Capital Markets’ Day 2021

November 23, 2021 | www.u-blox.com | SIX: UBXN
Disclaimer

This presentation contains certain forward-looking statements. Such forward-looking statements reflect the current views of management and are subject to known and unknown risks, uncertainties, assumptions, and other factors that may cause actual results, performance, or achievements of the Group to differ materially from those expressed or implied herein.

Should such risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this presentation.

u-blox is providing the information in this presentation as of this date and does not undertake any obligation to update any forward-looking statements contained in it as a result of new information, future events, or otherwise.
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:30-15:45</td>
<td>Welcome</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td></td>
<td>What we are</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td></td>
<td>u-blox is a solution provider</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td></td>
<td>Our addressable markets and growth drivers</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td></td>
<td>Market focus</td>
<td>Markus Schaefer</td>
</tr>
<tr>
<td></td>
<td>Value proposition</td>
<td>Markus Schaefer</td>
</tr>
<tr>
<td>15:45-16:05</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>16:05-16:15</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>16:15-17:00</td>
<td>R&amp;D plans and expenditures</td>
<td>Andreas Thiel</td>
</tr>
<tr>
<td></td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>16:15-17:00</td>
<td>ESG</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td></td>
<td>Financial information</td>
<td>Roland Jud</td>
</tr>
<tr>
<td></td>
<td>Round up</td>
<td>Thomas Seiler</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>Q&amp;A</td>
<td></td>
</tr>
</tbody>
</table>
Representatives

Thomas Seiler
Chief Executive Officer

Tom Seiler has served as a Member of the Board of Directors and as CEO since the incorporation of u-blox Holding AG in 2007. He serves as CEO of u-blox AG since 2002. In 2006 he was appointed Member of the Board of Directors of u-blox AG. Thomas Seiler holds a degree in mechanical engineering from the Swiss Federal Institute of Technology Zurich (ETH) and a MBA diploma from INSEAD, France. In 1987 he was appointed Member of the Executive Committee of Melcher Holding AG, Switzerland and CEO from 1991 to 1998. Thereafter, he served as CEO of Kistler Holding AG, Switzerland from 1999 to 2001.

Andreas Thiel
Head of Product Centers, Co-founder u-blox AG

Andreas Thiel is Head of Product Centers at u-blox AG, a role he took on in early 2019. From 1997 to 2012, he was Executive Vice President R&D Hardware of u-blox AG, and from 2007 to 2012 he served as Executive Vice President (R&D Hardware) of u-blox Holding AG. From 2012 to 2019, he acted as Executive Director Cellular Product Development. He holds a degree in electrical engineering from Aachen University (RWTH) in Germany. From 1994 to 1997 he was a research assistant and project manager at the Swiss Federal Institute of Technology Zurich (ETH). In 1997, he co-founded u-blox AG.

Roland Jud
Chief Financial Officer

Roland Jud has been appointed CFO of both u-blox Holding AG and u-blox AG in 2011. He holds a degree in economics from the University of St. Gallen (HSG), a diploma as Swiss Certified Auditor (CPA) and a diploma as Certified IFRS/IAS Accountant. From 1992 until 1999 he was auditor and consultant at KPMG. He served as Group Controller and Deputy CFO at Gurit-Heberlein Holding AG, Switzerland from 1999 to 2008. Thereafter, he was Head of Accounting, Reporting and ICS at Ascom Holding AG, Switzerland until 2010. From 2010 until 2011 he held the position of CFO and Member of the Executive Committee at Nexgen AG, Switzerland. Roland Jud is a Member of the Advisory Board of c-crowd AG, Zürich.

Markus Schaefer
Executive Director Global Marketing & Sales

Markus Schaefer joined u-blox as Member of the Executive Committee for Global Marketing and Sales in September, 2019 and is based in Thalwil, Switzerland. He holds a M.Sc. in Electrical Engineering from RWTH Aachen, Germany and an MBA in Leadership from Tiffin University, Ohio, USA. He worked at Infineon Technologies from 1995 to 2009 in Application Engineering, Marketing and Sales, mainly based in San Jose CA, USA. He served as Senior Director of Global Sales and Marketing at NXP for RF and Power Management from 2009 to 2014 in Nijmegen, the Netherlands. From 2014 to 2019, Schaefer held the position Head of Sales EMEA and India at MACOM Technologies based in Dusseldorf, Germany. He is a citizen of Germany.
## Specifics topics covered

