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Interim Results

for Financial Year to 30 November 2021

Richard Gibbs, CEO
Michael Tyerman, CFO

filtronic.com

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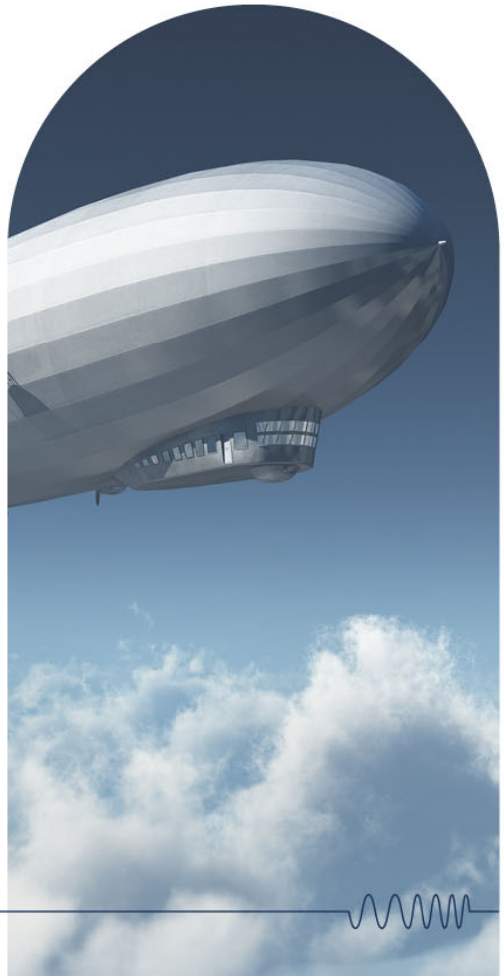

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Enabling the future of RF Microwave and mmWave communications

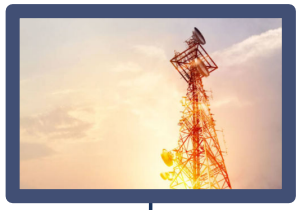
Creating value for our stakeholders through technology leadership

Executive Overview

Overview

Filtronic plc is a **designer** and **manufacturer** of advanced RF communications products serving five core markets:

Telecommunications Infrastructure (X-Haul)



Aerospace & Defence

Critical Communications

Transport & Private Networks

Space / *HAPS/LEO

- HAPS: High Altitude Pseudo Satellites
- LEO: Low Earth Orbit Satellites

RF design expertise at microwave frequencies up to 180GHz

Specialist manufacturing of RF Subsystems and mission critical hybrid assemblies

We deliver high-performance solutions based on:

- Flexible UK / USA manufacturing resources allowing OEM's to quickly scale to volume
- Accredited manufacturing facilities with robust security, proven processes and full traceability
- Order fulfilment options which include turn-key design and manufacturing, inventory hub and kitting

Half Year Highlights

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Revenue
£8.0m (+12%)

Adjusted EBITDA*
£1.1m (+83%)

Adjusted operating profit**
£0.6m (+554%)

Cash at bank
£3.0m (+5%)

Net cash (net of all lease obligations except right of use property lease)
£2.2m (+14%)

* Adjusted EBITDA is earnings before interest, taxation, depreciation, amortisation and exceptional items.

** Adjusted operating profit is operating profit/(loss) before exceptional items.

- Strong performance from core business operations relative to H1 2021
- Healthy cash position will-drive investment in product development to deliver growth in target markets
- Served core-markets showing signs of recovery with key customers making firm forecast commitments for H2 2022 and beyond
- Responded effectively to global semiconductor shortage challenge with:
  - proactive sourcing
  - increased inventory holding
  - rapid redesign / qualification
- Robust orderbook phased for delivery in H2 2022 subject to supply of customer owned semiconductor materials
- Business outlook continues to be in line with management expectations for FY 2022
- Jonathan Neale appointed as Chairman in November 2021

