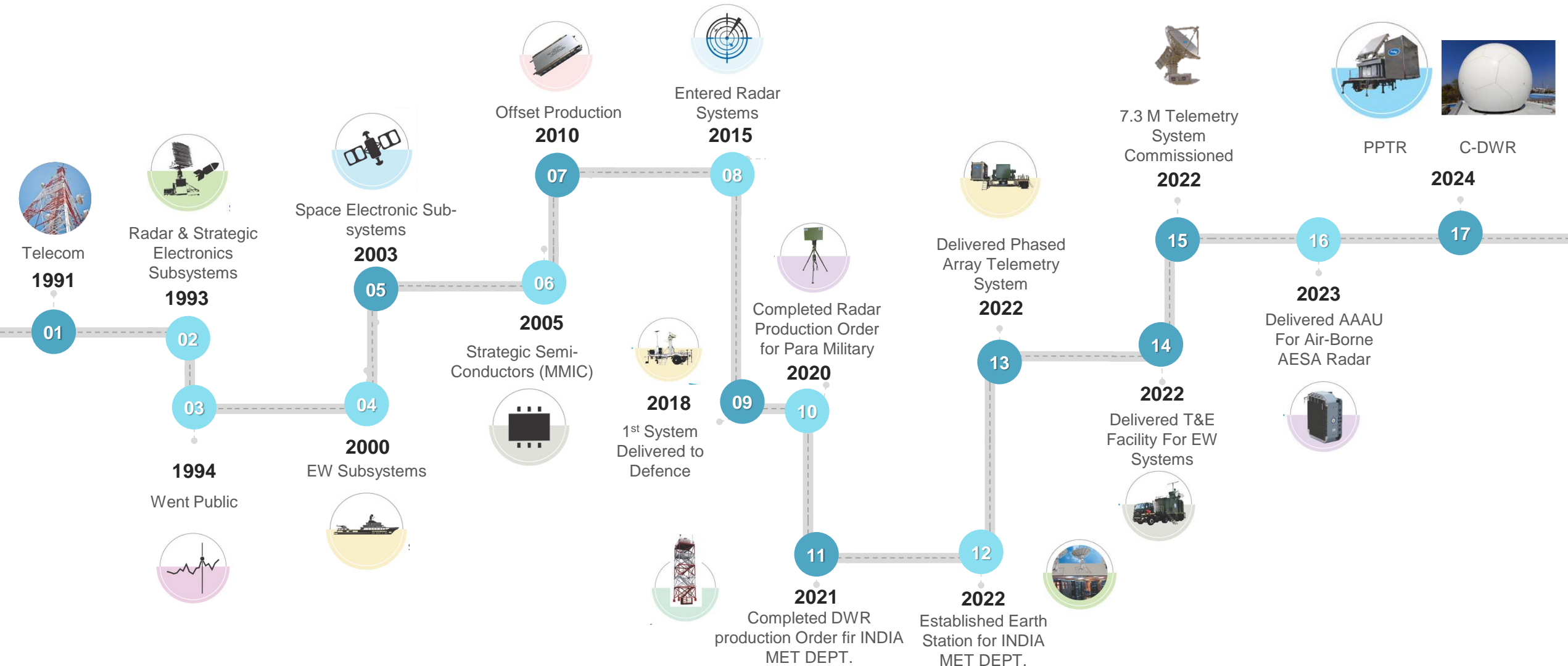
**C Vinod Kumar**  
GM - Marketing &  
Sales (Weather &  
Telemetry)

# Journey so far



Astra Microwave Products Ltd.

## 30+ Years of Astra Microwave Products Ltd.



# Strong research and development capabilities

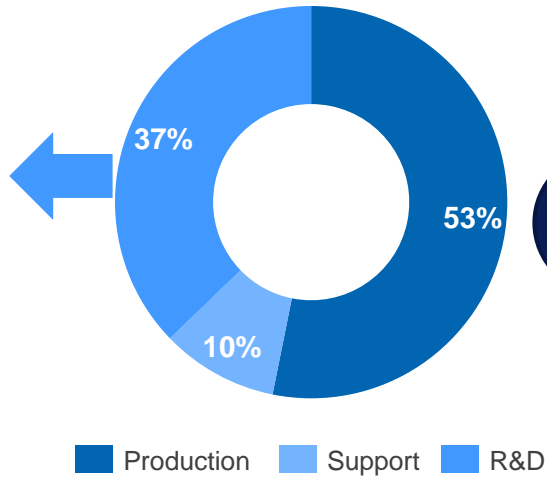


Astra Microwave Products Ltd.

Dedicated research and development facility in **Bengaluru with modern equipment** and in **Hyderabad at Unit-III & Unit-IV**

Total workforce (as of June 30<sup>th</sup>, 2024) – 1,537

**572 R&D professionals, out of which over 97 have a masters degree, 4 hold doctorate degrees and over 100 have decade-plus experience**



- Participating in multiple **MAKE-II programs of IAF & IA** for various **Radar Systems**
- Working on multiple **proactive development products** & preparing for building future systems

Astra is one of the few private sector players in India that has the capability to develop and supply **GaN & GaAs MMIC products upto 40 GHz**

**R&D Expenditure (Rs in Crores):**

FY24	38.33
FY23	34.19
FY22	35.96
FY21	22.50
FY20	22.25

# State of the Art Infrastructure



Astra Microwave Products Ltd.

Astra has advanced in-house facilities for lower turnaround time for product realization appreciated by domestic and foreign customers.

## Hyderabad

## Bengaluru

### Unit I



Land : 1.13 Acres  
 Building : 18,000 Sq. Ft  
 Status : Own  
 Year : 1999

#### Facility Offering

Automatic weather  
 Station AWS and other  
 Hydrology &  
 Meteorology

### Unit II



Land : 2.0 Acres  
 Building : 20,000 Sq. Ft  
 Status : Own  
 Year : 1995

#### Facility Offering

Near Field Test Range  
 Out-Door Test Range  
 Multi-Layer Antenna  
 Fabrication

### Unit III



Land : 9.9 Acres  
 Building : 77,000 Sq. Ft  
 Status : Own  
 Year : 2003

#### Facility Offering

Clean Room Laser  
 Welding Vibration  
 Table

### Unit IV



Land : 19.0 Acres  
 Building : 1,80,000 Sq. Ft  
 Status : Own  
 Year : 2009

#### Facility Offering

EMI/EMC Halt/Hass  
 Chamber  
 ESS Chamber

### Unit V



Land : 0.59 Acres  
 Building : 23,000 Sq. Ft  
 Status : Own  
 Year : 2019

#### Facility Offering

MIC Facility CNC  
 Drilling Copper Plating  
 Gold Plating  
 Etching developing

### Bengaluru Unit



Land : 5.0 Acres  
 Building : 1,00,000 Sq. Ft  
 Status : Own  
 Year : 2012

#### Facility Offering

Near Field Test Range  
 (NFTR)  
 Satellite Integration  
 Facility

### Equipped with

Clean room  
 compatible oven  
 for curing epoxy

Temperature controlled  
 hot plate with nitrogen  
 purging facility for  
 eutectic attachment

High-precision  
 bonding  
 machines

ESD measurement  
 equipment

DC probing station  
 for on-chip  
 measurement of  
 DC parameters



01

Fully automated Assembly facility consisting of 3 Automatic SMT assembly lines with high end testing capabilities that include AOI, 3D X Ray, and functional test using Flying probe tester.

