



# Quarterly Presentation Q3 2018

October 17 2018, Oslo, Norway



# Today's presentation

## Business update



Svenn-Tore Larsen  
CEO

## Financials



Pål Elstad  
CFO

## Business outlook



Svenn-Tore Larsen  
CEO



A photograph of a paved path winding through a forest in autumn. The trees are covered in vibrant yellow and orange leaves, with some evergreen trees visible in the background. The path is lined with fallen leaves and low-lying vegetation. The sky is visible through the canopy of trees.

# Business update

Svenn-Tore Larsen, CEO



# Strong Quarter

Total revenue of MUSD

78.7

Gross Margin

50.2%

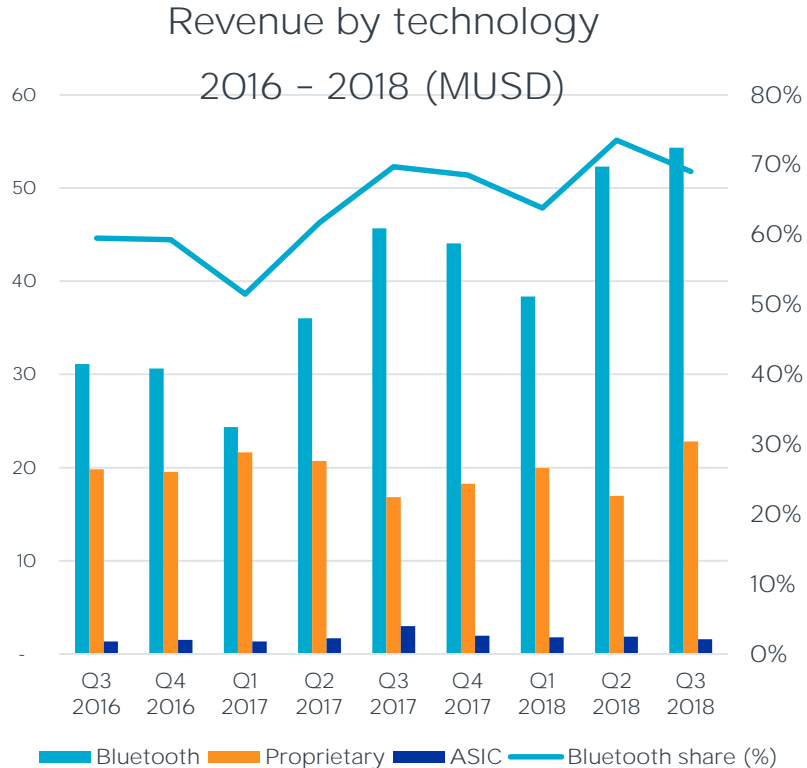
New all-time-high with +19.9% y-o-y growth

- +19.0% y-o-y growth in Bluetooth (YTD +36.7%)
- +35.5% y-o-y growth in proprietary (YTD +0.9%)
- Bluetooth growth muted by a Chinese application in the Building and Retail market
- Solid proprietary business with confirmed prolonged lifecycle
- Entering market with our four year cellular IOT investment

Gross margin expansion +2.4p.p y-o-y

- Solid operational performance
- Higher value nRF52-series exceeded nRF51-series revenue for the first time
- Strong growth in EBITDA. EBITDA at MUSD 14.3 (MUSD 8.4 in Q3 2017) +71.0% y-o-y, +5.5p.p EBITDA margin y-o-y
- Adjusted EBITDA at MUSD 18.2 or 23.1% margin