Financial Summary

Revenue: 12% Growth H1 2022 vs H1 2021

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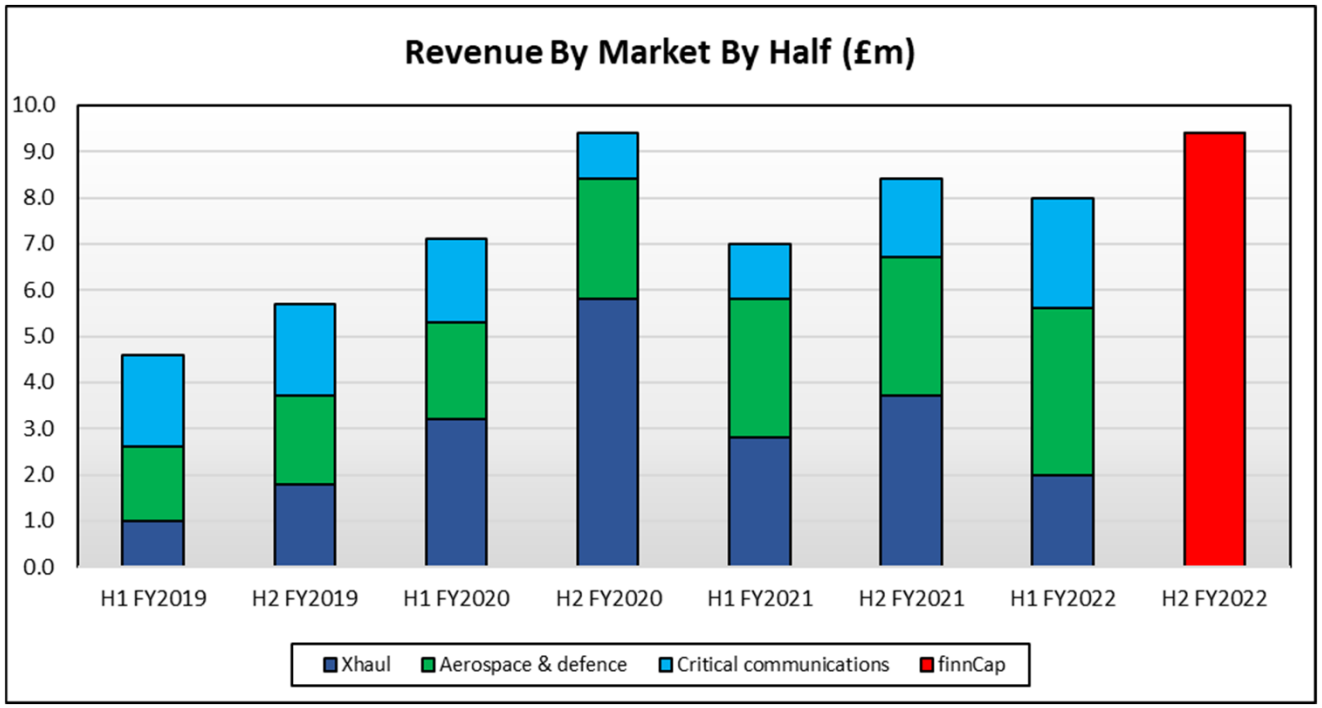
Revenue in line with internal forecasts

Key strategic objective:

Develop customer base outside of top three customers



Group revenue £8.0m (2021: £7.1m)

- Recovery of critical communication products with investment back into infrastructure projects.
- Aerospace & defence improvement through battlefield communications project.
- Xhaul revenue impacted by the global semiconductor component shortage. Recovery expected in H2.

12% growth over same period last year.

- **Xhaul:** Decreased 35% vs H1 21 but demand remains good.
- **Defence:** Growth of 20% vs H1 21.
- **Critical comms:** 100% revenue growth vs H1 21

