

# Enabling the connected future

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12 August 2021



# Agenda & Welcome

**Welcome & introduction**

**Items of business**

**Chair's address**

**Chief executive's review**

**Shareholders' questions**

- Annual report and business update

**Ordinary resolutions**

- Re-elect Bruce Irvine as a director of Rakon
- Approve increase in the total annual pool for directors' fees
- Authorise directors to fix remuneration of Rakon's auditor

**General business**

**Meeting close / afternoon tea**



**Bruce Irvine**  
Chair

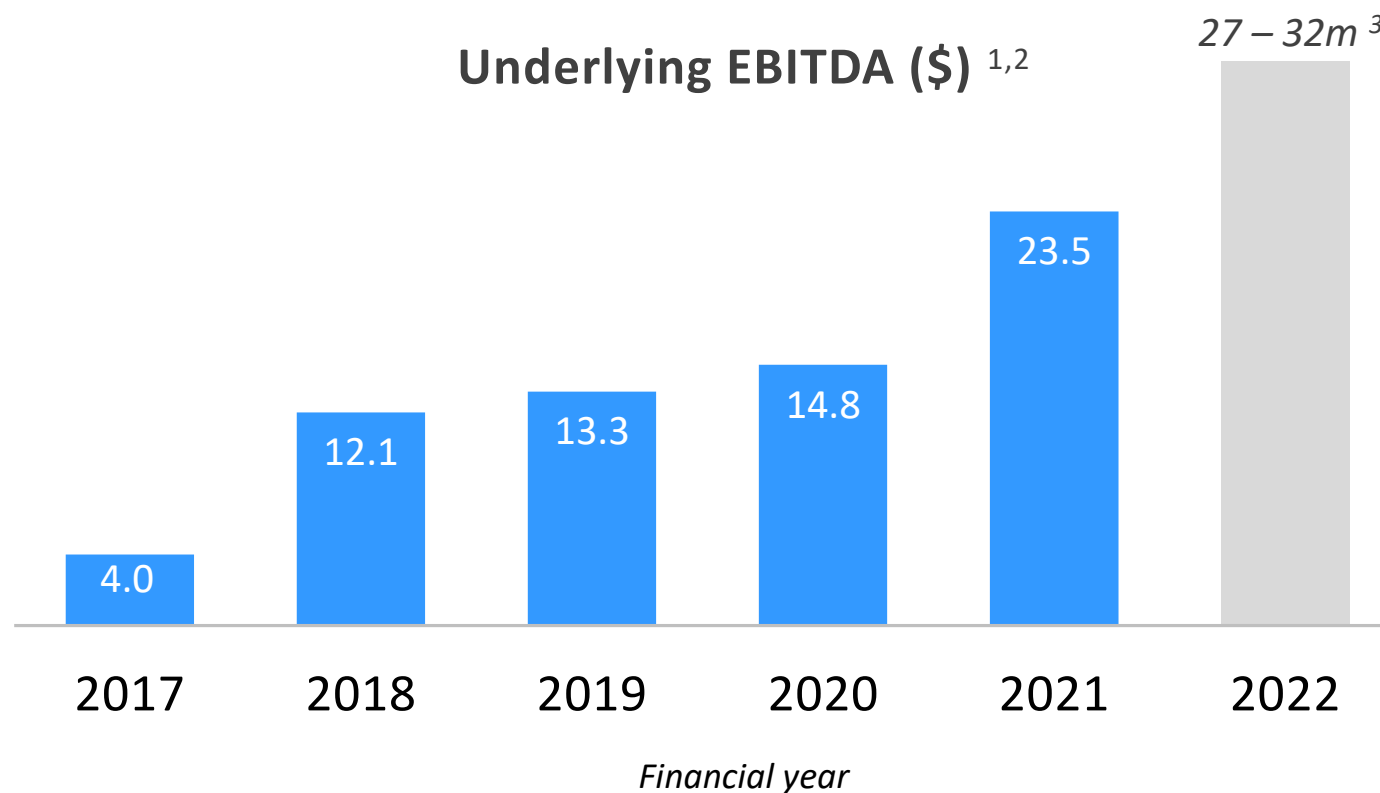
**Brent Robinson**  
Chief executive

Chair's address  
**Bruce Irvine**



# Chair's address

## Financial snapshot



**Notes:**

<sup>1</sup>All figures are presented in New Zealand dollars unless otherwise indicated

<sup>2</sup> Refer to Note 5 of the FY2021 audited financial statements for an explanation of how 'Non-GAAP Financial Information' is used, including a definition of 'Underlying EBITDA' and reconciliation to NPAT

<sup>3</sup> FY2022 is a provisional estimate



# Shareholder value

## Significant increase in share price

**Health and safety of people was paramount through Covid-19 outbreaks and lockdowns**

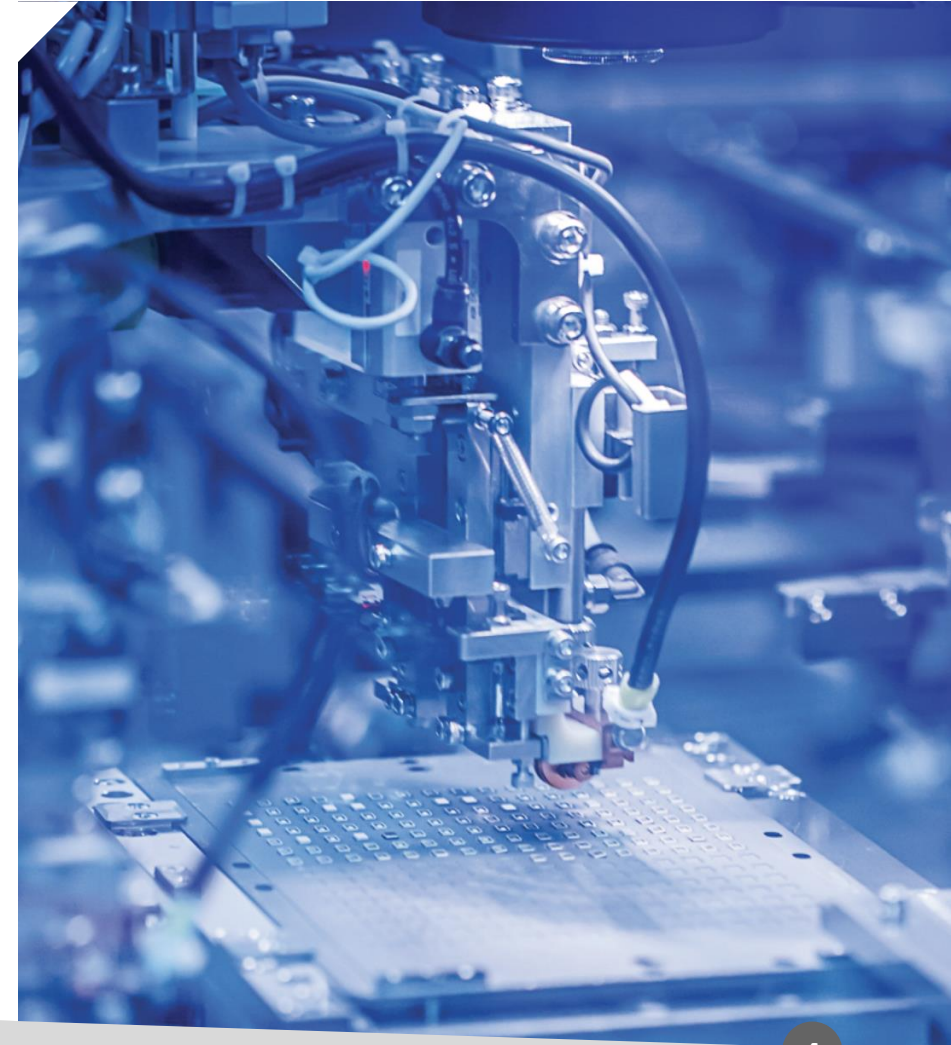
- ❑ Global operations sustained through restrictions

