rakon

Fact Sheet

About Rakon

Frequency Control & Timing for High Speed Connectivity

Rakon is a global high technology company and a world leader in its field. We design and manufacture advanced frequency control and timing solutions. Rakon has eight manufacturing plants including four joint ventures plants and five research and development centres. Customer support centres are located in 13 offices worldwide.

Today we live in a connected society of wired, wireless and optical networks. Data is being transferred everywhere, at any time and at high speeds. Our products are found at the forefront of communications where speed and reliability are paramount. Primarily based around quartz crystal technology and utilising its unique and natural piezoelectric properties, our products create extremely accurate electric signals. These signals are used to generate radio waves and synchronise time in the most demanding communication applications.

Rakon is proud of its New Zealand heritage which was founded in Auckland in 1967. It is a public company listed on the New Zealand stock exchange, NZSX, ticker code RAK.

Strategic Change

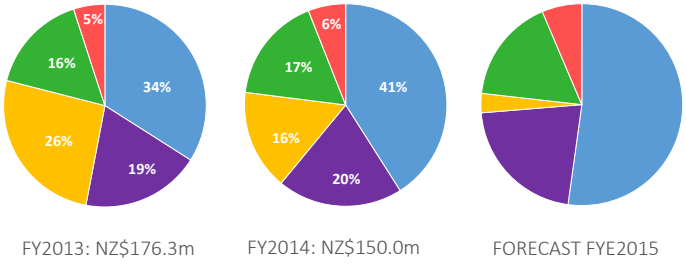
The company has undertaken significant change in 2013 and 2014. The 'new' Rakon is a much leaner, globally competitive company, optimally focussed on generating shareholder value. We have retained the foundations central to Rakon's renowned success and repositioned the business around our core strengths – higher margin, technologically advanced products. Rakon has a customer portfolio of global leaders in their respective markets, as a result of our ability to offer disruptive technologies coupled with comprehensive application knowledge. Our focus is on enabling next generation technologies as well as retaining or securing 'preferred supplier' status with leading Tier One companies in the telecommunications, global positioning and space & defence markets. Business targets are centred on delivering high value, high performance products to these segments – driven from the operational excellence of our worldwide facilities.

Group Financial Results

NZD Millions	HY2015	FY2014	HY2014	FY2013
Revenue	61.4	150.0	80.5	176.3
Underlying EBITDA*	4.3	(7.5)	(4.7)	5.1
Depreciation and amortisation	4.8	16.5	5.2	12.1
Loss from discontinued operations	-	33.3	24.3	7.6
Impairment	-	19.9	7.5	17.3
Net profit/(loss) after tax	(3.4)	(83.8)	(45.7)	(32.8)
Earnings per share (cents)	(1.8)	(41.7)	(22.3)	(16.8)
Operating cash flow	(0.0)	12.5	7.8	(2.7)
Capital expenditure	2.8	5.9	3.7	12.3
Net debt	8.2	6.4	27.1	33.1
Net debt to equity	10.6%	8.1%	23.3%	21.1%
Return On Equity (ROE)	-4%	-106%	-39%	-21%

Revenue Mix

Changing in Line With Strategic Actions



*Disclosure of Non-GAAP Financial Information.
Rakon has used 'Underlying EBITDA' as a measure of non-GAAP financial information in this publication and it is defined as: "earnings before interest, tax, depreciation, amortisation, impairment, loss on disposal of assets, employee share schemes, non-controlling interests, adjustments for associates and joint ventures share of interest, tax & depreciation, and other non-cash items."

'Underlying EBITDA' is a non-GAAP measure, with its presentation not being in accordance with GAAP. The Directors present 'Underlying EBITDA' as a useful non-GAAP measure to investors, in order to understand the underlying operating performance of the Group and each operating segment, before the adjustment of specific non-cash charges and before cash impacts relating to the capital structure and tax position. 'Underlying EBITDA' is considered by the Directors to be the closest measure of how each operating segment within the Group is performing. Management uses the non-GAAP measure of 'Underlying EBITDA' internally, to assess the underlying operating performance of the Group and each operating segment.