Third Consecutive year of Adjusted EBITDA growth

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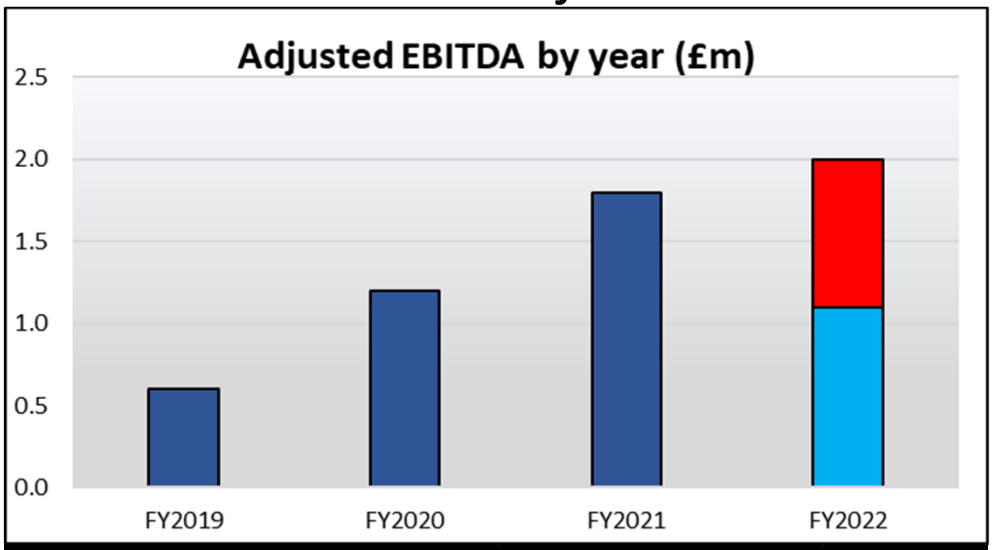
Adjusted EBITDA in line with internal forecasts



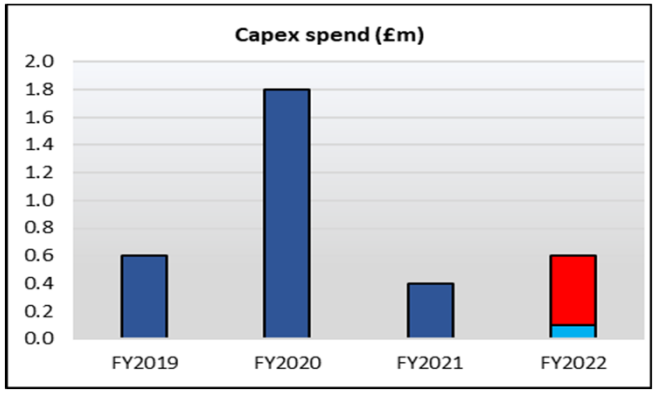
Half year results (£m)

	H1 2022	H1 2021	Change
Revenue	**8.0**	**7.1**	**12%**
COGS	(2.6)	(2.7)	4%
Operating costs	(4.8)	(4.3)	(12%)
Operating profit (Adjusted)	**0.6**	**0.1**	**309%**
EBITDA (Adjusted)	**1.1**	**0.6**	**83%**

- **Stronger sales mix** from higher margins within aerospace & defence and critical communications markets. COGS 4% lower on 12% revenue increase.
- **Further yield and process efficiency improvements** delivered further manufacturing cost savings.
- Overhead costs increased by 12% to £4.8m to support top line growth with recruitment of key employees.
- **Operating gearing** improves profitability as revenues increase as cost base can support higher revenues.
- **Adjusted EBITDA** grew by 83% to £1.1m.
- Expect to increase EBITDA in H2 delivering against current market expectation.