# Bluetooth CAGR of 32%

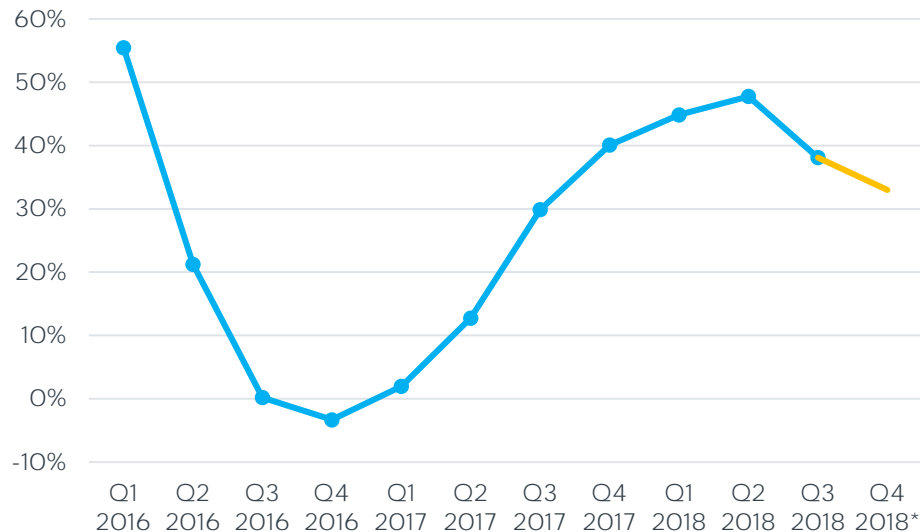


Growth in Bluetooth revenue slower than forecasted for Q3 2018

- Bluetooth growth negatively impacted by one application with three customers in China, in the Building and Retail market.
- Strong growth in proprietary in Q3 2018 driven by new designs
- Prolonged lifecycle for the proprietary business with new designs

# Historic Bluetooth growth

LTM % Y-Y Bluetooth growth



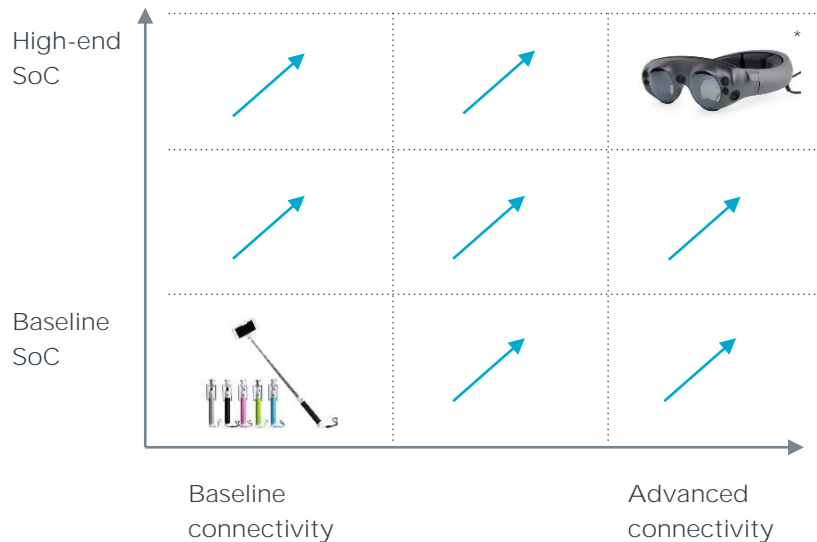
\*Q4 2018 is based on midpoint in H2 2018 guiding

Historic Bluetooth growth rate has been trending at 30-40%

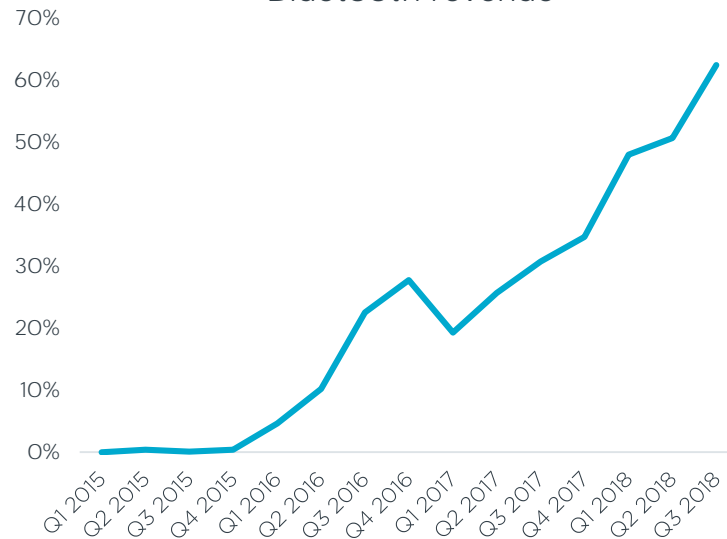
- Bluetooth Low Energy growth trending above target in some quarters and below in others
- Fluctuations driven by larger volume designs
- Historically, growth driven by long tail market
- As the market has matured we see that large industrial players has started to employ Bluetooth