**Significant impact from Covid to operations in first quarter but new opportunities captured in Q2 and H2**

- ❑ Increased demand from Telecommunications sector
- ❑ Worldwide TCXO shortage

**Scaled up capacity to meet increased demand**

- ❑ Significant long term orders secured
- ❑ NZ production capability now 40% greater than FY2021



# Our growth strategy

## How we will succeed

### Markets

- ❑ Three principal market segments – Telecommunications, Positioning, Space & Defence
- ❑ New segments emerging with cloud computing, autonomous vehicles and NewSpace

### Customers

- ❑ Preferred supplier to Tier 1 & 2 customers
- ❑ Work alongside customers for design of next-generation technologies

### Expertise

- ❑ Industry-leading R&D
- ❑ Proven commercialisation

### Operations

- ❑ Global, scalable operation
- ❑ Extend existing products whilst developing new solutions
- ❑ Future proofing low-cost manufacturing platform



2011-12 2012-13 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19

# Governance

## Strong leadership

### Health and safety of global team has been paramount

- Covid outbreaks and restrictions impacted all operations

### Risk management and Board oversight

- Managing ongoing supply chain and Covid-19 uncertainties

### Enhanced investor communications and engagement

- Refreshed website and lifted company profile

### Secured long term debt facility

- Enabling investment in future proofing operations and expansion opportunities

### Prudent financial management

- Consolidate performance through FY2022 and maintain conservative balance sheet

### Succession planning for Board

- Refreshed skills and smooth transition

### Appreciation of committed resilient global team



## Chief executive's review

**Brent Robinson**





# Our key executives here today



**Dr. Sinan Altug**  
Chief Operating Officer



**Darren Robinson**  
Chief Marketing Officer



**Anand Rambhai**  
Chief Financial Officer



**Margo Thomas**  
General Manager,  
Global People & Capability



**Scott Stemper**  
Global Quality Manager



**Maureen Shaddick**  
Company Secretary



**Borja Thomas Schuhmacher**  
Head of Global  
Product Management



# FY2021 highlights & achievements



## Strong financial performance

We delivered continued growth in revenue and earnings through sustained demand and solid operating improvements



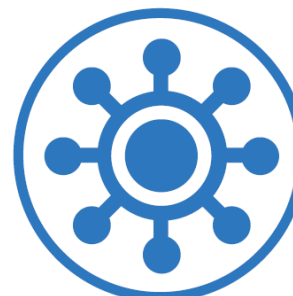
## Opportunities captured

We rapidly deployed new product designs and increased capacity to meet the rise in demand because of worldwide chip shortages



## XMEMS® wins

A year on from officially launching this proprietary technology, we're designed into strategic customers' applications



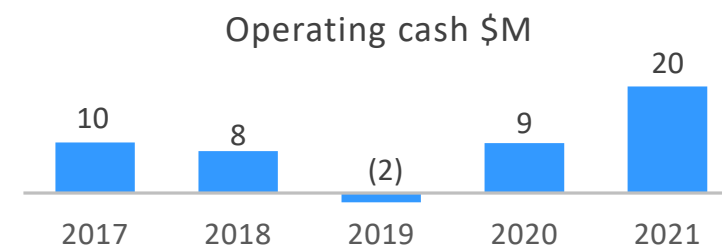
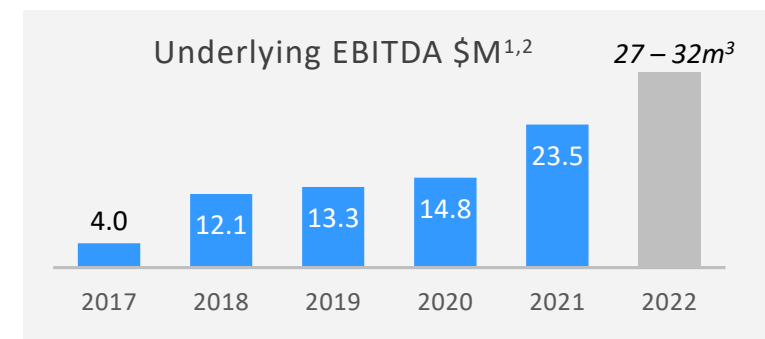
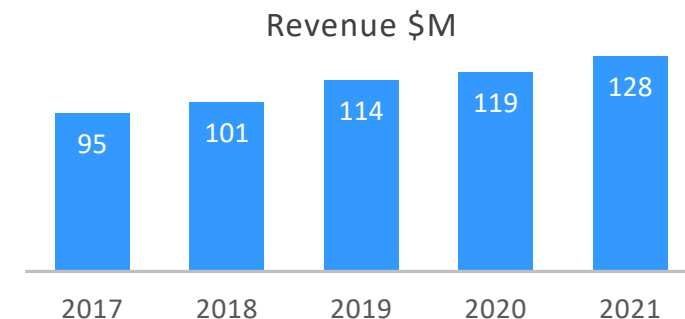
## Effective Covid response

The commitment and resilience of our global team ensured we continued operating with minimal downtime and supply chain disruption

# FY2021 financial performance

## Strong earnings and cash flow

Performance for the 12 months to March (\$m)	FY2021	FY2020	% change
Revenue	128.3	119.0	+8%
Gross profit	58.9	52.0	+13%
Gross margin %	45.9%	43.7%	+2.2 percentage points
Operating expenses	49.0	48.1	+2%
Net profit after tax	9.6	4.0	+142%
Underlying EBITDA <sup>1</sup>	23.5	14.8	+59%
Earnings (cents per share)	4.2	1.8	+133%
Net cash / (net debt) <sup>2</sup> as at 31 March	5.0	(7.9)	+164%
Capital expenditure for the 12 months	5.1	4.6	+10%



### Notes

<sup>1</sup> Refer to Note 5 of the FY2021 audited consolidated financial statements for an explanation of how 'Non-GAAP Financial Information' is used, including a definition of 'Underlying EBITDA' and reconciliation to net profit after tax