<table>
<thead>
<tr>
<th>What we are?</th>
<th>What we offer: Solutions</th>
<th>Market share and growth drivers</th>
<th>u-blox market focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-blox value proposition</td>
<td>R&amp;D plans and expenditure</td>
<td>Financial view on Capex and FCF</td>
<td>ESG &amp; Sustainability</td>
</tr>
</tbody>
</table>
Guidance 2021

- Strong recovery of demand and record bookings since late 2020
  - Expansion of industrial IoT
  - Content extension in automotive
  - Rapid ramp-up with new products
- Revenues lag bookings due to supply constraints for electronic components
- Additional costs expected related to Sapcorda acquisition integration
- Lower R&D capitalization due to increased R&D efforts for re-designing of modules with better available components
- Newly launched products increase amortizations

<table>
<thead>
<tr>
<th>CHF</th>
<th>Actual HY 2021 (adjusted)</th>
<th>Guidance 2021 (June) (adjusted)</th>
<th>Guidance 2021 (Aug) (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue growth at 2020 exchange rates</td>
<td>16.5%</td>
<td>11...19%</td>
<td>15...19%</td>
</tr>
<tr>
<td>EBITDA margin</td>
<td>14.9%</td>
<td>16...22%</td>
<td>16....20%</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>5.5%</td>
<td>9...12%</td>
<td>6...9%</td>
</tr>
</tbody>
</table>

- Exchange rate assumptions for 2021: Average rates of 2020 (USD: 0.939, EUR: 1.075, GBP: 1.204)

- FX-sensitivity against CHF:

<table>
<thead>
<tr>
<th>+10% of</th>
<th>USD</th>
<th>EUR</th>
<th>GBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>+9%</td>
<td>+1%</td>
<td>0%</td>
</tr>
<tr>
<td>EBITDA</td>
<td>+16%</td>
<td>0%</td>
<td>-2%</td>
</tr>
<tr>
<td>EBIT</td>
<td>+22%</td>
<td>-1%</td>
<td>-3%</td>
</tr>
</tbody>
</table>
What we are
u-blox is a leading provider of positioning and connectivity technologies for the industrial, automotive and consumer markets. Founded 1997 as a spin-off from ETH Swiss Institute of Technology. Ticker: UBXN (SIX Swiss Exchange)

Financial Overview (1)
- Assets: CHF 502m
- Liabilities: CHF 211m
- Revenues H1 2021: CHF 193m
(1) As of 30 June 2021

Shareholder Information (2)
- Share Price: CHF 67.0
- Shares Outstanding: 7.1m
- Market Capitalization: CHF ~475m
(2) As of 22 November 2021

Structure
- Employees: ~1200
- Locations: 32

Market presence
- AMEC, EMEA, APAC
- Industrial, Automotive, Consumer
- 10’300 customers

HQ based in Switzerland
From ETH spin-off to a leading wireless solution provider

World Semiconductor Market CAGR 5.6% (2007...2021)

Revenue CAGR 12.5% (2007...2021)

- GNSS technology
- M2M connectivity
- IoT components
- Chip-to-cloud solution

Source: u-blox, World Semiconductor Trade Statistics

Guidance 2021 range indicated by light red bar
Our evolution
Technology leadership built over decades

- **2018**: Chip-to-Cloud solution capabilities
- **2008**: Augmentation services
- **2007**: Single die chipsets
- **2002**: Radios and signal processing
- **1997**: Module technology

**Intellectual property**
- Radios
- Signal processing
- Cloud services
In summary – what we are

• From core components to chip-to cloud solution capability - a growth journey since 1997
• Unique position providing connectivity to the industry
  • Chipsets build our innovation leadership foundation
  • Modules deliver the access to 10’000+ customers
• Strong solution capabilities based on our broad product base
• Long-term growth drivers in all application areas
u-blox is a solutions provider
Billions of things waiting to be connected
u-blox delivers the solution

We enable customers to make their business wirelessly connected.

Adhering to the Swiss tradition of technological innovation we continuously strive to find applicable and modern ways to boost our customers’ businesses.

This helps us in building a sustainable future.