# Delivering on strategy to strengthen ASP

Continued strong market pull for SoC integration and connectivity



% nRF52 Series of Bluetooth revenue



# Improved operational leverage

Adjusted and reported EBITDA (MUSD)



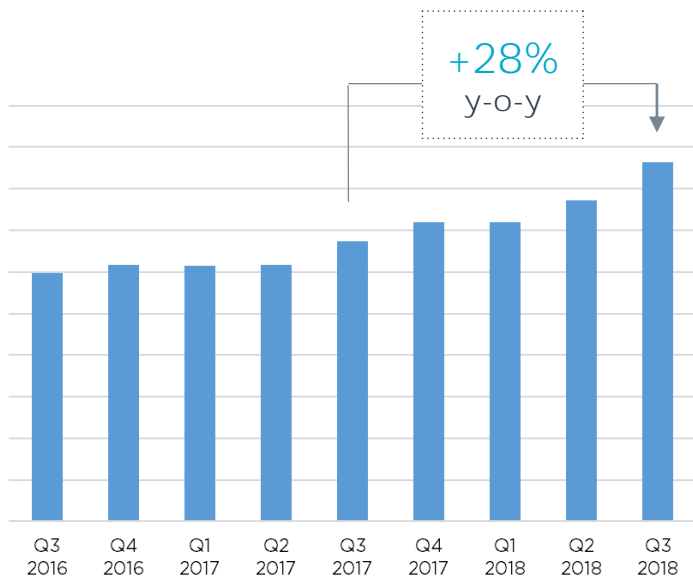
On track to meet our objective for improved profitability for full year 2018

- Solid revenue growth (+19.9%) with higher gross margin (+2.4p.p)
- EBITDA at MUSD 14.3 (+71.0% y-o-y)
- EBITDA margin for short range business of 23.1%.
- Building organizational strength while maintaining cost discipline
- Entering market with our four year cellular IoT investment



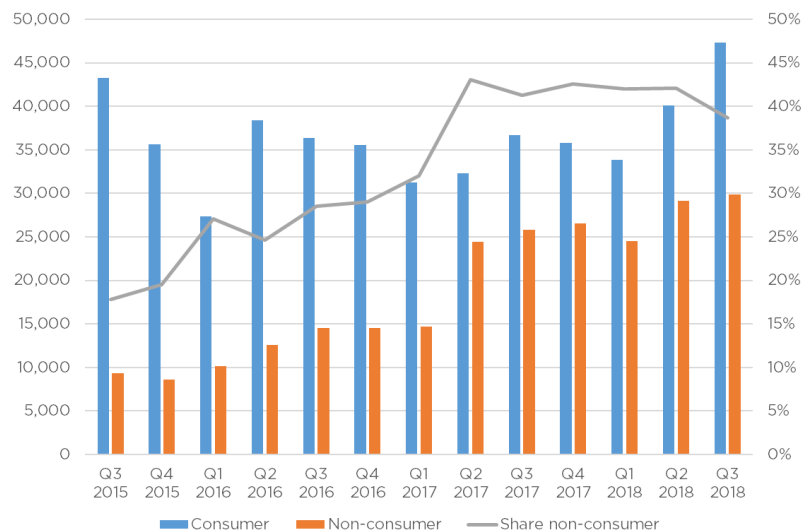
# Customer base growth and diversification

Continued growth in number of Active Customers\* on Bluetooth



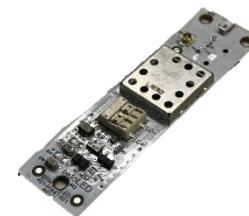
\*) Definition of "Active" Customer: An end customer which has purchased 10,000 units or more during prior six months (i.e., a customer actively selling product to end customers or preparing a high volume prototype)

Diversified revenue across consumer and non-consumer\*



\* Consumer is sum of Wearable and Consumer Electronics, non-consumer is sum of Building/Retail, Healthcare and Others.