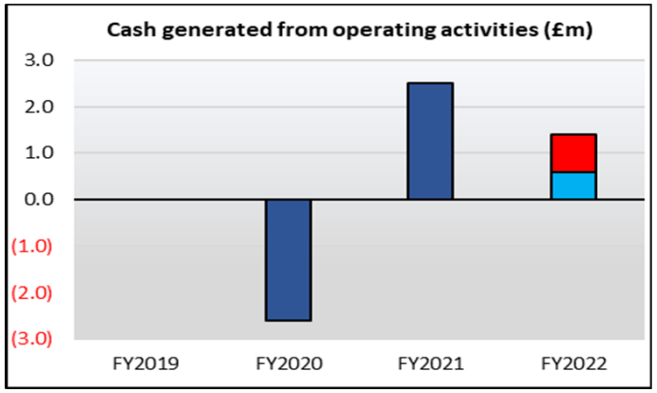
finnCap forecast

Balance Sheet Highlights



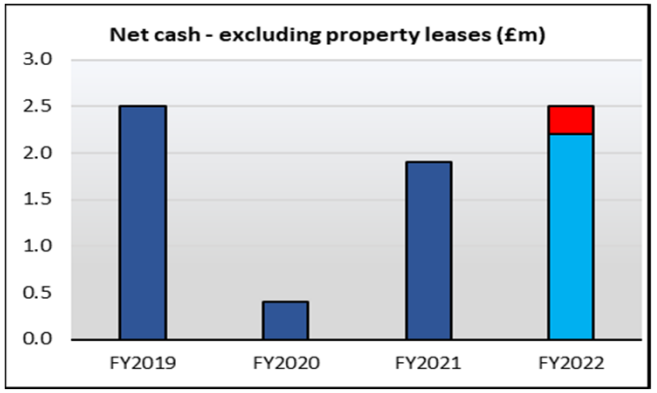
Capital expenditure needs still low

- £0.1m capex in H1 as well kitted for current requirements.
- Capex spend in H2 planned to accelerate NPI developments and service the opportunity pipeline.
- Future capex spend will be aligned to incremental revenue opportunities and technology capability.



Good cash generation

- £0.6m cash generation from operating activities in H1.
- Solid EBITDA cash conversion limited by working capital investment in inventory and stronger trading in Q2.
- Plan to continue to de-risk material availability risk from the global electronic component shortage and reduced shipping capacity out of Asia by holding more inventory in H2.



Strongest net cash position expected for 4 years

- £2.2m net cash when excluding IFRS16 property leases.
- Cash in bank of £3.0m (31 May: £2.9m) provides a strong position to develop the business and invest in top line growth.
- Further strengthening of the balance sheet.
- Undrawn invoice discounting debt facilities available - £3.0m Barclays and $4.0m Wells Fargo.

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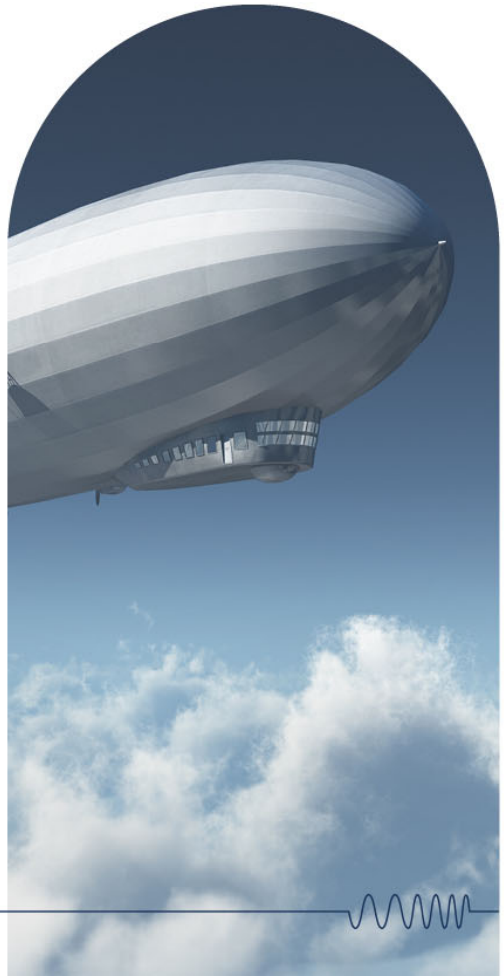
Operational Summary