We empower customers to locate their devices and connect them from silicon to cloud.
From product to solutions
Our solutions respond to many end applications

- Various dimensions respond to customer needs
- Deep insight and long-lasting experience build the foundation
- Continual innovation and R&D efforts align all dimensions for responding to customer needs
Why do customers choose u-blox

Customer goal
- Highly reliable product
- One product for the global market
- Low risk – during product development and during lifetime of final product
- A solid and dependable supplier

u-blox solution
- Ubiquitous connectivity, high positioning accuracy
- Broad module offer for versatile solutions
- Simple SKU management
- Global coverage and product certification
- Solution delivers reliability, resilience, robustness and security
u-blox’s solutions leadership leads to customer value

Quality and technology leadership
- Outstanding history of turning innovations into long-term business (10 GNSS generations – 10 years product availability)
- Wide product pipeline with strong market launch cadence

Problem understanding and solution expertise
- Early understanding of emerging market needs
- Translation into solution-oriented product portfolio

Strong customer relationships
- Highly embedded customers
- Loyalty and stickiness of customer relationships

Deep IP mastering
- Full ownership of IP in wireless technologies
- Complete system capability from chip-to-cloud

Innovation drive
- Track record of innovative leadership in wireless technology
- Excellent quality reputation for reliability and longevity
What does a solution look like?

u-blox enables local and cloud connectivity, theft protection and navigation

Our solution space: three core technologies + value-added services
Our addressable market and growth drivers
Global megatrends expand our markets

Billions of devices become smart and connected to the cloud

- Power tools: ~1.3 billion
- Parking spaces: ~1.2 billion
- Laptops: ~0.9 billion
- Drones: ~5 million
- Street lights: ~1 billion
- Pets: ~0.5 billion
- Bicycles: ~1.3 billion
- People: ~2.2 billion
- Cars: ~0.5 billion
- Urbanization
- Digital transformation
- Climate change & resource scarcity
- Demographic & social change
The smart world is arriving
Positioning and connectivity at heart for more intelligence

- Mobility
- Data security
- Human machine Interaction
- Smart and autonomous system incl. AI
- Green energies
- eHealth
- Blockchain
- IoT
- Cloud and edge computing
Strong growth drivers with long duration

<table>
<thead>
<tr>
<th>Industrial</th>
<th>Automotive</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>57%</td>
<td>27%</td>
<td>13%</td>
</tr>
<tr>
<td>Revenue share H1 2021</td>
<td>Revenue share H1 2021</td>
<td>Revenue share H1 2021</td>
</tr>
</tbody>
</table>

The scope of application is increasing rapidly as the wireless content in individual applications remains fixed.

In-vehicle electronic content is expanding strongly as volumes remain flat.

Applications become more feature rich with connectivity an expected functionality.
Application fields are expanding as technology evolves

- Continued innovation and R&D investment have pushed the boundaries of functionality and created new application fields.
- u-blox targets such new application fields systematically and with dedication.
Customer relationships: iGPSPORT
u-blox M10 to deliver ultra-long battery lifetime

- As the cycling scene diversifies, longevity and performance in complex signal environments are gaining importance as key differentiators.
- The cycling computer leverages the u-blox M10 platform’s ultra-low power consumption, compact size, and its ability to track four global navigation satellite systems (GNSS) to offer endurance athletes a superior user experience.

Adopting the u-blox M10 positioning platform in their iGS320 cycling computer brought iGPSPORT an 80 percent increase in power autonomy to deliver 72 hours of continuous tracking, up from 40 hours in their previous solution.
Customer relationships: Facebook
Facebook chose u-blox timing technology to speed up their data centers

- Facebook has open-sourced the design of its timecard, which features the ultra-precise u-blox ZED-F9T timing module, providing easy access to nanosecond-level timing.
- By improving the synchronization of networked computers, Facebook’s Time Card can significantly speed up the performance of their data centers and distributed databases.
- Use case: Financial institutions are legally required to trace operations within a consistent and accurate time scale (MiFID II Compliance).

Easy access to nanosecond-level timing accuracy opens new avenues in industry segments that rely on highly synchronized signals, such as 5G network base stations that require tighter synchronization than those of previous generations.

Market segment: Timing

- Source: Oscilloquartz SA
Customer relationships: Bird

Meeting demand for integrated, precise smart sidewalk protection solution

- Together with u-blox, Bird co-developed the industry’s first robust, integrated sensor fusion system that tracks location with centimeter-level precision.
- By combining u-blox’s ZED-F9R high precision dead reckoning module with centimeter-level sidewalk mapping and Bird’s suite of onboard vehicle sensors, the system efficiently detects and prevents sidewalk or footpath riding in real time.