02

450,000 sq.ft. of research, design, development and manufacturing across 6 units

03

Class 10K & Class 100K Clean Rooms

04

Laser Welding, Seam Sealing

05

Bare Die assembly using Gold wire bonding and parallel gap welding

06

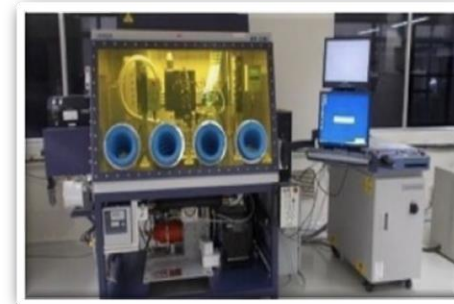
Multilayer Microstrip Antenna Assembly Facility



Clean Rooms - Class 10K



SMT Lines



Laser Welding



Automated Optical Inspection

# Functional Testing



01

Near Field Test Range (NFTR)

02

Digital Signaling

03

Function and pulse generators

04

Open air antenna test range

05

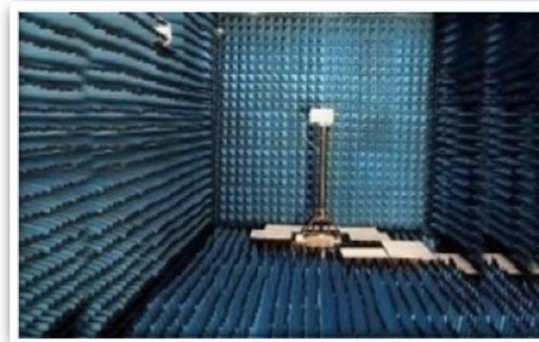
Spectrum Analyzers, Vector Network Analyzer,  
Signal generator, RF power meter

06

Distortion Analyzer

07

ATE-ATS facility



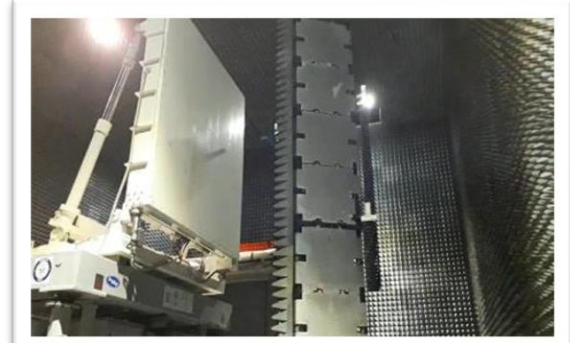
FFTR



ATE ATS - Facility



Open Air Antenna - Test Range



NFTR

01

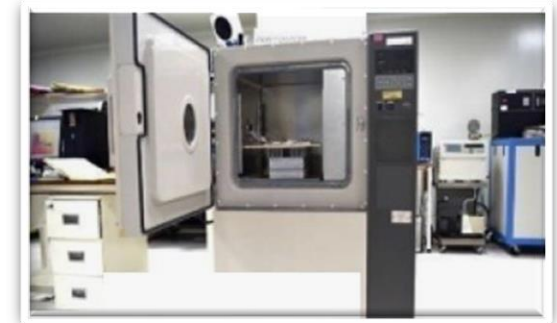
EMI/EMC Test Facility as per MIL STD 461C/D/E/F (NABL)



EMI-EMC Test

02

HASS/HALT Chambers



Environmental Chamber

03

Environment Chambers (-65degC to +175degC; 98% RH)



Vibration

04

Vibration/ Shock Testing tables, Bump Test M/c's



HASS Chamber

05

Weiss Chamber

06

Power Quality Tests as per MIL STD 704 D/E

Astra has designed, developed and produced critical sub systems and systems for its customers for building various airborne, naval and ground based platforms

## Radar, Missile Electronics, Electronic Warfare, Satellites, MMIC and Communication

### Defence

- Radars
- Electronic Warfare
- Missile Electronics
- Telemetry
- Counter-Drones

### Space

- Flight Model Application
- Satellite Bus
- Ground based Application
- INSAT MSS Terminals

### Hydro/Meteorology

- Water Level Measurement (Bubbler/ Radar Sensor)
- Automatic Weather Stations (AWS)
- Agromet Met Stations (AMS)
- Automatic Rain Gauge (ARG) X Band Doppler Weather Radar

### Other areas of work

- Antennas
- MMIC
- Contract Manufacturing
- Homeland Security
- Environmental & EMI/ EMC Testing Services

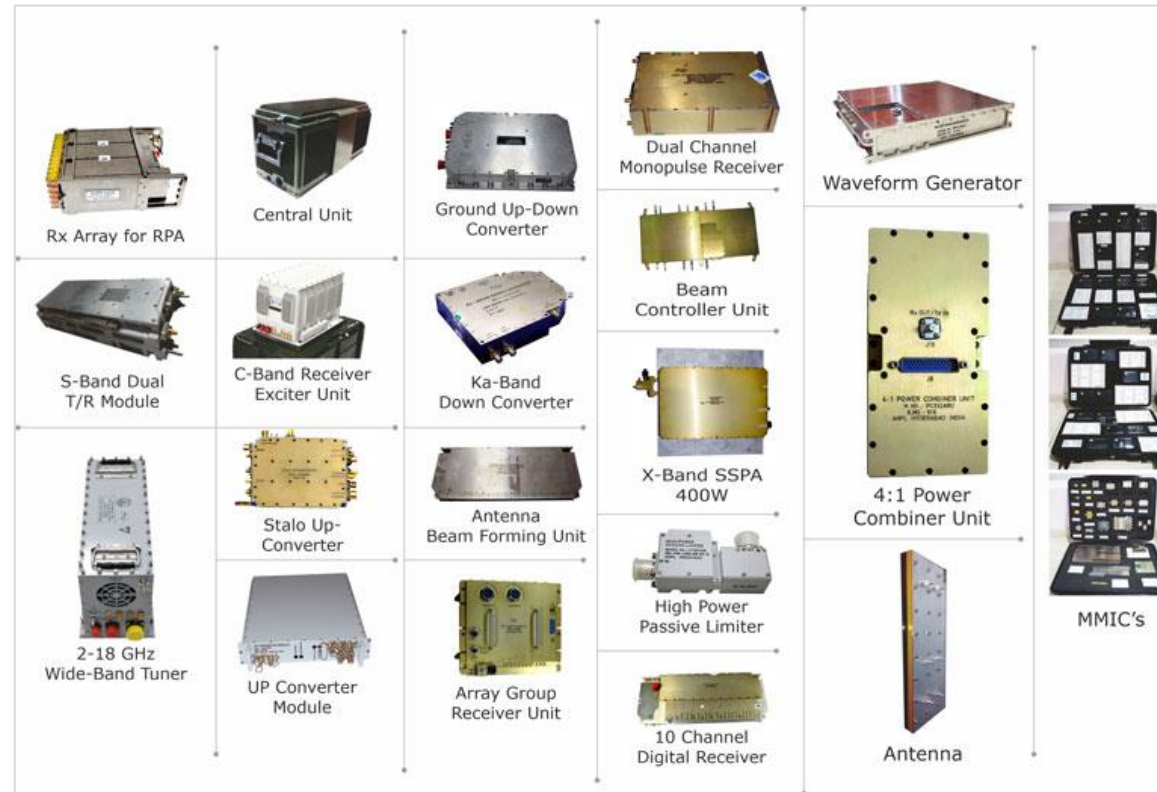
# Radar Electronics: Up to Ka band



Astra Microwave Products Ltd.