<sup>2</sup> Excluding NZ IFRS 16

<sup>3</sup> FY2022 is a provisional estimate

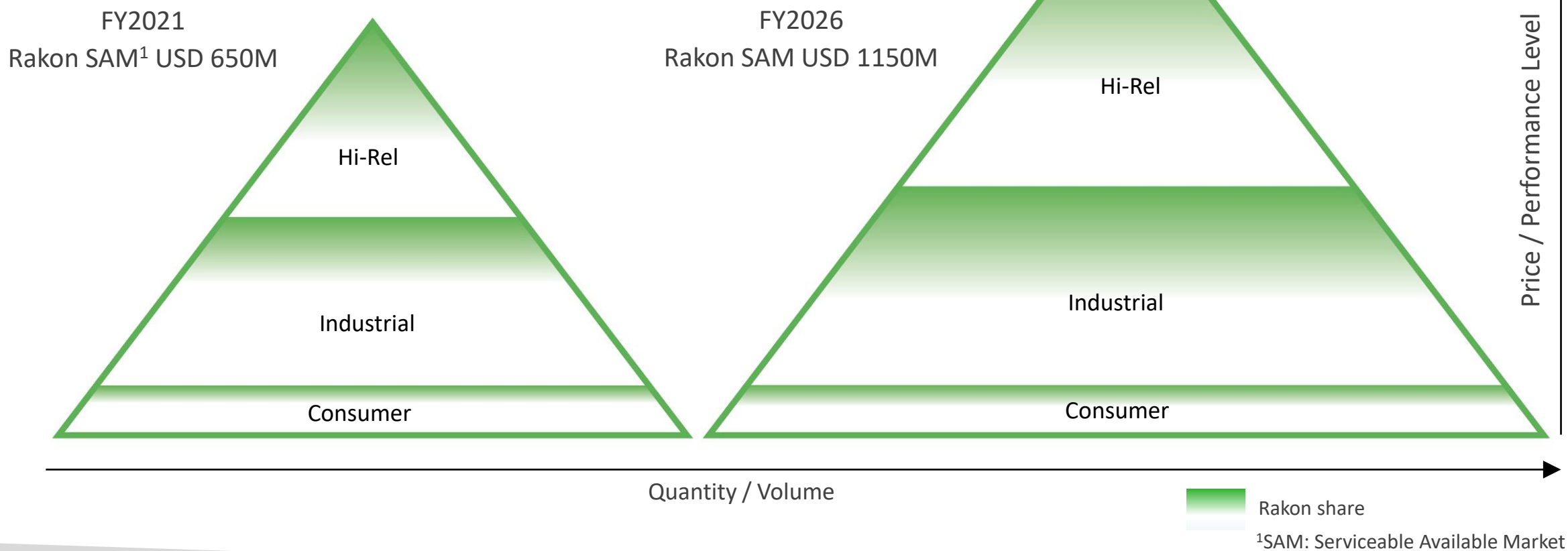


## Business update



# Our market positioning

**We solve problems with challenging specifications and high-performance requirements**



# Telecommunications

## Increased 5G demand driving revenue growth



### Revenue growth

FY2021 \$77M, up 18%

Telecommunications comprises  
60% of total revenue



### 5G demand increasing

Operators deploying new networks  
and enhancing existing infrastructure

Strong contribution from new  
products (Mercury™)