As more and more cities look to integrate shared micromobility into the climate action plans that focus on reduced carbon emissions in their communities, technology that prevents sidewalk riding has become increasingly important.
COVID-19 has accelerated the trend for smart devices

New solutions to limit virus spread with drone delivery

Ramp up in e-bikes and e-scooters as healthy commute to work alternative

Growing interest for stable network connections as more people work from home

Continued trend for accurate and long battery life fitness tracking

Growing interest in reliable people tracking solutions for contact tracing

Acceleration in IoT increasing demands for more remote monitoring and automation
High growth opportunity with connected devices in the IoT market

- **Strong growth rates in our key markets (CAGR shipments)**

  - **INDU POS** 38%
  - **INDU CEL** 8%
  - **INDU SHO** 11%
  - **AUTO POS** 9%
  - **AUTO CEL** 6%
  - **AUTO SHO** 7%
  - **CONS POS** 5%
  - **CONS CEL** 3%
  - **CONS SHO** 6%

  Sources: ABI, TSR, OMDIA, u-blox
Strong growth momentum in the industrial sector
Many applications expanding with more technological capabilities

- Devices that were previously stand-alone become connected
- New services offered via the cloud
- All industrial sectors following the trend
- Evolving standards in the wireless domain empower new applications
- Positioning determines origin of information
- Robust connectivity is expected, including cyber security

Market size wireless connectivity
Industrial (shipment millions)

Sources: ABI, TSR, OMDIA, u-blox
Strong growth momentum in the automotive sector

Strong increase of content driven by increase of wireless technologies in cars

- More driving assistance
- Positioning solving higher requirements
- Continued digitization of the car with electronics taking a higher share of overall cost

Market size wireless connectivity
Automotive (shipments millions)

Sources: ABI, TSR, OMDIA, u-blox

Only illustrative data
Growth factors in Automotive
Rebound effect, automation and EV

- Car output expected to grow by 30% to 2025 – driven by rebound from COVID-19 levels
- Continued increase of automation in the car
- EV an additional accelerator for wireless content in the car

Revenue growth contributors
Forecast 2021...2025 [%]

- Rebound 2021...2025: 25...30%
- ADAS: 15...25%
- EV: 15...20%

Source: u-blox estimates
Continued expansion in the consumer sector
High touch consumer products and wearables driving growth

- Low power solutions expand functionality
- Consumer applications becoming system solutions – e.g. trackers
- Strong effect from post-COVID acceleration
u-blox
Market focus
Selecting the promising markets
Where wireless communication and location information is at a premium

Industrial
Typical applications
• Smart transportation
• Asset tracking
• Connected buildings
• Smart City, Infrastructure
• Industry automation
• Timing
• Smart metering / utility
• Smart retail & payment
• Connected healthcare

Automotive
Typical applications
• Telematics
• Infotainment and navigation
• Environment and driver perception enhancement
• Autonomous driving
• Energy management
• Vehicle monitoring
• Automotive convenience
• Safety services
• Vehicle control

Consumer
Typical applications
• Drones
• People and animal tracking
• Car accessories
• Gateways and routers
• Portable computers
• Wearables
u-blox makes IoT happen:
Locate the information and connect securely and reliably

1) Automotive Driver Assistance System
Market shaping customers create new solution spaces

Innovative new solutions efficiently brought to market to meet demand of solution-oriented customers

Market shaping customer
- Leading in application space
- High skillset
- Differentiation with product

Solution oriented customer
- Limited wireless experience
- High expectation for useability
- Differentiation with solution

Innovative solutions are developed with market-shaping customers early approached.

All solutions are designed as versatile and easily scalable by the customer.
Services connect to full value chain

Enhancing product performance at various places in value chain – more occasions to start a customer journey

- Services create benefits along the value chain
- Customer journey can start at any point in the chain
- Thingstream platform offers rich values for higher customer satisfaction
  - Connectivity
  - Security
  - Location
  - Augmentation
  - SW maintenance
Global outreach to customers
32 locations, near the talent pools, and close to customers

- Americas head office
  Reston, Virginia, USA

- Corporate headquarters
  Thalwil, Switzerland

- APAC head office
  Singapore
10’300 customers worldwide
Continued expansion of our customer base

Illustrative selection of customers
## A rewarding customer journey

### Why customers prefer u-blox

### Sales goals
- More opportunities
- Winning the Design
- Optimize solution
- Realize high conversation rate
- Achieve customer satisfaction and retention

### Customer interaction
- Research
- PR
- Webinar
- Meeting
- Demo
- Certification / Qualification
- Value
- Market success
- Next generation
- Cross-selling