## Homeland security

- Counter UAV Radar – Drishti
- Perimeter Intrusion Detection Radar
- C-UAS System



Design & Development of complete Active Array Antenna Unit (AAAU) hardware, Signal Processing & Radar Data Processing for AESA Multi-Function Radar

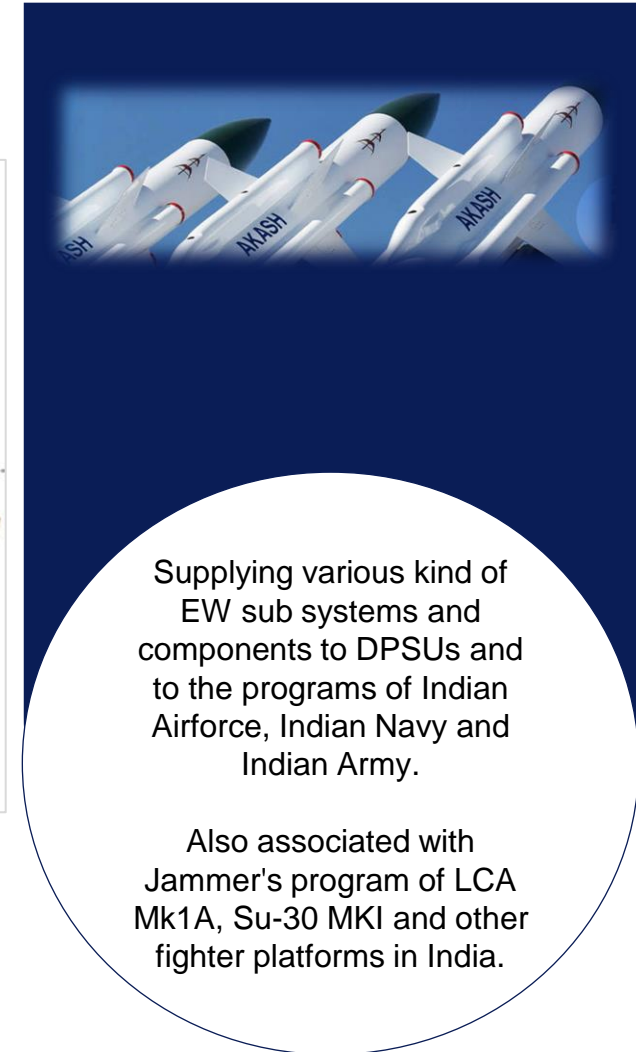
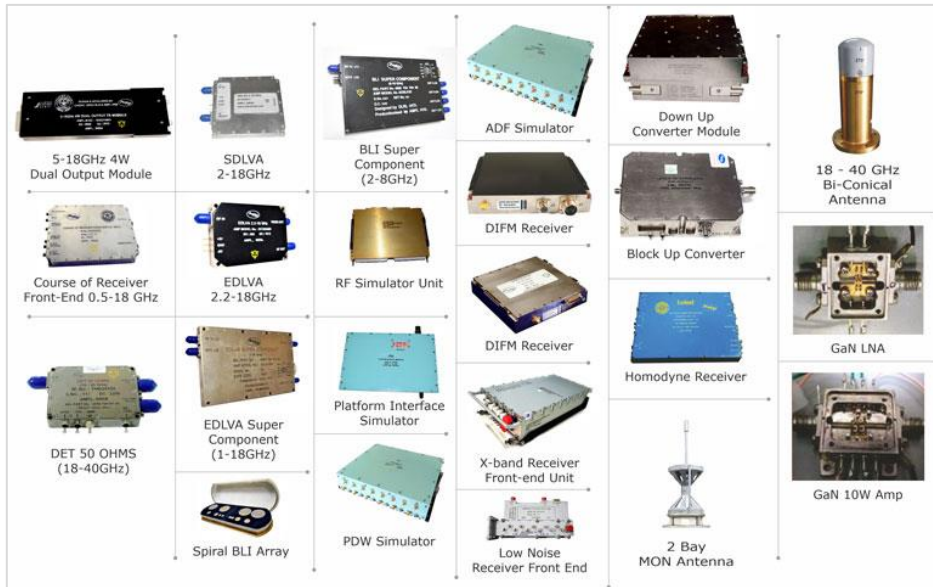
The Ka-band electromagnetic frequency spectrum ranges from 26.5GHz to 40GHz.

# Electronic Warfare: Up to Ka band



Astra Microwave Products Ltd.