### Cloud computing emerging

Precise timing requirements for many  
applications driving strong growth

Major cloud computing customer  
secured



### Product wins

Design-in wins for new products  
enabling 5G millimetre wave  
capability

Increased design wins for Pluto®  
TCXOs

# Why 5G?

## 5G is expanding the mobile ecosystem to new industries



Precision agriculture



Construction and mining



Digitised education



Connected healthcare



Richer mobile experiences



Smart manufacturing



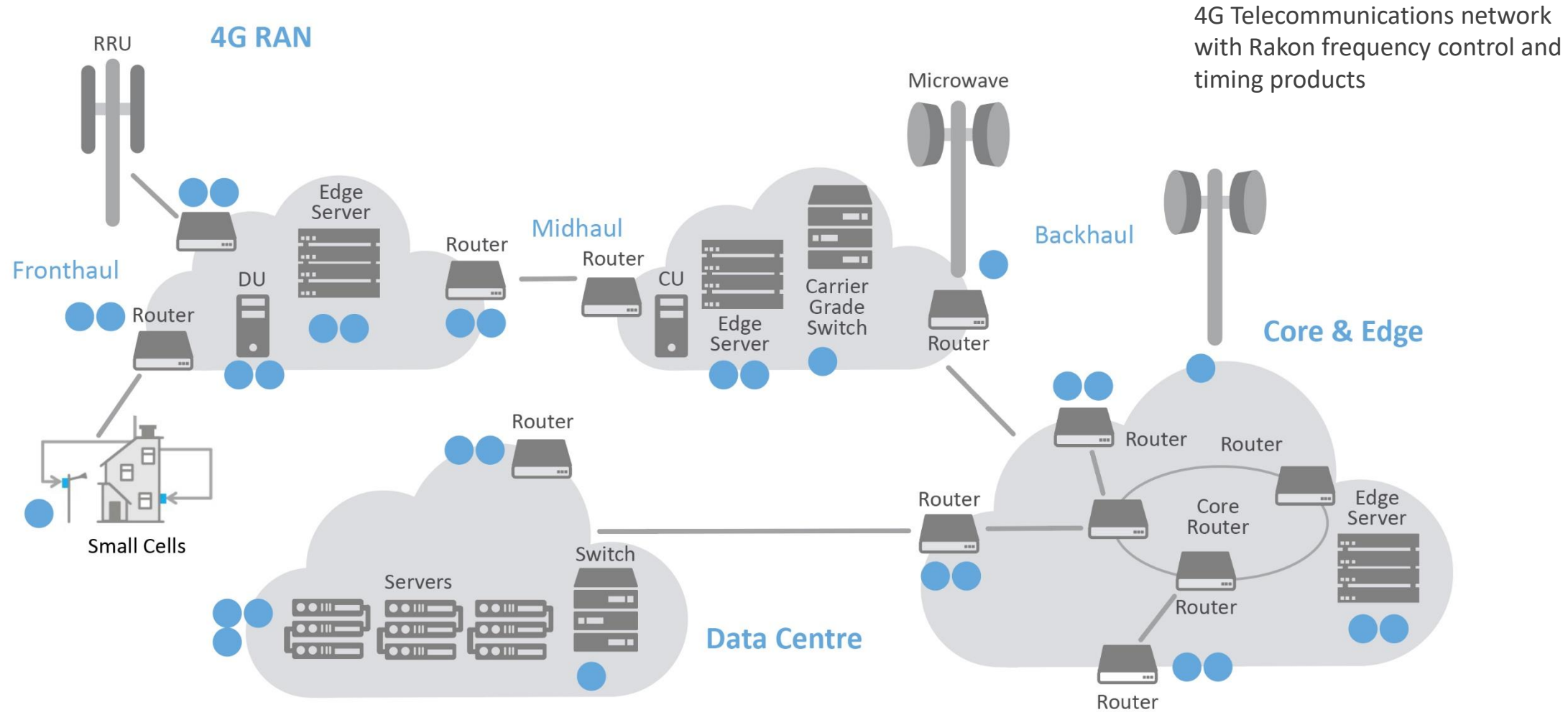
Intelligent retail



Smart city

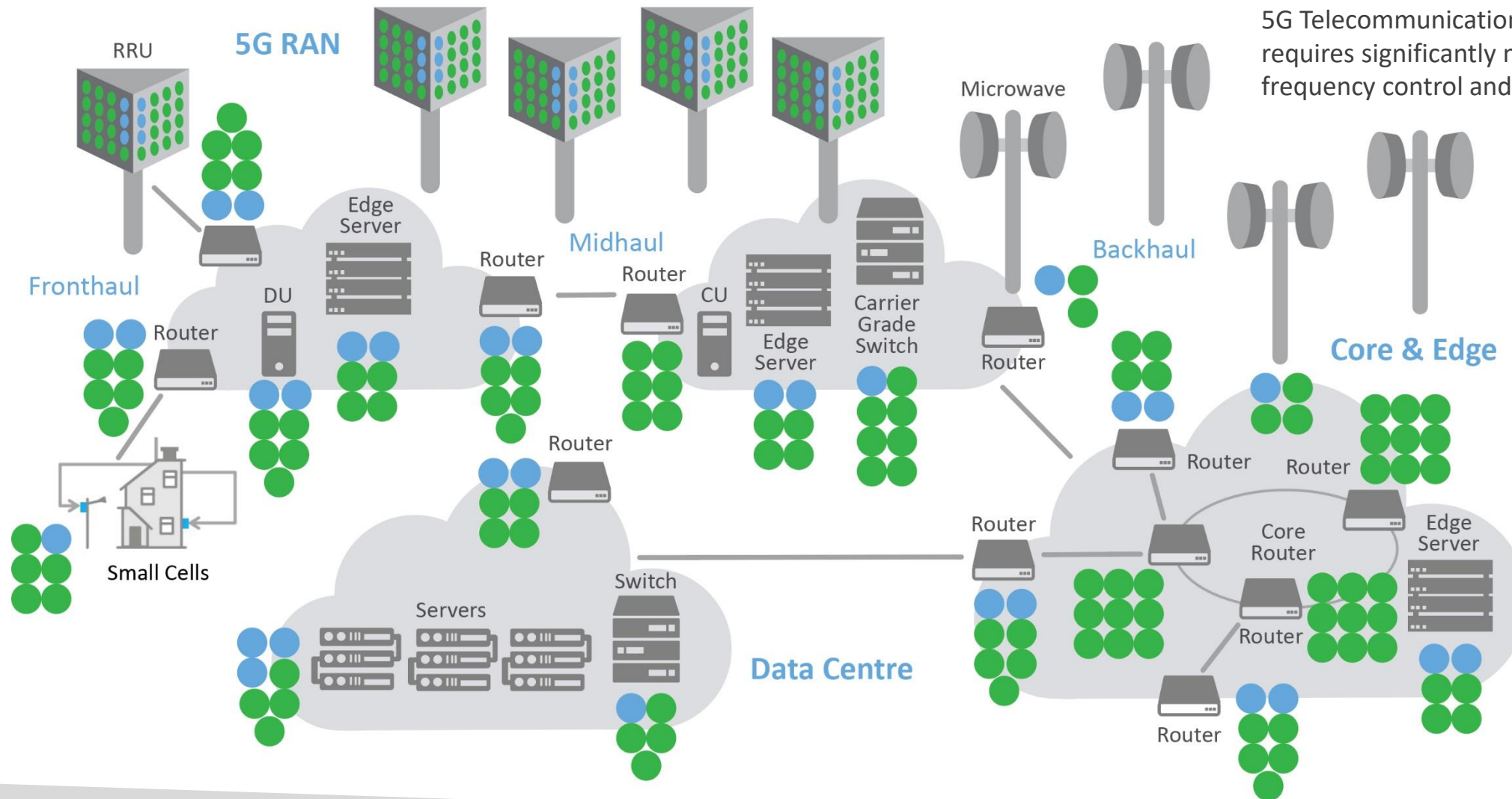
Source: Courtesy of Qualcomm

# Product applications in 4G networks





# Intensified product applications in 5G networks



5G Telecommunications network requires significantly more Rakon frequency control and timing products

# Rakon well positioned to grow

## Leading edge 5G technology to enable future requirements



**Long-term partnerships with all leading suppliers of telecommunications infrastructure equipment**

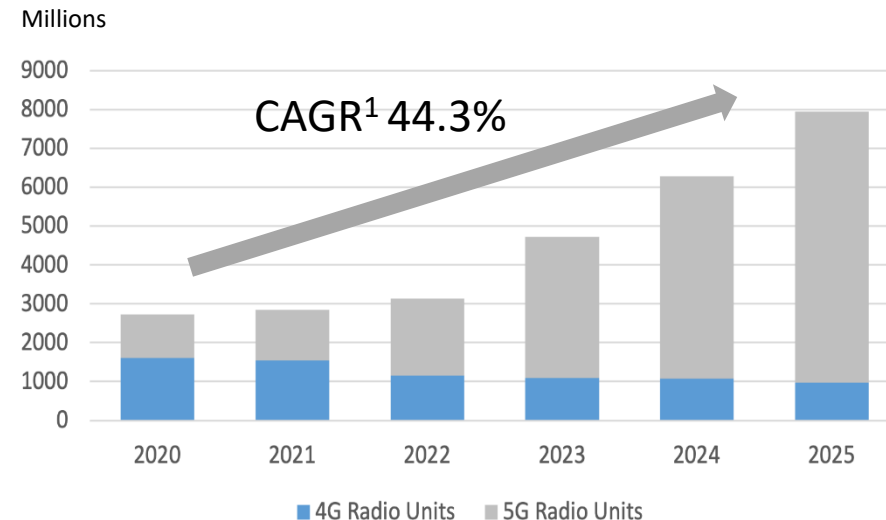
### Leading-edge technology

- ❑ Mercury products have a market advantage
- ❑ Several years ahead of competitors
- ❑ Key patents giving long-term protection

**Growth in all nodes of the network**

**Global footprint close to customers & low cost manufacturing facility**

### Radio Unit demand forecast



Source: Compiled from industry sources  
1 CAGR: Compound annual growth rate

# Space & Defence

## Momentum building in NewSpace



### Revenue growth

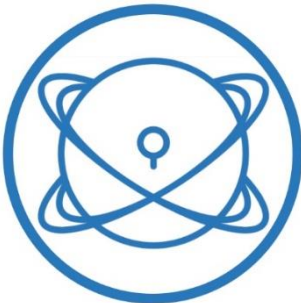
FY2021 \$30M, up 7%

Space & Defence comprises 24% of total revenue



### Mars Rover

Rakon designed / manufactured products on board NASA's Mars Perseverance Rover which landed on Mars in February 2021



### NewSpace satellite customer

Initial deliveries made for a major NewSpace LEO satellite constellation







### Steady Defence performance

Defence segment is a key source of innovation

Growth consolidated from previous year

# The NewSpace opportunity

## Major 10-year satellite launch programme

Satellite constellation	Number of satellites	
	Planned to launch	Approved to launch
	12,000	42,000
	1,000	2,000
	3,000	10,000
	1,400	3,000