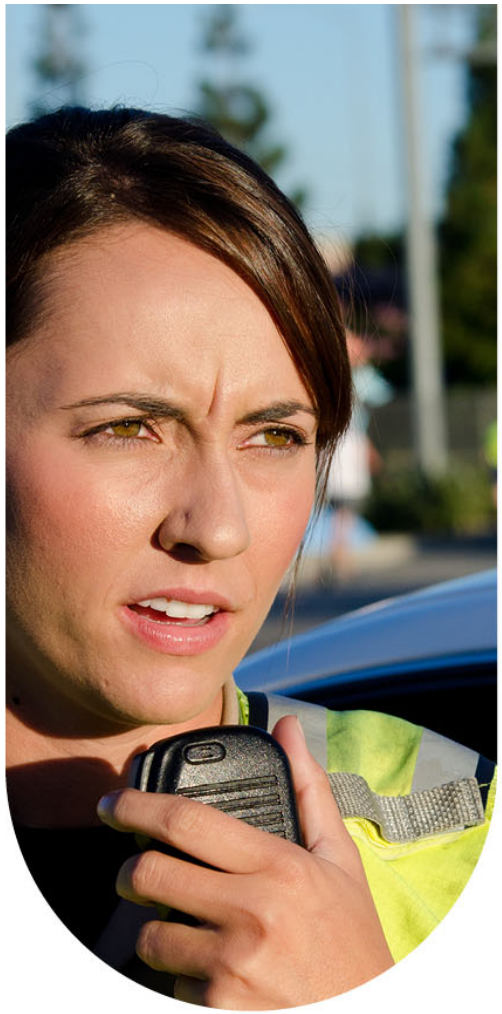
Business Development Highlights

- £800k initial production order from new test equipment customer following delivery of prototypes
- £1.3m Battlefield radio communications equipment order transitioned from design into low run rate production
- “Best-in-class” Tower Top Amplifier achieving anticipated volumes
- Several filter design wins for large UK defence prime based on recent defence accreditation of Leeds facility
- Pipeline increased with inclusion of opportunities identified with LEO space primes
- Expanding sales reach by agreeing terms with new agents and distributors in Europe, Asia and the USA
- Generating leads and building the Filtronic brand with a structured marcom plan

Building Momentum

- UK Government investment in sovereign Telecommunications Infrastructure (including the OneWeb) continues to build momentum and opportunity
- UK defence primes making decisions regarding technology and UK manufacturing capability for next generation radar platforms
- Global 5G infrastructure roll-out continues at pace with expectation that E-band frequencies are licenced worldwide
- Critical Communications market recovering with federal and state spending directed towards infrastructure investment
- Expanded sales channels in Europe, Asia and USA starting to drive an increased level of FRI / RFQ engagement
- Long term development programme for a 5G test equipment OEM transitioning to production demand
- Engagement in HAPS market brings E-band IP to the attention of LEO telecom constellations players
- Growing level of market acceptance for TTA products - specified in important state upgrade programs
- Final delivery of battlefield radio communications equipment driving interest in follow on demand
- Data analytics associated with targeted marketing activity shows increased levels of engagement at target customers

Strategy & Growth



Strategy & Growth – markets / applications update

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	Vertical Market & Application	Progress in 1st year	Target mid term	**Interim Update**	Target long term
	Aerospace	• TRM + filter development contracts for AESA radar. • TRM + filter research and for next gen radar • Consolidate business model for hybrid manufacturing	• Tx Rx Module + filter prototype for AESA radar . • TRM + filter research and for next gen radar • Portfolio of OEM customers for CMS and OSAT services	**• 8 separate filter programmes secured with UK primes** **• Completed Tx module prototype for next gen radar** **• Defined SiP solution for AESA radar upgrade**	• Qualification of prototypes for AESA radar upgrade. • TRM + filter development for next gen radar • Turnkey OSAT* offering for UK Defence OEMs
	Terrestrial 5G Telecom Infrastructure	• Promote superior Morpheus power performance to tier 1's • Secure funding for mmWave development program • Start mmic design for W-band in accordance with roadmap	• Develop E-band active SiP/ active diplexer solution • Develop Track to Train solution based on UK trials • Move test equipment development to production	**• Prototype E-band active SiP/ active diplexer solution** **• Limited progress with Track to Train based on UK trials** **• Secured 5G test equipment production order**	• Develop W-band transceiver and active diplexer for lead customer. • Develop D-band project plan in conjunction with lead customer(s)
	UK Defence & Critical Comms	• Achieve full security accreditation for Leeds site • Filtering process for UK DSTL SME programmes • Complete battlefield comms project design and initial build	• Support development of emerging 900MHz product • Win TTA orders with Tier 1 LMR providers in US/ Europe • Establish flexible 3rd party filter design relationship	**• Shipping first of our 900MHz critical comms products** **• Milestone of $1m of TTA sold since initial order in May 21** **• First project with third party offshore filter company**	• Win follow-on DSTL communications development program
	Space – HAPS / LEO	• Look for fast turn OSAT business opportunities that can provide space heritage • Promote IP developed as part of initial HAP's engagements to LEO constellation OEMs	• Align Filtronic with OneWeb for development of gen 2 • Development of 10w PA for volume manufacturing • Play active role in HAPS Alliance to promote E-band	**• Engaged in consortium bids for OneWeb 2.0 program** **• Generated roadmap for scalable Cerus SSPA** **• Playing active role in HAPS Alliance to promote E-band**	• Establish strong relationship with Space Catapult to develop NETPark site as manufacturing & test hub • Develop demonstrator for scalable SSPA at E / V band