## Electronic Warfare



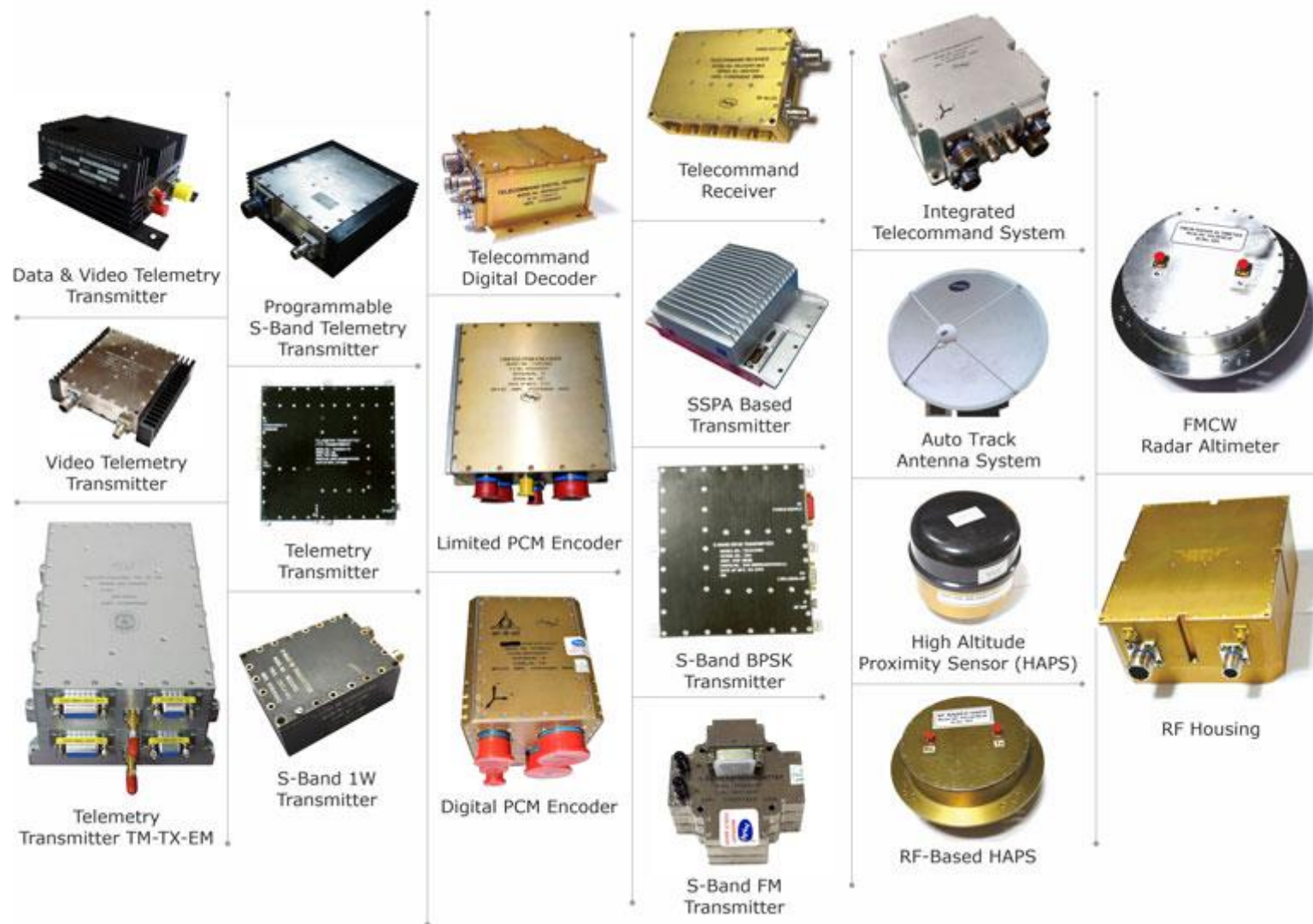
## Strategic Electronics



# Telemetry



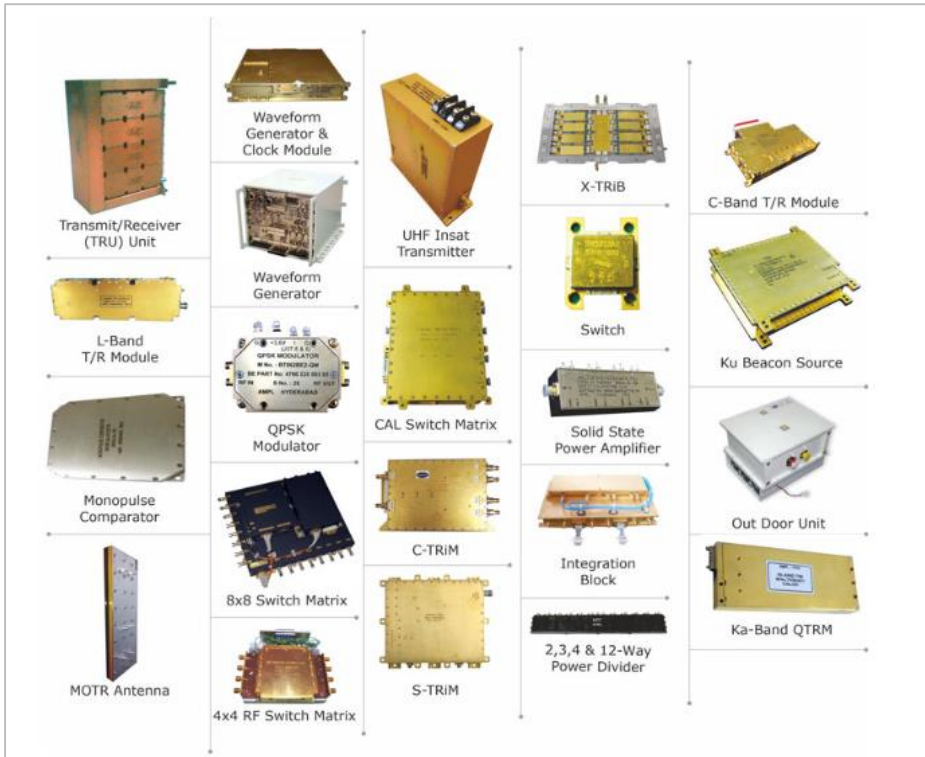
Astra Microwave Products Ltd.



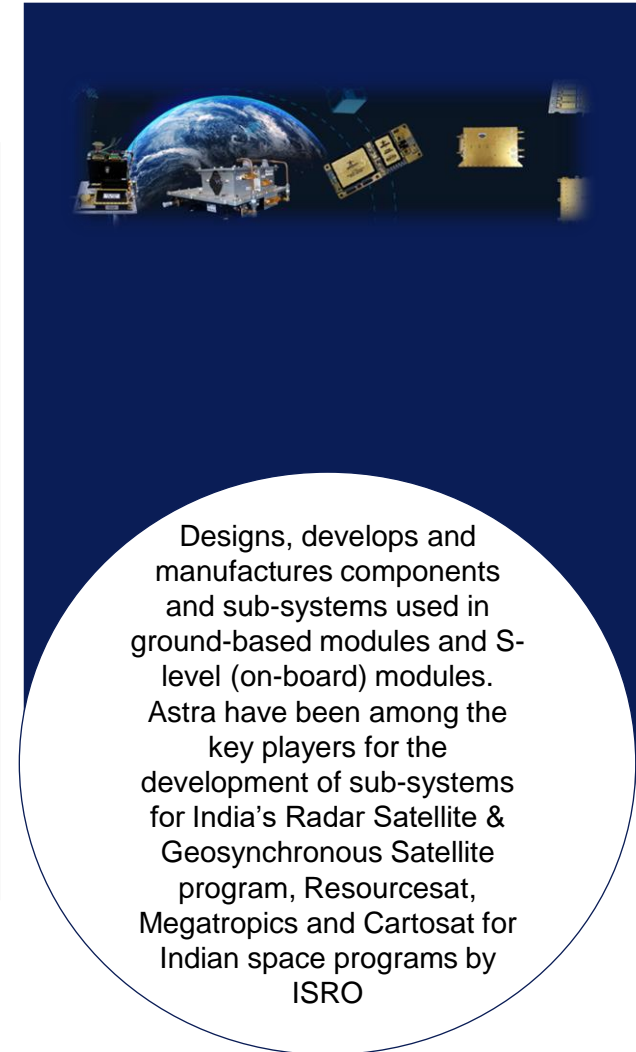
Supplying various sub-systems for Telemetry applications such as S-Band FM Transmitter Airborne RF Trans receiver, Ground Up Down Converters, C & S band switch antenna systems, Telemetry Tracking Systems etc.

Supplying telemetry sub-systems to LCA and Intermediate Jet Trainer (IJT) aircraft.

## Ground Application



## Flight model



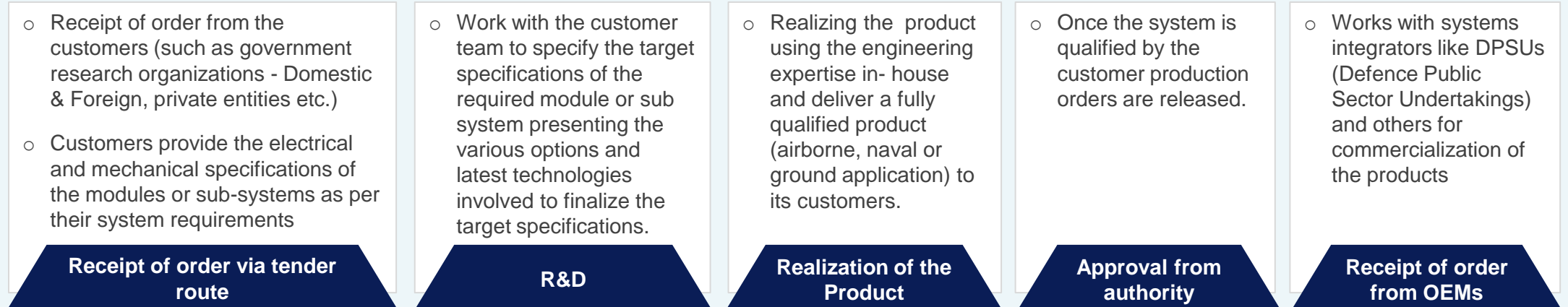
Designs, develops and manufactures components and sub-systems used in ground-based modules and S-level (on-board) modules. Astra have been among the key players for the development of sub-systems for India's Radar Satellite & Geosynchronous Satellite program, Resourcesat, Megatropics and Cartosat for Indian space programs by ISRO





Build To Specifications

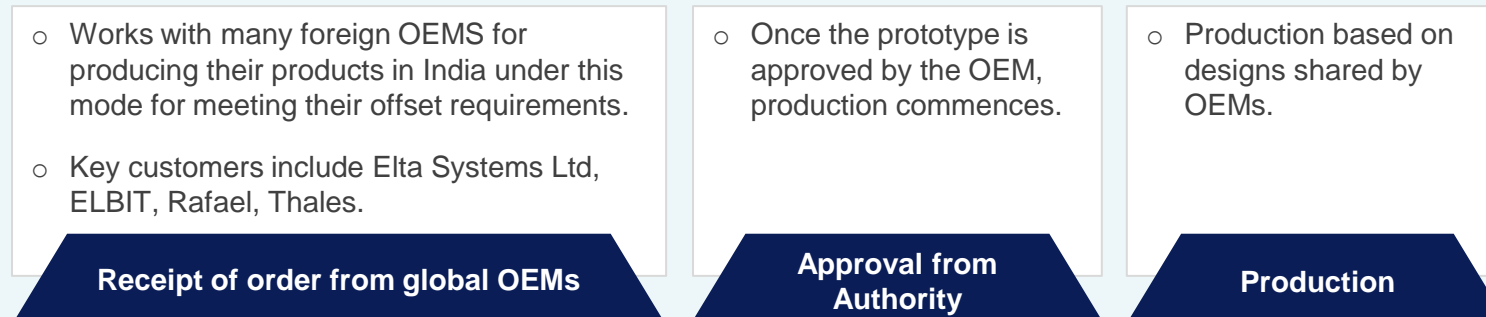
*The company's strong relationship with large corporations builds its brand equity and helps it in establishing itself as a prime contractor for large and longer-term programs in the marketplace. AMPL works on high-value complex projects awarded by companies.*



High value addition leads to better margins

Build To Print

*Astra Microwave has produced more than USD 150 million worth of high-end modules under BTP route.*



Marginal value addition -Acts as a capacity filler

## New product development To accelerate growth



- Develop products in close association with government research organizations for defence and space.
- Govt has introduced policy measures promoting Indigenous shipbuilding.
- Grow business by producing new and innovative products.
- Enter commercial end user markets for radars.