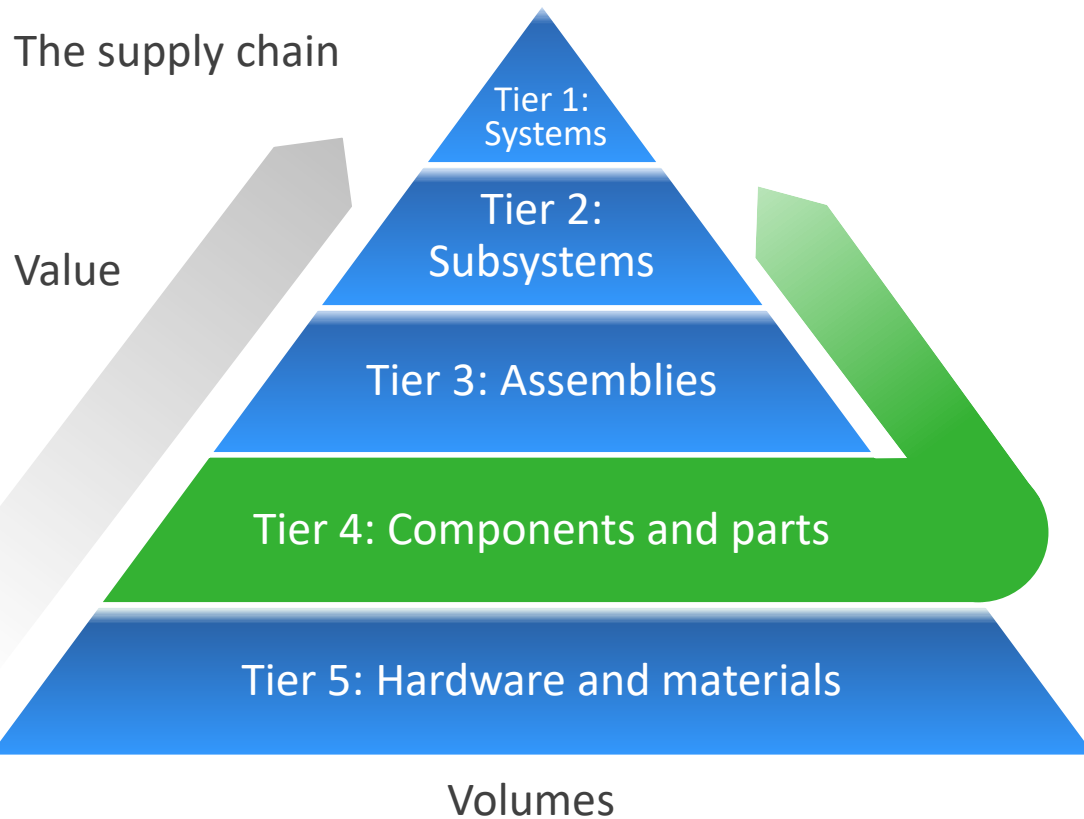
Source: Based on yearly industry projections



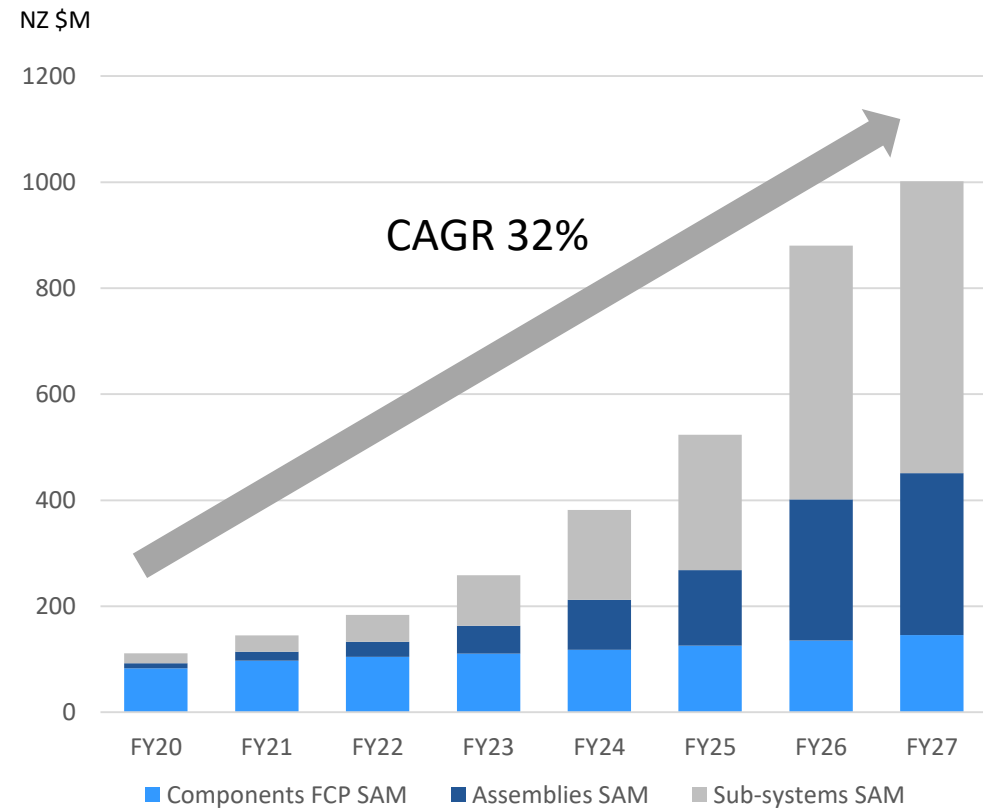


# Rakon NewSpace strategy

## 3–5 year growth plan

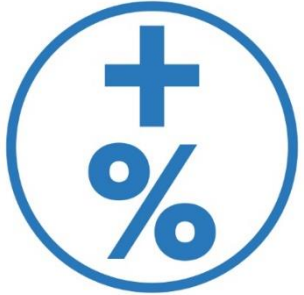


Rakon Serviceable Available Market



# Positioning

## Mixed FY2021 performance but strong FY2022 outlook



### Revenue down but better margin %

FY2021 \$14M, down \$4.9M  
Better gross margin percentage with improved product mix  
Positioning comprises 11% of total revenue



### Agriculture and mining growth

Growth in higher-margin precision industrial applications including growing share of agricultural / mining segments as automation becomes standard



### Autonomous vehicle market momentum building

Autonomous vehicle industry driving need for higher performance and higher reliability products



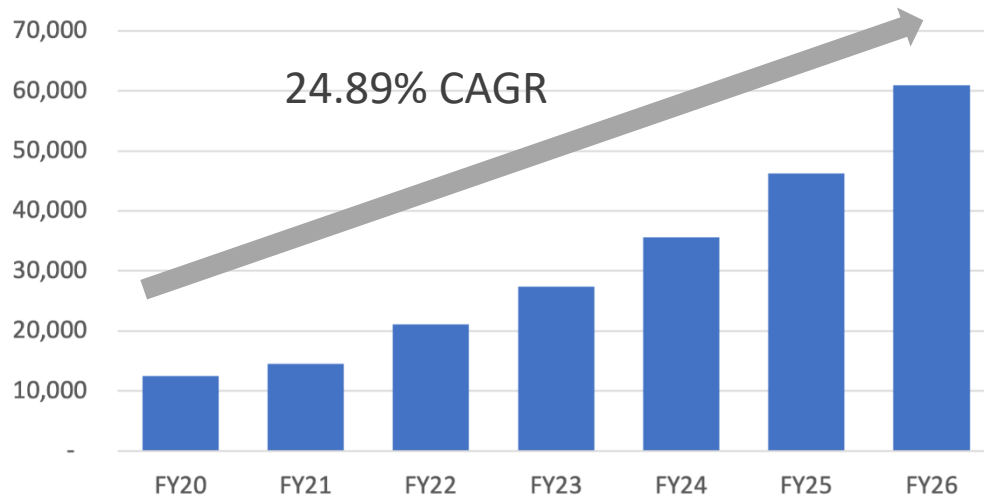
### New orders captured

Significant orders captured due to global TCXO shortages  
– delivering in FY2022 and FY2023