* OSAT = outsourced assembly & test

Strategy & Growth – operations / capability update

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	Business Function	Progress in 1st year	Target near term	**Interim Update**	Target long term
	Sales & Marketing	• Build the roster of sales reps in North America • Develop direct sales network in Europe / Israel • Relaunch the Filtronic brand and build online presence	• Expand UK defence sales and business development team • Build CRM tool capability and develop sales methodology • Engage in selected technical associations + industry groups	**• Full roster of sales reps covering North America** **• Data analytics support recent marcom investments** **• Increased engagement in funding / industry groups**	• Bring Channel Management skills into the company • Develop technical proposal/ grant application writing team
	Engineering	• Build stronger programme management organisation so we can scale design programs • Strengthen inhouse SIP design and engineering capability • Build OEM engineering links	• Build alignment with key UK universities specialising in RF subsystem design • Engage engineering staff in technical associations + industry groups	**• Hired Director of Technology to drive roadmap and external engagements** **• Established links with UK universities specialising in RF subsystem design**	• Graduate development programme
	Operations & Facilities	• Maximise efficiencies from hybrid manufacturing line • Build accredited UK defence "box-build" capability. • Consolidate USA Critical Comms build / test facility	• Manufacturing process for low cost plastic encapsulation. • Develop assembly process for Compound Semi materials. • Improve prototype development Eng. capability	**• Defined process required for low cost plastic TRM SiP.** **• Secured funding to explore Compound Semi materials.** **• Add third Evo line to support process development**	• Space level cleanroom manufacturing facilities • Expansion of in house qualification + DPA capability
	People & Processes	• Improve materials planning and inventory management systems for turnkey OSAT* • Explore Filtronic Leadership Academy – Management Development Training	• Gain Cyber Security IASME accreditation • Develop ESCC level assembly process flows ESCC9000.	**• Working towards IASME governance accreditation** **• Develop ESCC level assembly process flows ESCC9000** **• Filtronic Leadership Academy programme launched**	• Gain Cyber Security ISO27001 accreditation

Key Investments in FY2022

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Business Activity	Key Investments	Interims Update
Sales and marketing	• Development of direct sales channels with senior hire • Expansion of rep network in the USA and Europe • Further development of the CRM system	• **Executive search firm engaged to strengthen direct sales channels** • **Most of North America covered with 4 rep firms** • **Reps deployed in France / Germany / Italy / Spain and Israel** • **Proactive lead generation and systematic targeted marketing** • **Building brand awareness with structured marketing campaign** • **Increased marketing spend in H2 designed to re-engage in face-to-face meetings based on the return of tradeshows in 2022**
Engineering (R&D)	• W-band technology (exploring grant funding channels to part-fund) • Increase engineering capacity to serve a building opportunity pipeline, development of the technology roadmap and execution of customer developments • Q-band Power Amplifier (PA) design to penetrate space markets	• **Funding application submitted to support W-band development** • **RPO firm retained to support engineering recruitment activity** • **Scalable Cerus E-band SSPA design concept developed for LEO market** • **Ka/Ku V/Q-band Power Amplifier (PA) design concept generated** • **Defined a process for next generation plastic encapsulation of TRM**
Operations and business processes	• Process development of semiconductor packaging and OSAT manufacture to match technologies deployed in next generation products. • Expand our cyber security credentials to win more defence contracts • Development of core business systems to support scalability • Upskill our leaders and management with the 'Filtronic Leadership Academy' to support them driving business performance improvement	• **Procurement of equipment required to support rapid prototyping and process development** • **Actively building cyber security credentials to win more defence contracts** • **Enhancing MRP and programme management tools to provide tighter business controls and smarter procurement strategies** • **Upskilling our leaders and management with the launch of the 'Filtronic Leadership Academy' in January 2022**
Balance sheet	• Build the inventory position to mitigate the risk of the global electronic component shortage	• **Increased inventory holding and order cover to mitigate the risk of the global electronic component shortage and shipping delays from Asia**