## Focus on Research & Development



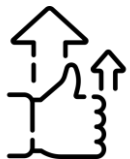
- Invest in modern technology and equipment's to address changing industry trends and customer requirements.
- Leverage strong R&D base to broad base domestic offerings.
- Developing digital expertise by spending more on R&D.

## Joint Ventures and Strategic alliances



- Through JV or strategic alliances, offer improved technology and products.
- Target the offset requirement in large defence procurement programmes of Govt.
- [Exploring the areas in the anti drone, EW, satellites, SDRs and electro-optics through JVs.](#)
- In discussion with our JV partners to expand the origin 21.30 like in the SDR product portfolio to develop EO (electro-optics) product line.

## Reap benefits of sectoral tailwinds



- By doing extensive investments to strengthen our position as a systems vendor.
- [Bidding for the whole system - the complete radar system - for both DRDO and for future MoD requirements.](#)
- Atmanirbhar Bharat initiative is To encouraging the industry develop the system either through in-house development or through foreign technology tie-up.

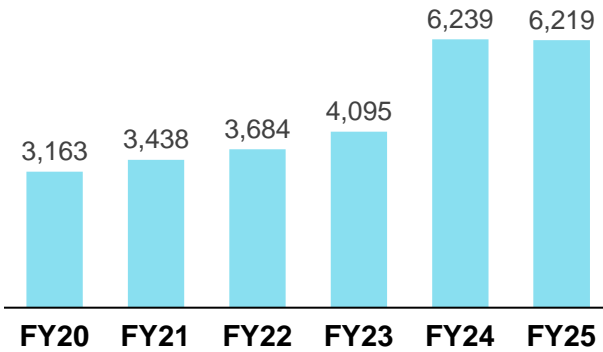
# Growing defence products opportunity



Astra Microwave Products Ltd.

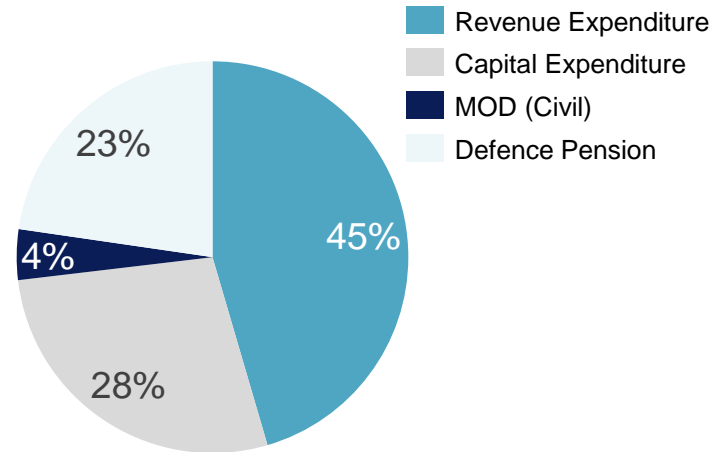
India's extensive modernisation plans, an increased focus on homeland security to increase government allocation for defence expenditure along with Make in India focus are expected to drive healthy growth in the sector

## Growing Defence Budget (in Bn INR)



India is the 3rd largest military spender

## Defence Budget Components – FY25



Source: Ministry of Defence - Budget

## Business Potential till 2028

**Rs. 4,000 Cr.**  
Defense & Aerospace

**Rs. 500 Cr.**  
Space

**Rs. 1,500 Cr.**  
Turnkey Projects,  
Metrology & System

**Rs. 1,000 Cr.**  
Export

**Rs. 7,000 Cr.**  
Total

The Indian government has taken various initiatives to promote on indigenization in this space:

**Atma Nirbhar Bharat**

**Imports Embargo**

The Indian government has set the defence production target at USD 25 bn by 2025 (including US\$5 bn from exports by 2025)

ISRO has planned multiple deep space and experimental missions to strengthen India's position in global space industry through new technology development

Indigenous shipbuilding with a remarkable increase in capability and programme fulfillment

Defence Acquisition Procedure, 2020

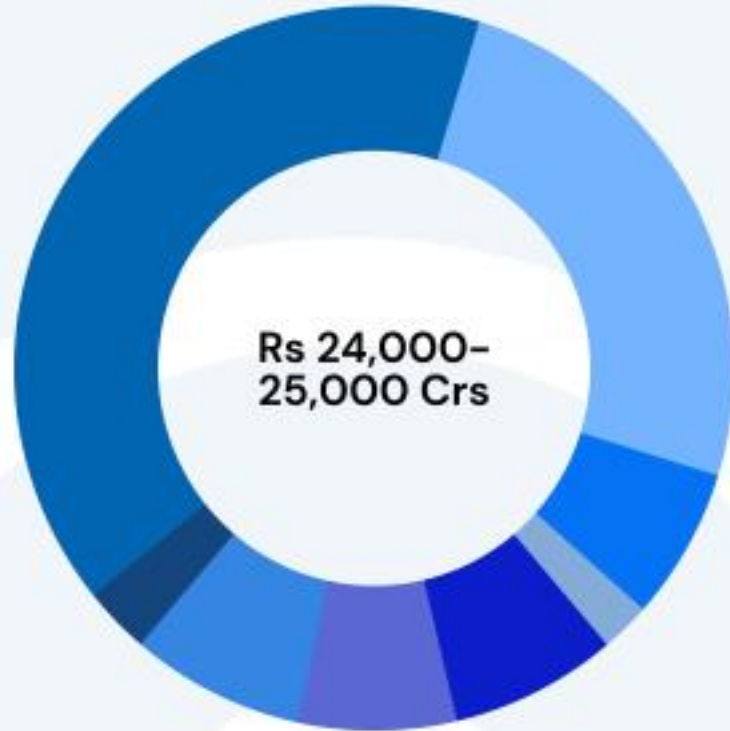
Category	Indigenous Content (IC)
Buy (Indian-IDDM)	Indigenous design and $\geq 50\%$
Buy (Indian)	In case of indigenous design $\geq 50\%$ otherwise $\geq 60\%$
Buy and Make (Indian)	$\geq 50\%$ of the 'Make' portion
Buy and Make	not present
Buy (Global - Manufacture in India)	50% or more
Foreign Vendor	Foreign Vendor - Nil/ Indian Vendor $\geq 30\%$

# Total Addressable Market



Astra Microwave Products Ltd.

Major opportunities for AMPL of around Rs 24,000-25,000 Crs across all sectors till FY28.



**Meteorology/ Hydrology**  
  
Rs 900 - 1,000 Crs

**Special Projects**  
  
Rs 2,000 - 3,000 Crs

**Radar Programs**  
  
Rs 10,000 - 11,000 Crs

**Space (FM)**  
  
Rs 500 - 600 Crs

**Missiles & Telemetry**  
  
Rs 1,800 - 2,000 Crs

**Turnkey Projects**  
  
Rs 5,000 - 6,000 Crs

**Exports**  
  
Rs 1,500 - 2,000 Crs

**EW**  
  
Rs 700 - 750 Crs

## Wide Array of Opportunities due to Government Initiatives

Various government initiatives are encouraging the industry to develop the system either through in-house development or through foreign technology tie-up.

Astra in alliance with System Knowledge of its partners aims to deliver the product that meets Government thrust on Atma Nirbhar Bharat.

Getting opportunity from the Services to build for the intersystems.

Indian industries are getting opportunities to develop and supply products which are published as negative import list by GOI.

Astra will utilise its skill on design and production of high-end defense equipment in India and would also cater to the after-sale support.

Indigenous integrated and strategic defence and aerospace electronics solutions provider which is well positioned to benefit from the Atma Nirbhar Bharat initiative.