# Rakon growth strategy

## Autonomous agricultural and construction machinery

### Autonomous tractor units forecast



Source: MarketsandMarkets report



# Autonomous vehicles

## The changing requirements for automotive positioning technology



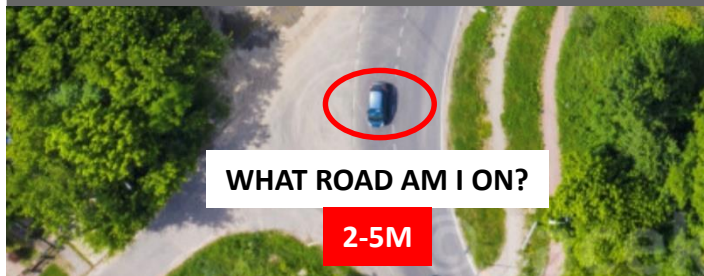
### Navigation

Accuracy: Consumer grade

**YESTERDAY**

### Technology Enablers:

- GPS + mapping



### Drive Assist & Driver Safety

Accuracy: High precision

**TODAY**

### Relative Positioning w/

- Sensors, cameras, LIDAR
- Radar, advanced mapping



### Autonomy

Accuracy: Survey, construction grade

**TOMORROW**

### Technology Enablers:

- Absolute positioning
- Advanced vision
- Edge computing + AI + V2V

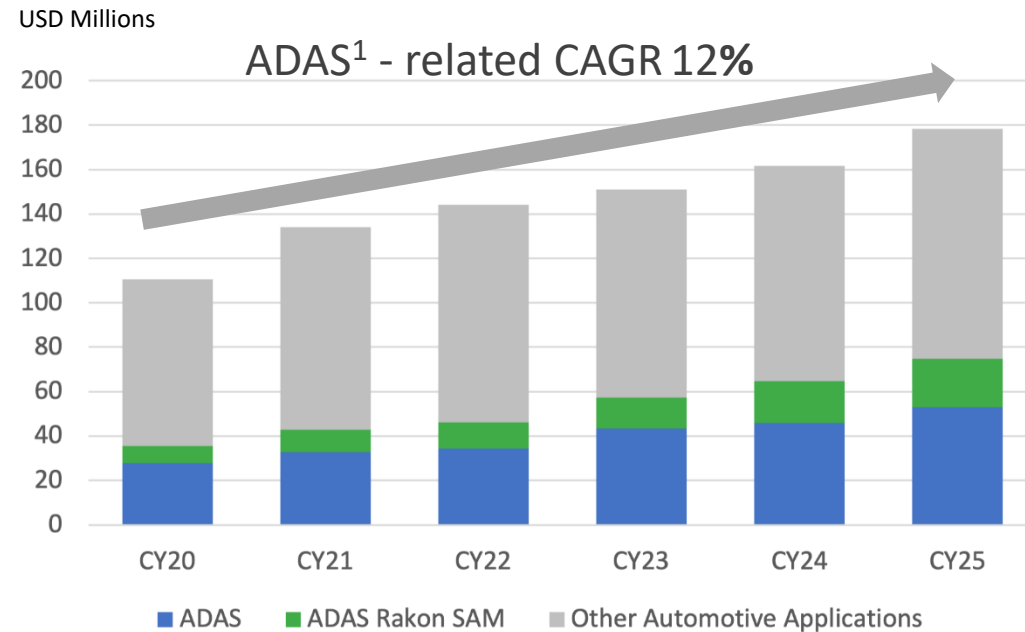




# Autonomous vehicles

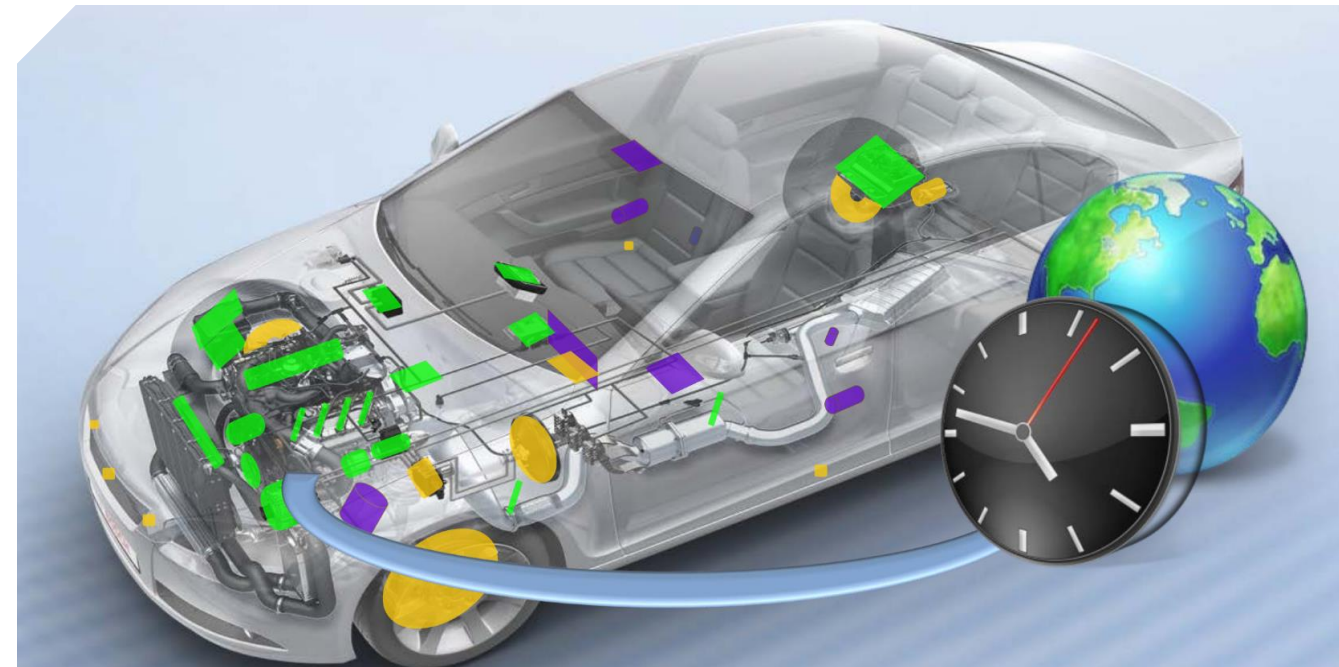
## Growing demand for high precision and high reliability