The use of 'Underlying EBITDA' in this publication for the half year of FY2015 has been extracted from unaudited financial statements. The use of 'Underlying EBITDA' in this document has been extracted from audited financial statements for FY2013 – FY2014.

Company Information

Share Listing

Share price as at 18 November 2014: $0.35
Shares on issue as at 18 November 2014: 191,038,591
Market capitalisation: $66,863,507
Financial year: 31 March 2014
Industry sector: Goods, Intermediate & Durables
NZX Indices: NZX SciTech, NZX SmallCap, NZX All

Share Registry

Computershare Investor Services Limited
Private Bag 92119
Victoria Street West
Auckland 1142
New Zealand
Tel: +64 9 488 8777
Fax: + 64 9 488 8787
enquiry@computershare.co.nz
www.computershare.co.nz

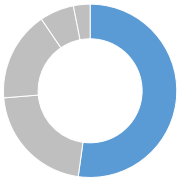
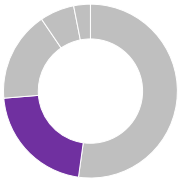
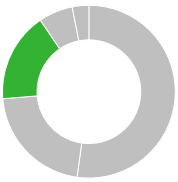
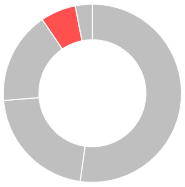
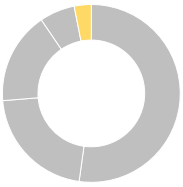
Company Advisers

Auditors: PricewaterhouseCoopers
Principal Lawyers: Bell Gully
Bankers: ASB Bank

Company Information

Rakon Limited
8 Sylvia Park Road, Mt Wellington,
Auckland 1060, New Zealand
Telephone: +64 9 573 5554
Fax: +64 9 573 5559
www.rakon.com

Products and Markets

	Telecommunications	Global Positioning	Space & Defence	Other	Smart Wireless Devices
Market Definition	The equipment which enables communications networks to operate. Includes base stations, microwave transmission, fibre optics, small cells and network timing.	Includes all Global Navigation Satellite System (GNSS) equipment and other location and positioning systems. Applications include Personal Navigation Devices (PNDs), high precision GPS (surveying, mining, agriculture), rescue beacons and sport & recreation products.	Applications where reliability as well as precision and performance are critical. This market also includes aviation and other high reliability applications.	Uses are multiple and include: wireless control, test and measurement, smart metering, smart lighting, Machine to Machine (M2M) and emerging markets.	Portable devices with added data functionality such as internet access, computing and video capability. Examples include smart phones (such as iPhones, Android phones etc.) and tablet PCs (such as iPads).
Products	OCXOs, TCXOs, VCXOs and XOs.	TCXOs and Crystals.	DPCSSs, OCSOs, OCXOs, TCXOs, VCXOs, XOs and Crystals.	OCSOs, OCXOs, TCXOs, VCXOs, XOs and Crystals.	TCXOs, VCXOs and XOs.
Principal Manufacturing Locations					
R&D					
Forecast Share of Revenue FYE2015					
Key Points	Continued market share and revenue growth. Rakon supplying all Tier One Original Equipment Manufacturer (OEM) suppliers. Strong demand generated from 4G rollouts in the US and Asia. Rakon product portfolio well positioned for new generation equipment. 4G LTE base stations and supporting infrastructure is expected to drive demand for the next three years.	Rakon has a strong reputation in the global positioning market and remains the leading frequency control supplier. Margins improving as GPS customers focus on more industrial and specialised applications.	A growing number of design wins from new product platforms. Expanded focus into US, India and Asian markets, are expected to yield revenue growth in 24 to 36 months.	Rakon is constantly looking for new and emerging markets that utilise its value added technology.	Rakon has divested from the low margin Smart Wireless Device (SWD) business to focus on high value, high performance products. This resulted in the sale of Chengdu factory to ECEC in 2013 with Rakon maintaining a minority shareholding. Rakon also retains some limited investment in SWDs with a 40% share in Timemaker (crystal blank producers).