Summary

Summary

- Filtronic is evolving
  - Focused on four strategic pathways (X-haul / defence communication / aerospace and space) – positions us in markets where we can differentiate, add real value and command sustainable margins:
    - Strengthening the sales and engineering functions to open the aperture on new business opportunities
    - Promoting the brand based on a clear understanding of our values and customer's expectations
    - Driving a roadmap for the development of facilities, people and business processes
    - Multi-year plan to build capability and further develop our IP portfolio
- Served available markets showing signs of recovery and board are confident in their future forecasts
- Cash and resources are in place to work through current semiconductor supply chain issues
- Good alignment with UK Government priorities – UK defence, sovereign supply chain and space
- USA manufacturing aligned with the McCain Bill and "Made in America" policy
- Optimistic trading outlook for the current financial year despite industry challenges

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Appendices

Income statement

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	H1 2022	H1 2021	Variance	H2 2021	Variance
	£000	£000	£000	£000	£000
Revenue from goods and services	7,428	6,710	718	7,665	(237)
Revenue from non-recurring engineering (NRE)	576	438	138	743	(167)
Revenue	**8,004**	**7,148**	**856**	**8,408**	**(404)**
Material costs of goods sold	**2,584**	**2,713**	**129**	**2,749**	**165**
Employee costs	3,047	3,090	43	3,228	181
Depreciation, amortisation and impairment	516	521	5	674	158
Other operating income	(24)	(282)	(258)	(63)	(39)
Other expenses	1,161	1,013	(148)	1,271	110
Total operating costs	**4,700**	**4,342**	**(358)**	**5,110**	**410**
Operating profit	**720**	**93**	**627**	**549**	**171**
Exceptional items	(113)	0	113	(64)	49
Adjusted operating profit	**607**	**93**	**514**	**485**	**122**
Depreciation, amortisation and impairment	516	521	(5)	674	(158)
Adjusted EBITDA	**1,123**	**614**	**509**	**1,159**	**(36)**

Balance sheet

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	Nov-21	May-21
	£m	£m
Goodwill and intangible assets	1.6	1.7
Right of use assets	2.1	2.3
Property, plant and equipment	1.0	1.0
Deferred tax	1.3	1.2
Non-current assets	**6.0**	**6.2**
Inventory	2.4	2.2
Trade and other receivables	4.1	3.3
Cash and cash equivalents	3.0	2.9
Current Assets	**9.5**	**8.4**
Trade creditors and other payables	2.8	2.4
Provisions	0.3	0.4
Deferred income	0.3	0.3
Financial liabilities	0.1	0.1
Lease liabilities	1.8	2.0
Total liabilities	**5.3**	**5.2**
Net assets	**10.2**	**9.4**
Share capital and reserves	**10.2**	**9.4**

Cash flow statement

	Nov-21	Nov-20
	£m	£m
Net cash generated from operating activities	0.6	0.5
Net cash used in investing activities	(0.1)	(0.1)
Net cash used in financing activities	(0.4)	(0.7)
Movement in cash and cash equivalents	**0.1**	**(0.3)**
Currency exchange movement	0.0	(0.1)
Opening cash and cash equivalents	2.9	2.0
Closing cash and cash equivalents	**3.0**	**1.6**