Crystal products potential by automotive application



Source: Industry estimates

<sup>1</sup> Advanced driver assistance systems



In-vehicle global synchronisation

# Managing supply chain risks

## Industry supply chain challenges due to critical component shortages

- ❑ Stretched lead times, lower allocations, expedite fees, price increases

### Focus on minimising customer disruption through:

- ❑ Continuous supplier engagement and escalation
- ❑ Diversifying supply base through alternative sources
- ❑ Extending blanket orders to critical suppliers
- ❑ Ordering extra raw material inventory and buffer stock
- ❑ Forecasting for the longer-term



# Q1 update



## Strong start to FY2022

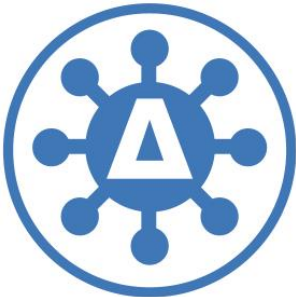
Telecommunications continued at higher run rate from previous quarter

Commencement of deliveries for increased TCXO business



## Cost pressures growing

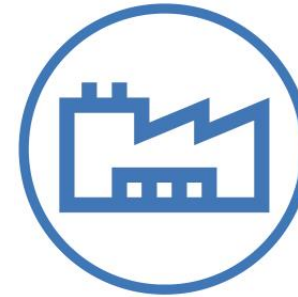
General cost inflation becoming evident, particularly in New Zealand



## India Delta impacts

India production lower in April but now at normal levels

Minimal impact on Q1 revenue



## New India plant project

Modern fit-for-purpose facility enabling future expansion

Low-cost advantage will enable extension of product lifecycle

Supports dual supply chain strategy

Two-acre site in Aerospace business zone



# In summary

## Strong FY2021 result

- ❑ NPAT up 142% on prior year to \$9.6M
- ❑ Underlying EBITDA up 59% to \$23.5M

## FY2022 result on track

- ❑ Customer delivery focus
- ❑ Risks being closely monitored and managed

## One-off gains from worldwide chip shortage

- ❑ Delivery mainly in FY2022 and part FY2023. Positive signs of some market share retention

## Strong order book ahead

## Medium-term growth focus

- ❑ 5G networks, data centres and autonomous machines
- ❑ 5G / AI applications, autonomous vehicles and LEO satellites (3 – 5 years)

## R&D / new product commercialisation

- ❑ Product leadership
- ❑ IP protection & know-how
- ❑ Customer partnerships
- ❑ ASICs & XMEMS®

## Solid financial management

- ❑ Conservative balance sheet to manage risks & capture opportunities







## Shareholders' questions



Resolutions



# Ordinary resolution



## Resolution 1: re-election of director

- That **Bruce Robertson Irvine**, who retires by rotation and is eligible for re-election, be elected as a director of Rakon



	Proxy votes lodged	For	%	Against	%	Discretionary	%
Bruce Irvine	89,747,796	83,295,783	92.81	1,923,121	2.14	4,528,892	5.05

# Ordinary resolution



## Resolution 2: annual directors' fee increase

- That the total annual pool for directors' fees be increased by \$100,000 from \$360,000 to \$460,000 with effect from 1 October 2021

	Proxy votes lodged	For	%	Against	%	Discretionary	%
<b>Directors' Fees:</b>	60,810,193	52,431,466	86.22	4,228,863	6.95	3,907,490	6.42



# Ordinary resolution

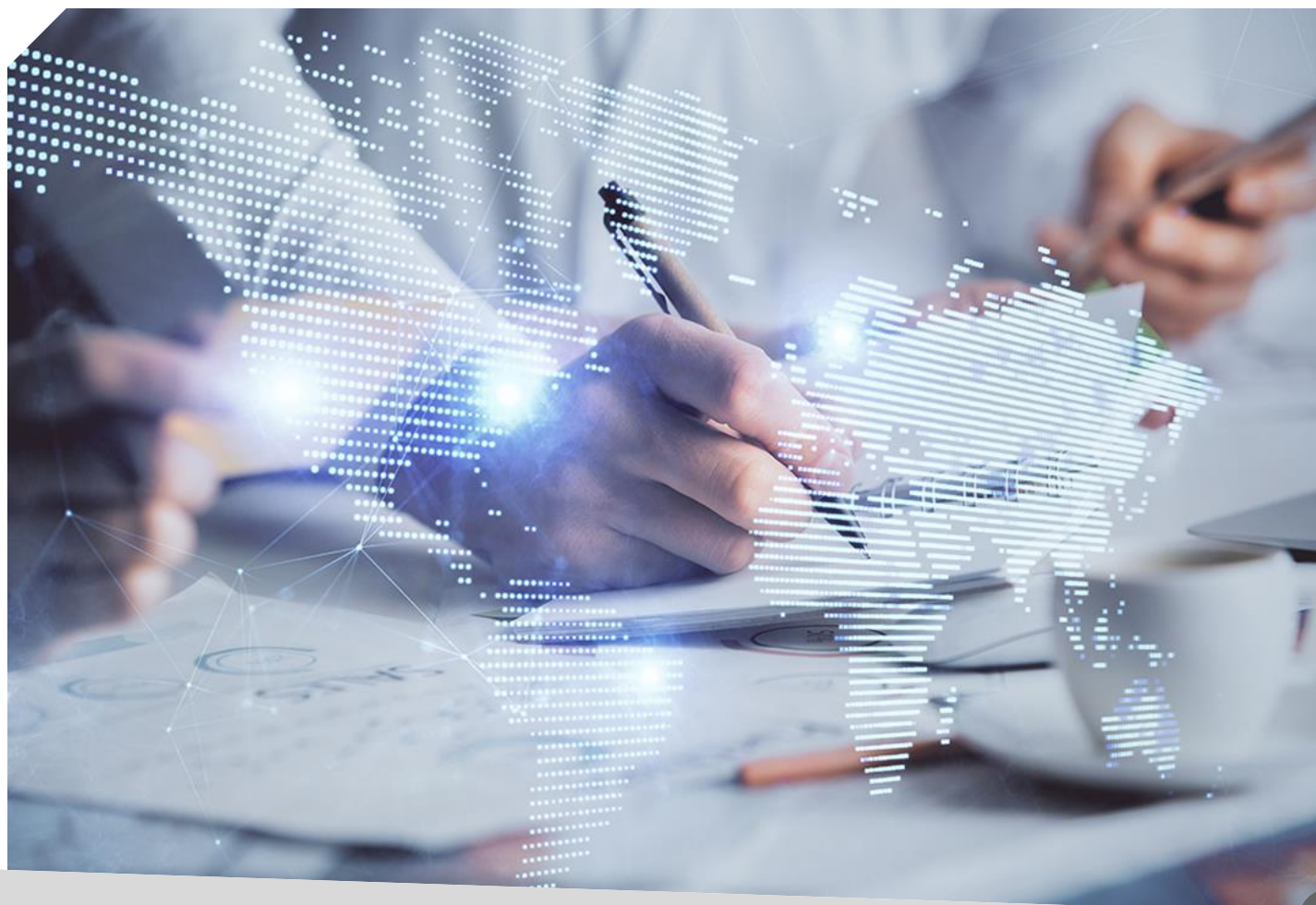


## Resolution 3: fixing remuneration of auditor

- That the directors are authorised to fix the remuneration of Rakon auditor, PricewaterhouseCoopers, for the following year