Strategy and Vision

Rakon's strategic focus is on markets for growth and profitability, technology development and operational excellence. Our vision is to be the preferred 'frequency control product' supplier to the telecommunications, global positioning and space & defence markets with best-in-class application knowledge.

Rakon's focus is on shareholder value creation and our overarching objective is to achieve an overall Return On Equity (ROE) of >12%.

Strategic Focus	Focus on Markets for Growth & Profitability			Technology Development		Operational Excellence	
	Telecomms	Global Positioning	Space & Defence	Products / Applications	R&D	Operating Platforms / Efficiency	People
FY15 Strategic Priorities	• Growth from 4G/LTE global deployments. • Leverage the current strength in customer base and design-in activities. • Capture market share through technology transitions.	• Maintain strong market share through superior product performance. • Shift in focus to specialised applications.	• Develop a global market position by expanding beyond well established European markets. • Leverage new product and platform developments.	• Develop application specific technology solutions and next generation products. • Development of products for future emerging markets.	• Focus on delivering the technology roadmap. • Continue the development of disruptive technologies. • Implement a best practice 'select-to-launch' process.	• Complete the structural realignment initiative in FY14, to realise planned operating cost savings in FY15. • Implement the transfer of Lincoln manufacturing to NZ. • Focus on speed.	• Embed new organisational structures following FY14 restructuring and market re-focus. • Align our global effort to deliver the new strategic plan.

Governance

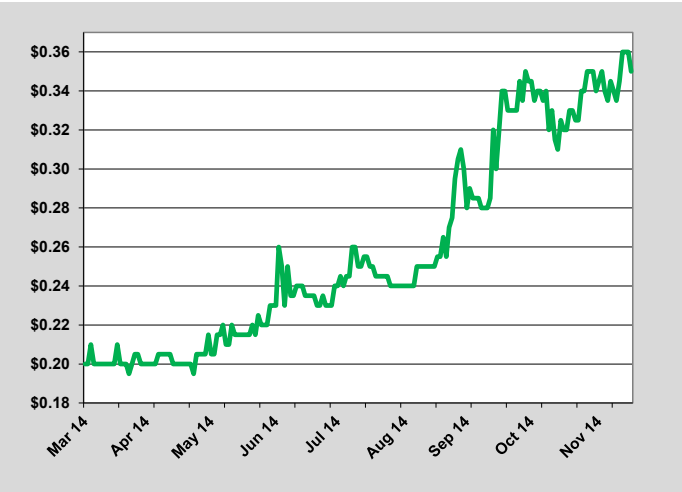
Bryan Mogridge – Independent Chairman

Appointed Chairman in 2005. Bryan has been a public company director since 1984. Formerly CEO of Corporate Investments and Montana Wines. Current directorships: Lantern Hotel Group PTY Limited (Chairman), Pyne Gould Corporation Limited (Chairman), BUPA Australia PTY Limited (Director) and Mainfreight (Director). Bryan is also Chairman of the Starship Foundation.

Board of Directors

Bryan Mogridge (Independent Chairman), Brent Robinson (Executive Director), Bruce Irvine (Independent Director), Sir Peter Maire, KNZM (Non-Executive Director), Darren Robinson (Executive Director), Warren Robinson (Non-Executive Director and Founder), Herb Hunt (Independent Director).

Rakon Share Price



Source: IRESS
Shows daily close price.

Leadership

Brent Robinson – Executive Director (Managing Director and CEO)

Appointed to the Board in 2005. 35 years at Rakon which includes establishing a global business. 28 years as Managing Director/CEO. Under Brent's leadership Rakon has grown into a global and diversified business with revenues increasing from NZ$1 million to NZ$150 million. Brent also acts as Rakon's Chief Technology Officer, driving the business's technology and innovation. Awarded the New Zealand Hi-Tech Trust – Flying Kiwi Award in 2011.

Simon Bosley CA – Chief Financial Officer and Company Secretary

Simon was appointed Chief Financial Officer in February 2013. In his current role he is responsible for Rakon's finance, investor relations and information systems as well as taking a lead role in the structural change undertaken in 2014. Simon is also Rakon's company secretary. He previously spent ten years with Sony in executive management positions in New Zealand and Australia.