### Sales channels and tools
- u-blox.com
- Thingstream
- Support Portal
- u-center
- m-center
- s-center
- Web shop
- EDI

### Broad market access via various sales channels ensures efficiency and revenue growth

### Direct sales force
- Local specialized distributors
- Catalogue and global distributors
u-blox value proposition
u-blox’s unique selling proposition

- **Positioning** is a necessary anchor for determining the source of information.
- **Wireless connectivity** is the essential functionality for transferring data to the cloud.
- The combinations form the solution space – with unmatched functionality.
- We are **undisputed leaders** in positioning with strong brand recognition in our target markets, offering an anchor to sell bundled solutions.
- There is no comparable company with our unique strategic line-up.
The essential value
Positioning and connectivity are key to reliable infrastructure

- **High precision for automated operations**
  - Facilitating autonomous vehicles
  - Paving the path to smart devices

- **Highly robust connectivity**
  - Enables smart devices in the infrastructure
  - Supports long product lifetimes

- **Super low power**
  - Continued strong expansion of wearables
  - Very long operation time, also with small batteries

“We were not happy with what we got from your competitor”
Head of R&D in a telematics company
u-blox is a trusted solution supplier for micromobility

A complete solution for a strongly growing eco system

- u-blox provides all building blocks to securely and efficiently locate and connect vehicles to the cloud
- **We solve many use cases:**
  - Vehicle and user activity tracking
  - Telemetry & vehicle diagnostics
  - Navigation
  - Driver & rider behavior monitoring
  - Safety and crash detection notification
  - Collision avoidance system
u-blox is a trusted solution supplier for micromobility
A complete solution – chip-to-cloud

- Solution covering all use case requirements out of one hand
- Optimized functionality
- Fast time to market
- Much reduced development risks
- Efficient dealing with all use cases

A complete chain of building blocks for the complete solution – chip-to-cloud
Deep insights into applications
Dedicated R&D for solving customer problems

• Specific adaptations on top of our platforms for solving the application problem
• Support tools for customers evaluation
• Building the selling reference

“Thanks for fixing this problem so fast - we are testing now”
Head of autonomous driving R&D team with an EV manufacturer
Why are we competitive?
We are innovative and reliable to the core

- Since our foundation as a spin-off from ETH, we have maintained our **innovative spirit**, the **still-present founders** are the guarantors of this attitude.
- **Strong enthusiasm** for our purpose is the central driver in our product centers.
- We focus on our markets and customers with **high dedication**.
- We are **lean and agile** - we make innovative products with less resources and shorter turnaround times.
- Our large competitors focus on very large customers in the consumer space – not our realm.
- We have **robust market share** in our market sectors and are often the **undisputed leader**.
- There is **no comparable company with our unique strategic line-up**.
Competitive environment
No other company offers the same solution portfolio

<table>
<thead>
<tr>
<th>Company</th>
<th>Product Offer</th>
<th>Cellular</th>
<th>Positioning</th>
<th>Short Range Radio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediatek</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Qualcomm</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Nordic</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>ST Microelectronics</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Broadcom</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>NXP</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Sequans</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Silicon Labs</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Autotalks</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>u-blox</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Quectel</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Telit</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Alps</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Fibocom</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Laird</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>LG</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Murata</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Septentrio</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Sierra Wireless</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Silicon Labs</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Thales</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>u-blox</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Hexagon</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Telit</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Trimble</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>u-blox</td>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

The combination of our three core technologies offered in the form of chips and modules is unique in the market.

- Competitors in the integrated circuits space focus mainly on the smart phone
- Competitors in the module space have no access to core IP and implement only the reference design of the chip suppliers
Our solution approach enhances profitable growth

Gaining a higher share in the value chain

- Turning in-depth market and application understanding into salient solutions
- Maximize customer value
  - Innovative functionality
  - Better cost/performance ratio
  - Less implementation risk
  - Quick time-to-market
R&D
Plans
and expenditures
Maintaining our growth path: 15 R&D centers

Strong footprint to attract innovation talents

- 15 R&D centers worldwide
- 800+ engineers
- CHF 100m+ annual investment (2021)
The u-blox product cycle
From idea creation to monetization – very long product lifetime

1-2 Years
Creating Ideas
Utilizing proprietary information and technology to design and solve problems in end-applications.

1-3 Years
Development Cycle
Creating and testing phase, ramping-up production.