	Proxy votes lodged	For	%	Against	%	Discretionary	%
<b>Auditor Fees:</b>	89,747,796	84,266,019	94.05	877,959	0.98	4,454,222	4.97

## General business and shareholders' questions





Meeting closure

# Disclaimer



This presentation contains not only a review of operations, but also some forward looking statements about Rakon Limited and the environment in which the company operates. Because these statements are forward looking, Rakon Limited's actual results could differ materially

Although management and directors may indicate and believe that the assumptions underlying the forward looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward looking statements will be realised

Media releases, management commentary and investor presentations are all available on the company's website and contain additional information about matters which could cause Rakon Limited's performance to differ from any forward looking statements in this presentation. Please read this presentation in the wider context of material previously published by Rakon Limited



Find out more



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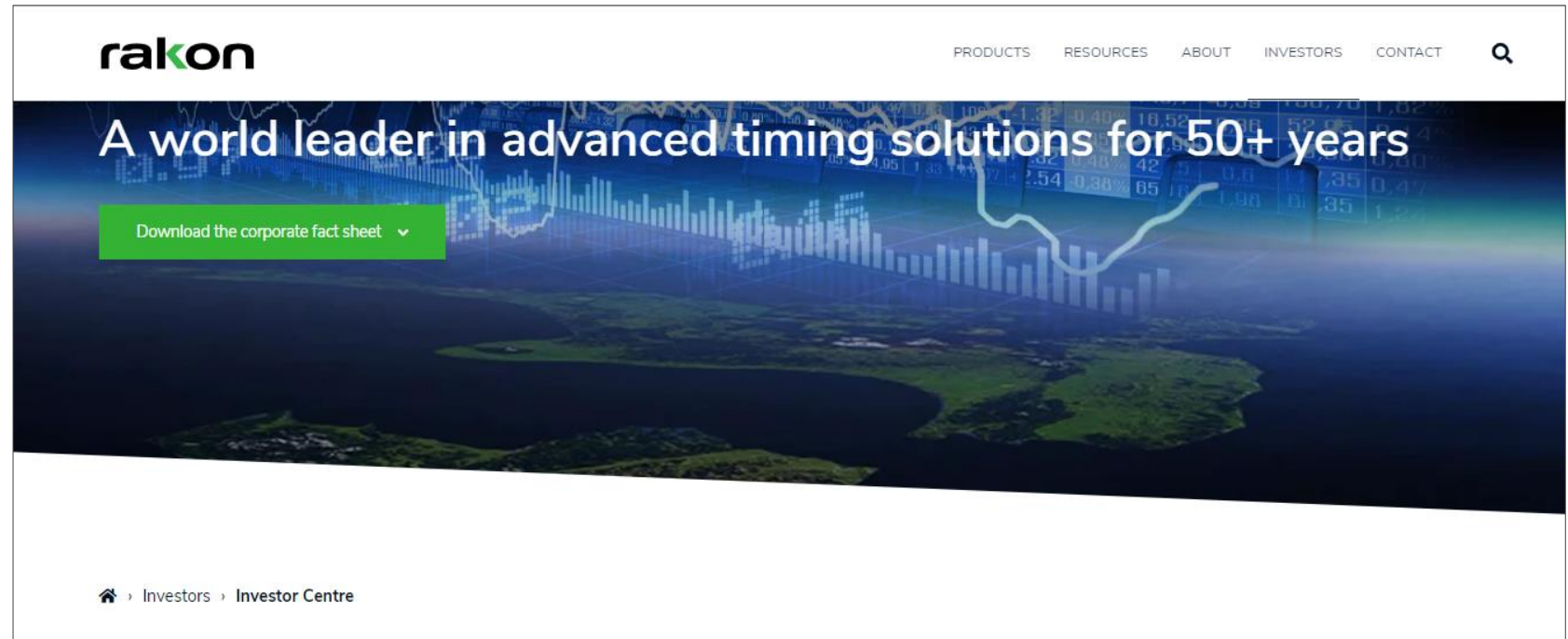
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## Appendices



# Glossary

**ASIC: Application Specific Integrated Circuit**

**Cloud computing:** Allows users to have on-demand availability of a remote computer system's resources for improved computing power or data storage (usually located quite far from the user, such as in another country)

**Crystal Oscillator (XO):** A quartz crystal combined with oscillation circuitry to generate a repeating electric signal

**Crystal Resonator (Xtal):** At the heart of XOs, VCXOs, TCXOs and OCXOs are quartz crystals, which are designed to resonate with electrical stimulation using the piezoelectric effect

**Data centres:** Usually a building that is used to hold a computer system and other components to backup data

**Design-in:** An opportunity that allows Rakon's product to be used as the reference component for certain customer reference designs (a technical blueprint of a system intended to be used by customers)

**Edge computing:** Allows users to have on-demand availability of a remote computer system's resources for improved computing power or data storage (usually located close to the user, such as within the same city)

**5G:** 5<sup>th</sup> generation of the telecommunications standard, providing 10 to 1000 times better performance in many different applications

**5G millimetre wave (mmWave) technology:** The equipment that enables higher frequency data transmission in 5G

**Mercury™ / Mercury+™:** Rakon's proprietary integrated circuit used in OCXOs to achieve clock variations to less than 1 billionth of a second, enabling precision timing in 5G applications

**NewSpace/ NewSpace LEOs:** Refers to the commercial space sector for mainly low earth orbit (LEO) satellites

**O-RAN:** Mobile networks that are more intelligent, open, virtualised and fully interoperable

**Oscillator:** A circuit or device that generates a fixed frequency signal and consists of a resonator and electronic components

**Oven Controlled Crystal Oscillator (OCXO):** A crystal oscillator that uses a miniaturised oven to keep its internal temperature constant

**Pluto®:** Rakon's proprietary integrated circuit used in TCXOs to achieve clock variations to less than 100 millionth of a second, enabling higher data rates in 5G applications

**Surface Acoustic Wave (SAW) resonator:** At the heart of SAW oscillators are SAW resonators that use the piezoelectric effect to generate electrically stimulated acoustic waves at a resonant frequency

**System solutions:** Refers to Rakon's solutions that include high performance products, equipment and consulting services for Space & Defence

**Temperature Compensated Crystal Oscillator (TCXO):** A crystal oscillator with additional circuitry to remove frequency variations due to temperature change

**Tier-1 customers:** recognised key players within their respective industries, that make up a significant market share

**Voltage Controlled Crystal Oscillator (VCXO):** A crystal oscillator with an adjustable output frequency

**Voltage Controlled SAW Oscillator (VCSO):** A SAW oscillator with an adjustable output frequency

**XMEMS®: Crystal Micro-Electro-Mechanical System.** Rakon's advanced quartz-based resonator technology. It is made with Rakon's NanoQuartz™ microfabrication process, delivering unprecedented resonator and oscillator performances





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