Group Executive

Brent Robinson (Managing Director/CEO), Simon Bosley (Chief Financial Officer), Darren Robinson (Sales and Marketing Director), Dr. Sinan Altug (Managing Director, Europe), Nick Maire (New Zealand General Manager), Andrew McCraith (Global Director – Strategic Marketing & Business Development), Malcolm Leuchars (Global Human Resources Manager).

Financial Calendar

Date	Event
17 December 2014	HY2015 Interim Report Available
21 May 2015	FY2015 Full Year Results Announcement

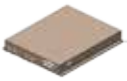
Dividend Policy

From the completion of the year ending 31 March 2015, Rakon intends to begin paying a dividend of up to 50% of the after tax profit, if considered fiscally appropriate.

Glossary

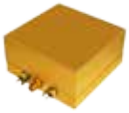
Crystals (Xtals)
At the heart of XOs, VCXOs, TCXOs and OCXOs are quartz crystals (Xtals).

Crystal Oscillators (XOs)
XOs are quartz crystals combined with basic oscillation circuitry. XOs can offer high frequencies with low performance. They are typically used in telecommunications networks and other broadband applications.



Digital Pulse Compression Sub-Systems (DPCSSs)
DPCSSs are fully programmable and are used to upgrade existing radars and to extend their life. DPCSSs have high speed digital processing capability, enabling remarkable increases in the overall system performance of radars.

Oven Controlled Crystal Oscillators (OCXOs)
OCXOs are used in applications where precise reference clocks are needed to secure high volume data traffic. Stabilities can be better than 0.1 part per billion (ppb). Used in telecommunications infrastructure and space & defence applications.



Oven Controlled SAW Oscillators (OCSOs)
OCSOs are oven controlled oscillators with embedded Surface Acoustic Wave (SAW) technology. SAW technology enables high frequency fundamental outputs (available from 320 MHz up to 2 GHz). OCSOs also deliver ultra low phase noise performance. They are commonly used in test and measurement equipment, high speed converters, radar systems and other precise communication applications.

Temperature Compensated Crystal Oscillators (TCXOs)
TCXOs are essentially quartz crystals combined with electronic circuitry to make oscillators which remove much of the error in frequency, caused by variations in temperature.

- **Innovating Since 1967**

A proud history of delivering industry 'firsts' such as the following: miniature GPS TCXO, stratum 3 TCXO, high *g*-shock TCXO and lowest *g*-sensitivity SMD TCXO, extreme *g*-emergency beacon TCXO, LTE small cell TCXO, Application Specific Integrated Circuit (ASIC) based OCXO, Highest Stability OCXO, ultra low phase noise OCSO and DPCSS for radars.

- **In-House ASIC and Test Equipment Teams – Key Differentiator**

Rakon designs its own oscillator ASICs and develops its own production test equipment and this is a unique capability in the Frequency Control Product (FCP) domain – enabling next generation technologies.

- **High Performance at Competitive Pricing**

Five R&D centres worldwide with a 50+ year history. Rakon's experience and in-depth knowledge of system requirements, enables development of innovative solutions into our customers' ecosystems. Manufacturing operations in India and China deliver competitiveness.

- **Winner of Prestigious Industry Awards**

Awards include the coveted Queen's Award for Enterprise – International Trade, New Zealand's 'Hi-Tech Company of the Year' and 'Hi-Tech Company of the Decade', 'Supreme Award' and 'Hi-Tech Exporter of the Year Award' as well as a number of Supplier Awards.

Voltage Controlled Crystal Oscillators (VCXOs)
VCXOs are oscillators designed to have their oscillation frequency changed significantly by a controlled voltage. Customers using high performing OCXOs for base stations and telecommunications infrastructure also use many VCXOs at different frequencies as part of their timing network requirements. VCXOs can offer much higher frequencies as well as low noise performance.

Eight manufacturing plants including four joint venture plants and five Rakon research and development centres. Customer support offices are worldwide.

Locations: China, France, Germany, India, South Korea, New Zealand, Singapore, Taiwan, the United Kingdom and the United States of America.

rakon Global