9 Years
Product in Market
Designing-in and delivering to the market rapidly. Adapting to meet evolving market conditions.

R&D expense expensed
R&D expense capitalized
R&D expense expensed, and amortized
Investments in R&D paying dividends in time
Deep technology and market IP acquired over decades

- We continue to invest in technologies that will push the industry forward for years to come.
- Our IP is based on CHF 1bn investment over the last 15 years – the intrinsic value of u-blox and the source of competitiveness
- We have been first to market with many technologies: Module form factors, leading positioning performance, and lately services
- R&D intensity managed to achieve positive free cash flow, our core KPI

Reconciled R&D cost

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenses</td>
<td>63'490</td>
<td>65'554</td>
<td>74'925</td>
<td>96'253</td>
<td>160'333</td>
</tr>
<tr>
<td>Amortization of capitalized R&amp;D</td>
<td>-5'886</td>
<td>-5'886</td>
<td>-7'384</td>
<td>-12'947</td>
<td>-10'395</td>
</tr>
<tr>
<td>Impairments</td>
<td>0</td>
<td>-128</td>
<td>0</td>
<td>-12'647</td>
<td>-74'120</td>
</tr>
<tr>
<td>Capitalized R&amp;D</td>
<td>37'189</td>
<td>53'817</td>
<td>53'797</td>
<td>50'040</td>
<td>36'772</td>
</tr>
<tr>
<td>R&amp;D expense incl. depreciation and amortization</td>
<td>94'793</td>
<td>113'357</td>
<td>121'338</td>
<td>120'699</td>
<td>112'590</td>
</tr>
</tbody>
</table>

Cumulated R&D investment (expensed and capitalized)

- Base effect of COVID-19 revenue drop
- Expansion of connectivity technology: CEL, SER
- Normalized R&D capitalization rate (40%)
- Efficiency gain from re-use of IP

R&D intensity managed to achieve positive free cash flow, our core KPI

52 u-blox Holding AG - Capital Markets Day 2021
Why we capitalize R&D

R&D phase is short over very long harvesting time

- u-blox 8 platform was developed between 2012 and 2014
- Market introduction 2014
- End of life expected in 2025
- Useful life 9 years with CHF 1bn expected sales over lifetime with continued maintenance investments
- Strong IRR from platform investments
Innovation for sustainable growth propelled by higher customer value

Effort temporarily increased in 2021 for retooling due to supply crisis

Horizon 1: Product maintenance – actual revenues
Horizon 2: New Products – revenues in 2-4 years
Horizon 3: Research and pre-development – revenues in 3-6 years

Estimated data 2021
3/4 of our gross margin is based on proprietary chipsets

Strong driver for profitability based on u-blox core IP

Estimated data 2021
Acquisition criteria

Our M&A strategy

• M&A has always been a part of our long-term strategy; successfully closed 17 transactions to date
• Target must complement product portfolio and add service component with a strong industrial logic
• Purchase price to enable shareholder value creation based on conservative synergy calculation
• Only willing to do acquisitions at reasonable valuation
• Business model, management and culture an ideal fit for u-blox
• Specific areas where we would find a complementary fit:
  • Technology acquisition
  • Gain economies of scale
  • Expanding customer footprint and cross selling
  • Recurring revenue models
• We maintain continually a pipeline of some 5...7 investment targets

We maintain a continual stream of acquisition opportunities

- Ideas >200
- Preliminary Analysis >100
- Due Diligence 24
- Closed Deals 17
Sapcorda
Leading provider of advanced GNSS augmentation services serving the high precision GNSS mass market

- Acquired remaining 57% ownership in Sapcorda JV in March 2021
- Integration efforts in H2 2021 amount to CHF 7m
- Assures delivering the high precision solutions out of one hand
- Essential for further innovation of our value proposition
- Enables u-blox to expand recurring revenues with GNSS augmentation services for high precision positioning
- Strong cumulative effect on recurring revenue with effect of prolonged revenue stream

Service revenues cumulating over lifetime of underlying hardware

Revenue profile of a typical use case, with cumulating HW revenues and service subscriptions
Softbank and u-blox collaborate
PointPerfect: High performance global GNSS augmentation services

- Automotive OEMs and Tier 1s, manufacturers of industrial IoT devices, unmanned aerial and ground vehicles depend on globally consistent GNSS augmentation services
- Collaboration with Softbank enhances common GNSS augmentation services for Japan, the USA and Europe.
Why do we invest in core IP?
Achieving sustainable competitive advantage and strong value creation