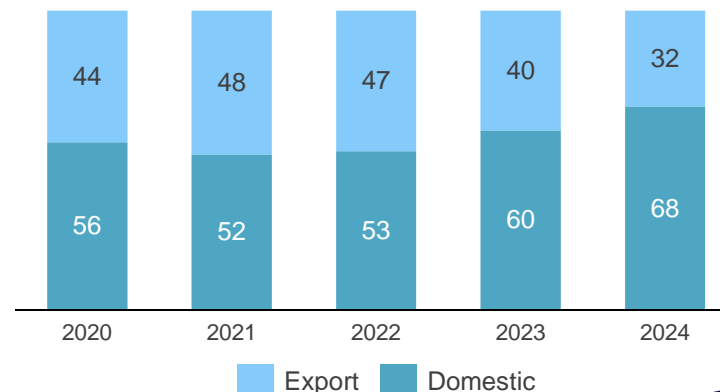
**We aim to achieve 70% Domestic 30% Export Revenue distribution over next 2-3 years. Domestic business on an average carries 40 to 45% of gross margin as against 8 to 10% gross margin in exports.**

## Defence Offset

The defence offset policy mandates a foreign vendor to source at least 30% of the value of an order (when the order is worth Rs.2,000 crore or more) from Indian manufacturers.

Astra has been active in tapping this opportunity and its export business is driven by these offset provisions.

**Astra Revenue Break-up %**



## Ready for Electronic Warfare




- Antennas
- EDLVA and BLI Super Components
- EW Simulators
- DIFM Receivers
- Front End Receivers
- Up/Down convertors
- Homodyne Receivers

## Strategic Electronic Telemetry Sub-systems

- Command guidance units
- Radio Proximity Fuze
- L, S, C & X-Band Transponders
- Phased Array based Telemetry Tracking System
- Sub-system for gimbal based and AESA Seeker
- Ground and Airborne data link systems
- Data and video Telemetry transmitters, Transponders,
- Encoders & decoders
- Telemetry Receivers

Subsidiaries

JV

Overview	
 <p>Bhavyabhanu Electronics Pvt. Ltd.</p>	<ul style="list-style-type: none"> <li>• BEPL is a fully owned subsidiary of Astra Microwave</li> <li>• Established with State-of-the-Art manufacturing &amp; test facilities to meet Global Standards. This combined with experienced manpower &amp; stabilized processes ensure that the needs of various Industry Segments can be met easily</li> <li>• A dependable player with excellent technological capabilities and a long-term commitment to the defense, aerospace, medical and industrial electronics industry</li> <li>• Products are known for ruggedness and reliability and conform to the latest quality standards. BEPL can handle both high-mix, low/medium volume products as well as high volume production for our customers</li> </ul>
	<ul style="list-style-type: none"> <li>• A fabless MMIC Design House, based in Singapore. Aelius Semiconductors develops GaAs and GaN MMIC products based on a robust and reliable design philosophy. These designs are fabricated at leading foundries across the world</li> <li>• The products are tested and packaged as per customer's requirement utilizing state-of-the-art facilities</li> <li>• Aelius's unique and wide range of MMIC products are focused primarily on the Defense and Space industries, with competitive time lines and prices. We offer the flexibility to custom-package our products to customer's chosen configuration of die, package, or module</li> </ul>
	<ul style="list-style-type: none"> <li>• Astra Microwave Products Ltd and M/s RAFAEL ADVANCED DEFENSE SYSTEMS LTD., Israel (RAFAEL) came together to form a Joint Venture Company called Astra Rafael Comsys Private Ltd. (ARC) in Aug-19</li> <li>• Focuses on indigenous technology and Atma Nirbhar Bharat programs</li> <li>• Engages in carrying out production, integration, customization, marketing, sale, life cycle support and additional activities as required in the fields of Tactical Radio Communication systems, Electronic Warfare Systems and Signal Intelligence Systems</li> </ul>

# Esteemed Clientele



Astra Microwave Products Ltd.

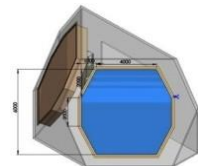
## Major stake in upcoming Defence Programs



Light  
Combat  
Aircraft

AATRU  
FOR ASPJ

AAAU for  
Uttam  
AESA  
Radar



AAAU for LRMFR



AAAU for  
AEW&CS



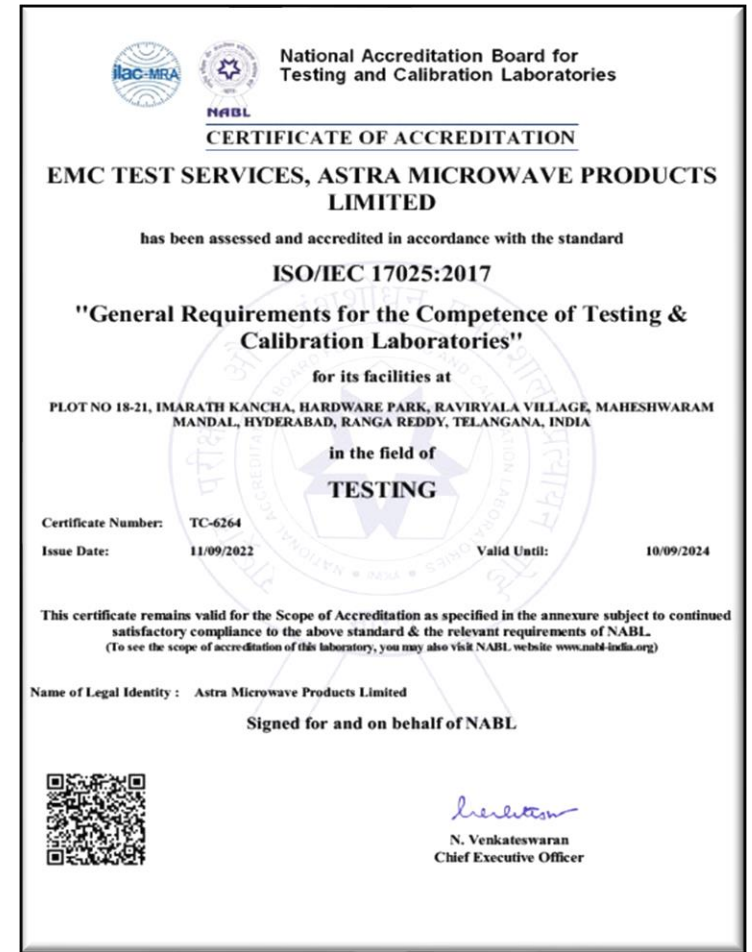
Long Range Radar TRMs, BSNs, PS



Medium  
Power Radar  
DTRMs



## Industry Leading Certifications





# Awards & Accolades



Astra Microwave Products Ltd.



**LATOt Ceremony for Counter Drone System**



**Tripartite MoU for Uttam AESA AAU for LCA Mk1A**



**G20 Space Economy Leadership Meet**



**Aero India 2023**

## Our Contribution towards the Society

- Eradicating hunger, poverty and malnutrition
- Promoting education
- Promoting gender equality
- Ensuring environmental sustainability
- Protection of national heritage
- Benefit of armed forces veterans
- Training to promote rural sports
- Contribution to the PM's National Relief Fund
- Funds provided to technology incubators
- Rural development projects