- We **derive a larger part of the value chain** because we deliver more:
  - Enhanced functionality
  - Lower cost of ownership
  - Added services
- **Independency** from 3rd party chipset roadmaps: Better fit to customer demand and less supplier dependency.
- Customers take **long-term commitment** with u-blox because of our control of core intellectual property (IP).
- **Better customer support** thanks to full insight and control.
- Strong **increase of margins** over the lifetime of the product.
ESG & sustainability
Integrating ESG into our strategy

It’s exponential our sustainability potential

- IoT is posed to make an exponential contribution to a more sustainable world
- u-blox has a key role in the innovation driving sustainability across it and a responsibility to produce products and services sustainably
- We are taking action in 5 areas aligned with the 17 UN Global Compact Sustainable Development Goals – since 2012

<table>
<thead>
<tr>
<th>Our 5 engagements</th>
<th>Supported SDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Ethics</td>
<td>3, 5, 8, 16</td>
</tr>
<tr>
<td>Employees</td>
<td>4, 5, 8, 9, 11</td>
</tr>
<tr>
<td>Environmental responsibility</td>
<td>3, 12, 16</td>
</tr>
<tr>
<td>Supply chain responsibility</td>
<td>3, 12, 16</td>
</tr>
<tr>
<td>Community</td>
<td>3, 4, 5, 10, 11</td>
</tr>
</tbody>
</table>
How our products support sustainability

Driving greener travel
Our JODY-W2 Wi-Fi and Bluetooth products are being used in an inductive electric vehicle (EV) charging initiative which promises to simplify this key aspect of EV ownership, and thereby drive adoption of zero-emission vehicles.

Safer and energy efficient communities
Our UBX-M8 GNSS chipset and SARA-R4 series cellular modems are being used in smart street lighting around the globe. This enables real-time fault-detection that leads to faster repairs, keeping communities energy efficient.

Reducing greenhouse gas emissions from central heating
Heating large buildings is a significant contributor to global greenhouse gas emissions. The SARA-R4 cellular range is at the heart of a globally available system that cuts energy waste from buildings.
Goals and Aspirations
It’s exponential our sustainability potential

Our top sustainability focus areas and goals

Ending isolation with AV1 the robotic avatar

Discovering IoT's exponential potential together

Designing for privacy and security from the start

uGive employee volunteering
Financial Information: Capex needs and Free Cash Flow
Strong bookings resulting in long reaching orderbook

Billings are continually expanding despite supply constraints

- Strong recovery of demand and record bookings since Q4 2020
- All sectors show strong expansion
- Bookings continually growing more strongly than billings
- Monthly revenue growth supports our 2021 guidance
- Orderbook fully covering expected 2022 revenue
  - All products contributing to order book solidity
  - Regions equally enjoy high orderbook
- Revenue growth rate depending on easing of supply constraints

Orderbook

9x
Increase over pre-COVID-19 times

Solid orderbook
- Our products are not a commodity
- High switching cost
- Long gestation times
Supply shortages
Continued imbalance between supply and demand in the electronic component markets

**Supply**
- Under-investment by foundries in main-stream nodes
- COVID-19 induced disruptions
- Severe fab accidents
- Politically constrained supply
- Transportation capacity limitations

**Demand**
- Working from home
- Double bookings
- Increase on demand for IoT and 5G
- Structural changes for digitization

**u-blox mitigation measures**
- Adapted and retooled existing products with available componentry – closed in H1 2021
- Additional suppliers qualified
- Intense hand holding of suppliers
- Exercising purchasing power via our contract manufacturers
- Overhaul of logistics processes for daily steering capability
Continued revenue expansion in sight
Stronger underlying order book - greatly expanded visibility

- Strong product pipeline in the past few years lays solid business foundation
- New chipsets create additional customer values
- Acceleration from expanded solution capabilities
- Recurring revenues with services
- Strong opportunity pipeline and recent important project wins in automotive and industrial sectors

- Continued expansion of digitization in the car
- Low power solutions allow expansion of wearables
- Ongoing trend for smart industrial devices
- High precision and functional safety create basis for recurring revenues
- Strong attraction of our solution capabilities

Only illustrative – picture does not provide for a mid-term guidance
Guidance 2021 range indicated by red bar
## H1 2021 financial summary