# Historical Financials

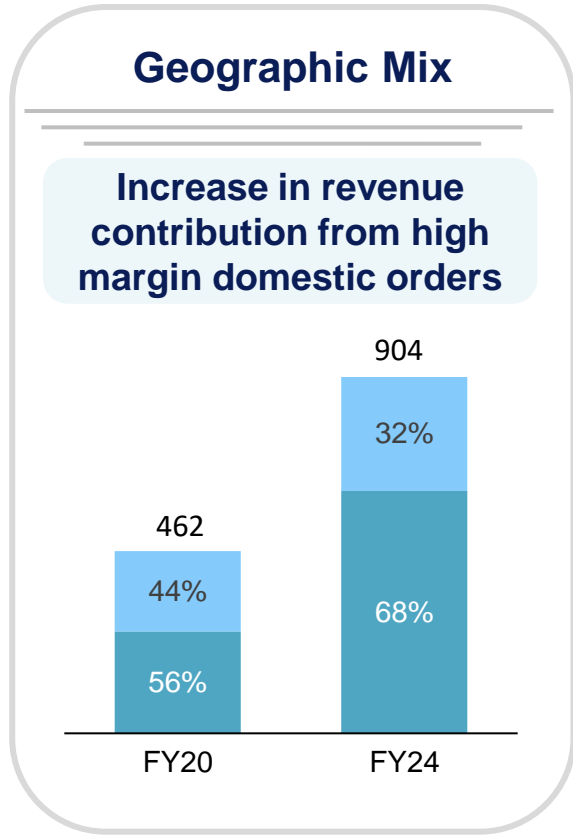
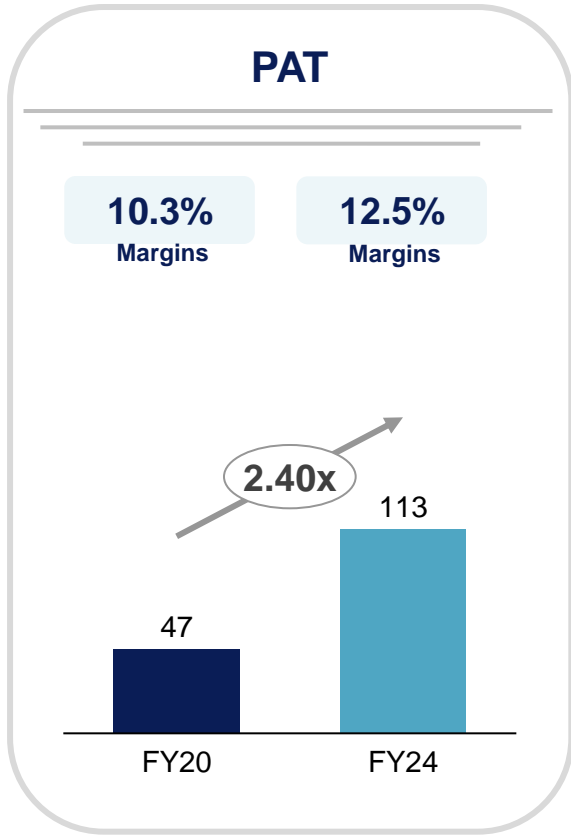
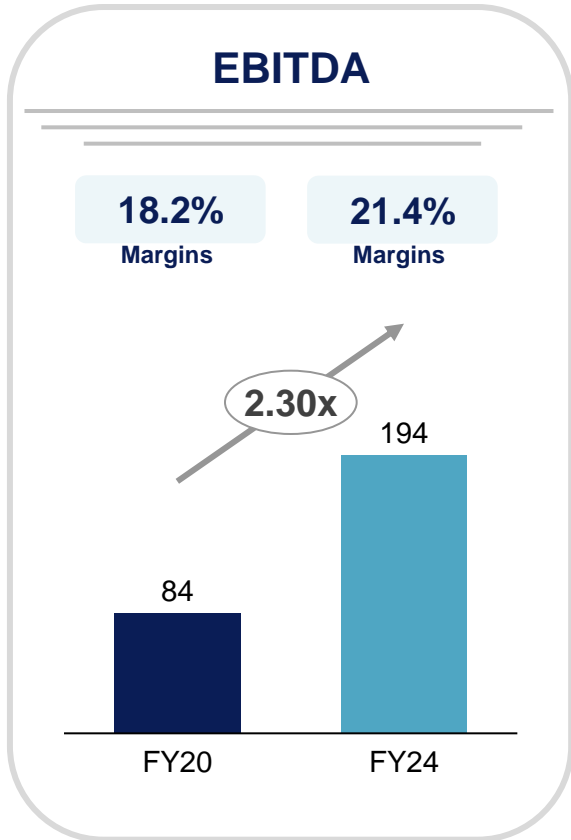
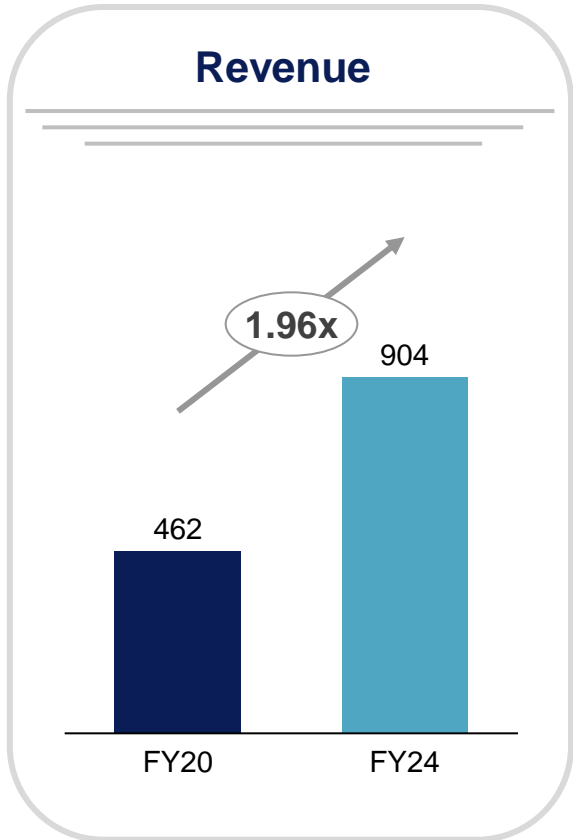


# Robust Long-term Growth



Astra Microwave Products Ltd.

Rs. in Cr



\*Represents standalone numbers

# Standalone Profit & Loss



Astra Microwave Products Ltd.

PARTICULARS (Rs. In Cr)	FY24	FY23	FY22	FY21	FY20
<b>Revenue from Operations</b>	<b>904</b>	<b>807</b>	<b>735</b>	<b>589</b>	<b>462</b>
Total Raw Material	551	519	524	418	267
<b>Gross Profit</b>	<b>353</b>	<b>289</b>	<b>211</b>	<b>171</b>	<b>195</b>
<b>Gross Profit Margin</b>	<b>39.1%</b>	<b>35.7%</b>	<b>28.7%</b>	<b>29.0%</b>	<b>42.2%</b>
Employee Expenses	104	87	73	64	66
Other Expenses	55	52	51	42	45
<b>EBITDA</b>	<b>194</b>	<b>150</b>	<b>87</b>	<b>64</b>	<b>84</b>
<b>EBITDA Margin</b>	<b>21.4%</b>	<b>18.5%</b>	<b>11.8%</b>	<b>10.9%</b>	<b>18.2%</b>
Other Income	12	6	7	12	12
Depreciation	25	23	22	23	25
<b>EBIT</b>	<b>181</b>	<b>132</b>	<b>73</b>	<b>53</b>	<b>71</b>
<b>EBIT Margin</b>	<b>20.0%</b>	<b>16.3%</b>	<b>9.9%</b>	<b>9.0%</b>	<b>15.3%</b>
Finance Cost	30	29	20	21	8
<b>Profit before Tax</b>	<b>152</b>	<b>103</b>	<b>53</b>	<b>31</b>	<b>63</b>
<b>Profit before tax margin</b>	<b>16.8%</b>	<b>12.7%</b>	<b>7.2%</b>	<b>5.3%</b>	<b>13.6%</b>
Tax	39	26	12	7	15
<b>PAT</b>	<b>113</b>	<b>77</b>	<b>40</b>	<b>24</b>	<b>47</b>
<b>PAT Margin %</b>	<b>12.5%</b>	<b>9.5%</b>	<b>5.5%</b>	<b>4.1%</b>	<b>10.3%</b>
<b>EPS (Rs.)</b>	<b>12.00</b>	<b>8.85</b>	<b>4.65</b>	<b>2.76</b>	<b>5.47</b>

# Standalone Balance Sheet



Astra Microwave Products Ltd.