<table>
<thead>
<tr>
<th>(CHF millions, except EPS and margin)</th>
<th>1H 2021 adjusted</th>
<th>1H 2020 adjusted</th>
<th>% change</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (at constant exchange rates)</td>
<td>192.7</td>
<td>174.0</td>
<td>+10.8% (+16.5%)</td>
<td>Demand up across the board; negative impact of FX USD/CHF</td>
</tr>
<tr>
<td>Gross margin</td>
<td>46.7% 89.9</td>
<td>45.6% 79.4</td>
<td>+1.1 p.p.</td>
<td>Due to product mix</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>27.1% 52.3</td>
<td>22.7% 39.5</td>
<td>+4.4 p.p.</td>
<td>Additional cost of redesigns; lowered capitalization rate</td>
</tr>
<tr>
<td>Distribution and marketing</td>
<td>9.4% 18.1</td>
<td>9.1% 15.8</td>
<td>+0.3 p.p.</td>
<td>Higher bonus rates expected due to strong growth of gross margin</td>
</tr>
<tr>
<td>G&amp;A</td>
<td>5.3% 10.2</td>
<td>6.6% 11.4</td>
<td>-1.3 p.p</td>
<td>COVID-19 impact</td>
</tr>
<tr>
<td>EBIT</td>
<td>5.5% 10.5</td>
<td>7.6% 13.2</td>
<td>-2.1 p.p.</td>
<td>Higher amortization expense, impact of full consolidation of Sapcorda</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>13.4% 25.8</td>
<td>-4.8% -8.4</td>
<td>-</td>
<td>Effect of gross margin increase, NWC change and OPEX reductions (CHF 15m)</td>
</tr>
</tbody>
</table>
Round up
Summary

Expect long term demand to stay robust as we navigate the near-term component challenges

• Experiencing both recovery and organic growth following the challenges of COVID-19 in 2020
  • Industrial sales remaining resilient with strong expansion for making devices connected
  • Automotive sales recovering and experiencing strong demand, supply shortages to fade away
  • Consumer experienced strong growth due to high consumer spending

• Current headwinds
  • Component constraints are creating uncertainty in the near to intermediate term, but we expect demand will remain
  • Continued growth of output
  • Strong bookings reflect growing demand from acceleration of an increasingly wired world, and excellent response from market for u-blox solutions.

• Very high customer loyalty
Takeaway: Positioned to thrive

Our long-term strategy and focus remains unchanged

• The secular trends propelling the growth of positioning and wireless technology in industrial and automotive applications will continue

Leader in positioning and wireless connectivity solutions

• Offering a unique, comprehensive solution offering that no other company can provide
• Our IP portfolio reflects our long history of R&D know-how built over decades of experience

New product platforms paving the way for expansion:

• Three new positioning platforms in market
• Strong traction R5 based LTE connectivity
• Building recurring revenue segment of the business

Well positioned to capitalize on a market recovery

What changed since our CMD 2020

• Strong traction in the market confirming the attractiveness of our product road map
• Increase of R&D efficiency
• Expansion of solution capability
• Add-on of recurring revenue potential with our Thingstream platform
• Solid business visibility
Priorities for shareholder value

Organic growth
- Investing in R&D with a long-term perspective
- Expanding sales channels
- Widening solution capabilities

M&A
- Continually exploit opportunities for inorganic growth
- Bolt-on acquisition preferred
  - Strategic fit
  - Cultural fit
  - Financially accretive

Shareholder value returns
- Consistent dividend policy (since IPO)
- Dividend policy to resume
Thank you for your attention
Upcoming events

- u-blox publication of 2021 annual report  
  11 March 2022
- u-blox AGM  
  20 April 2022
Investor relations contacts

**Thomas Seiler**  
Chief Executive Officer  
u-blox Holding AG  
Zürcherstrasse 68  
8800 Thalwil, Switzerland  
Phone: +41 44 722 74 44  
Fax: +41 44 722 74 99  
E-mail: thomas.seiler@u-blox.com

**Roland Jud**  
Chief Financial Officer  
u-blox Holding AG  
Zürcherstrasse 68  
8800 Thalwil, Switzerland  
Phone: +41 44 722 74 44  
Fax: +41 44 722 74 99  
E-mail: roland.jud@u-blox.com

Switzerland and EMEA:  
**Doris Rudischhauser**  
c/o Dynamics Group AG  
Phone: +41 79 410 81 88  
E-mail: doris.rudischhauser@u-blox.com

US:  
**Adam Prior**  
c/o The Equity Group Inc.  
Phone: +1 917 833 0238  
E-mail: aprior@equityny.com