ASSETS (Rs. In Cr)	Mar-24	Mar-23	Mar-22	Mar-21	Mar-20
<b>Non-Current Assets</b>	<b>249</b>	<b>228</b>	<b>215</b>	<b>202</b>	<b>213</b>
Property, plant and equipment	169	165	158	150	158
Capital WIP	13	2	-	-	12
Investment in Associates	2	2	2	2	-
Investments in joint ventures	20	20	20	20	16
Investments in subsidiaries	16	15	15	13	8
<b>Financial Assets</b>					
i. Other Financial Assets	9	6	9	10	11
Deferred tax assets	9	8	6	2	-
Non-Current Tax Assets	-	5	3	-	5
Other non-current assets	11	5	3	3	2
<b>Current assets</b>	<b>1,217</b>	<b>818</b>	<b>743</b>	<b>714</b>	<b>644</b>
Inventories	505	396	402	291	226
<b>Financial assets</b>					
i. Investments	-	-	-	14	13
ii. Trade receivables	503	282	202	254	247
iii. Cash and cash equivalents	61	49	21	14	7
iv. Bank balances other than (iii) above	65	55	49	24	43
Other financial assets	-	-	4	13	-
Current tax assets (net)	1	-	1	1	-
Other current assets	82	36	62	103	107
<b>Total assets</b>	<b>1,466</b>	<b>1,047</b>	<b>958</b>	<b>915</b>	<b>857</b>

EQUITY AND LIABILITIES (Rs. In Cr)	Mar-24	Mar-23	Mar-22	Mar-21	Mar-20
<b>Equity and Liabilities</b>	<b>968</b>	<b>653</b>	<b>590</b>	<b>561</b>	<b>547</b>
Equity share capital	19	17	17	17	17
Equity attributable to owners of the Company	949	636	572	543	530
<b>Non-current liabilities</b>	<b>73</b>	<b>77</b>	<b>47</b>	<b>4</b>	<b>3</b>
<b>Financial liabilities</b>					
i. Borrowings	15	3	3	-	-
Provisions	10	6	4	4	3
Contract liabilities	48	68	40	-	-
<b>Current liabilities</b>	<b>425</b>	<b>316</b>	<b>321</b>	<b>351</b>	<b>307</b>
<b>Financial liabilities</b>					
i. Borrowings	211	166	56	100	47
ii. Trade payables	88	44	53	35	38
iii. Other financial liabilities	22	18	15	11	16
Current tax liabilities (net)	1	4	-	1	2
Provisions	4	4	3	2	2
Contract liabilities	75	79	192	201	201
Other current liabilities	24	3	2	2	1
<b>Total equity and liabilities</b>	<b>1,466</b>	<b>1,047</b>	<b>958</b>	<b>915</b>	<b>857</b>

# Consolidated Profit & Loss



Astra Microwave Products Ltd.

PARTICULARS (Rs. In Cr)	FY24	FY23	FY22	FY21	FY20
<b>Revenue from Operations</b>	<b>909</b>	<b>816</b>	<b>750</b>	<b>641</b>	<b>467</b>
Raw Material Consumption	546	518	527	446	265
<b>Gross Profit</b>	<b>363</b>	<b>297</b>	<b>223</b>	<b>195</b>	<b>202</b>
<b>Gross Profit Margin</b>	<b>39.9%</b>	<b>36.4%</b>	<b>29.7%</b>	<b>30.4%</b>	<b>43.2%</b>
Employee Expenses	114	95	81	71	71
Other Expenses	58	54	53	45	48
<b>EBITDA</b>	<b>192</b>	<b>148</b>	<b>89</b>	<b>79</b>	<b>82</b>
<b>EBITDA Margin</b>	<b>21.1%</b>	<b>18.1%</b>	<b>11.9%</b>	<b>12.3%</b>	<b>17.7%</b>
Other Income	12	5	6	11	12
Depreciation	25	24	22	24	26
<b>EBIT</b>	<b>178</b>	<b>129</b>	<b>74</b>	<b>66</b>	<b>69</b>
<b>EBIT Margin</b>	<b>19.6%</b>	<b>15.9%</b>	<b>9.8%</b>	<b>10.3%</b>	<b>14.7%</b>
Finance Cost	31	31	21	25	8
<b>Profit before share of profit/loss from JVs</b>	<b>147</b>	<b>99</b>	<b>52</b>	<b>41</b>	<b>60</b>
Share of profits from JVs	12	-3	-2	-3	-1
<b>Profit before Tax</b>	<b>159</b>	<b>96</b>	<b>50</b>	<b>39</b>	<b>59</b>
<b>Profit before tax margin</b>	<b>17.5%</b>	<b>11.8%</b>	<b>6.7%</b>	<b>6.0%</b>	<b>12.7%</b>
Tax	39	26	12	10	15
<b>PAT</b>	<b>121</b>	<b>70</b>	<b>38</b>	<b>29</b>	<b>44</b>
<b>PAT Margin %</b>	<b>13.3%</b>	<b>8.6%</b>	<b>5.0%</b>	<b>4.5%</b>	<b>9.4%</b>
EPS (in Rs.)	12.80	8.06	4.37	3.33	5.08

# Consolidated Balance Sheet



Astra Microwave Products Ltd.

ASSETS (Rs. In Cr)	Mar-24	Mar-23	Mar-22	Mar-21	Mar-20
<b>Non-Current Assets</b>	<b>239</b>	<b>206</b>	<b>197</b>	<b>186</b>	<b>207</b>
Property, plant and equipment	167	166	159	153	161
Capital WIP	13	2	0		12
Investment in Associates	2	2	2	2	
Investments in joint ventures	22	9	12	14	13
Intangible assets	3	1	1	-	-
<b>Financial Assets</b>					
ii. Other Financial Assets	10	7	11	11	11
Deferred tax assets	11	9	7	3	1
Non Current Tax Assets	-	6	3		6
Other non-current assets	11	5	3	3	2
<b>Current assets</b>	<b>1,235</b>	<b>851</b>	<b>771</b>	<b>759</b>	<b>689</b>
Inventories	514	419	419	330	284
<b>Financial assets</b>					
i. Investments	-	-	-	14	13
ii. Trade receivables	505	284	205	267	249
iii. Cash and cash equivalents	66	56	27	18	9
iv. Bank balances other than (iii) above	65	55	50	25	44
Other financial assets		0	3	13	0
Current tax assets (net)	1		1	1	
Other current assets	78	37	65	92	89
Assets classified as held for sale	5	-	-	-	-
<b>Total assets</b>	<b>1,473</b>	<b>1,057</b>	<b>969</b>	<b>945</b>	<b>895</b>

EQUITY AND LIABILITIES (Rs. In Cr)	Mar-24	Mar-23	Mar-22	Mar-21	Mar-20
<b>Equity and Liabilities</b>	<b>966</b>	<b>643</b>	<b>586</b>	<b>559</b>	<b>540</b>
Equity share capital	19	17	17	17	17
Equity attributable to owners of the Company	947	625	568	541	523
Non-controlling interest	0	0	0	0	0
<b>Non-current liabilities</b>	<b>74</b>	<b>78</b>	<b>47</b>	<b>4</b>	<b>4</b>
Financial liabilities					
i. Borrowings	15	3	3	-	-
Provisions	10	7	4	4	4
Contract liabilities	48	68	40		
<b>Current liabilities</b>	<b>434</b>	<b>337</b>	<b>336</b>	<b>383</b>	<b>352</b>
Financial liabilities					
i. Borrowings	221	182	67	122	55
ii. Trade payables	84	46	55	38	61
iii. Other financial liabilities	23	19	16	12	16
Current tax liabilities (net)	1	4	0	2	2
Provisions	4	4	4	2	2
Contract liabilities	76	79	192	203	210
Other current liabilities	25	3	2	5	5
<b>Total equity and liabilities</b>	<b>1,473</b>	<b>1,057</b>	<b>969</b>	<b>945</b>	<b>895</b>



# Thank You

**For more information please contact:**

**Company:**



**Astra Microwave Products Ltd.**

**Astra Microwave Products Limited**

CIN No: L293091G1991PLC013203

Mr. T. Anjaneyulu, GM – Company Secretary

Email id: [secretarial@astramp.com](mailto:secretarial@astramp.com)

**Investor Relations Advisors:**

**SGA** Strategic Growth Advisors

**Strategic Growth Advisors Pvt Ltd.**

CIN No: U74140MH2010PTC204285

Shikha Puri / Dharmik Kansara

Email id: [shikha.puri@sgapl.net](mailto:shikha.puri@sgapl.net) / [dharmik.k@sgapl.net](mailto:dharmik.k@sgapl.net)

Tel No: +91 9819282743 / +91 72081 79323