# New Nordic powered products



Xiaomi 70mai Tire pressure	Estimote LTE Beacon	Polar 'Vantage M' and 'Vantage V'	IntSpo Asset tracking	Acuity Brands Professional light control
Automotive	Asset Tracking	Wearables	Asset tracking	Lighting
nRF51	nRF52	nRF52	nRF52	nRF52

# Financial summary

## Q3 2018 Strong KPI Improvements

Revenue	Revenue Bluetooth	Revenue Proprietary	Gross margin	EBITDA
MUSD 78.7	MUSD 54.3	MUSD 22.8	50.2%	MUSD 14.3
+19.9% y-o-y	+19.0% y-o-y	+35.5% y-o-y	+2.4pp y-o-y	+71.0% y-o-y
+10.6% q-o-q	+3.8% q-o-q	+34.5% q-o-q	+1.2pp q-o-q	+43.1% q-o-q



# Financials

Pål Elstad, CFO

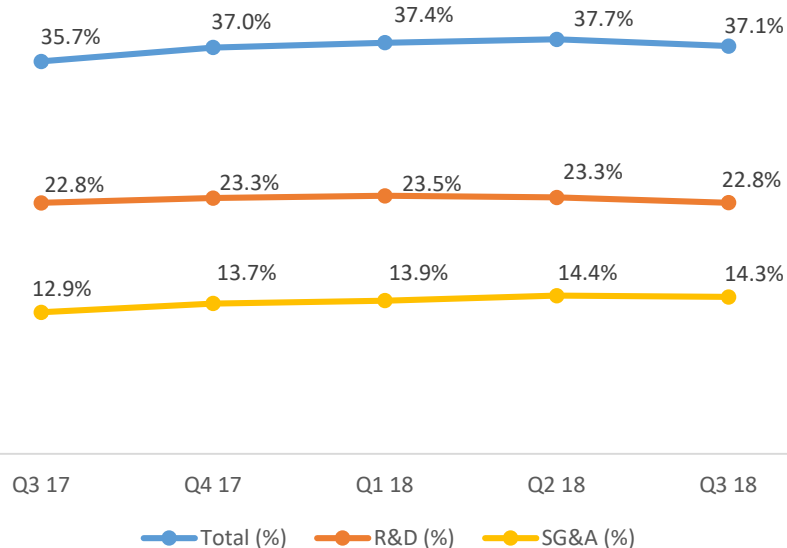


# Operating model performance Q3 2018

	Q3 2018	Q3 2017	
Gross Margin 50.2 %			
R&D short-range 15.3 %	Revenue growth y-o-y (MUSD 78.7)	+19.9% +25.5% (MUSD 65.7)	(-5.6pp) Bluetooth below long term Target - Strong proprietary
R&D cellular IoT 4.9 %	Gross margin	50.2% 47.8%	(+2.4pp) Continued positive contribution from cost improvements and favorable customer and product mix
SG&A 11.9 %	R&D short-range	15.3% 14.0%	(+1.3pp) Expansion in short-range IoT
EBITDA 18.2 %	R&D cellular IoT	4.9% 7.6%	(-2.7pp) Started capitalization ahead of first production release
	SG&A	11.9% 11.9%*	(+0.0pp) Cost control whilst scaling organization
	EBITDA margin	18.2% 14.3%*	(+3.9pp) Revenue growth drives improved EBITDA margins

# Trailing average R&D and SG&A spending

Trailing 12-months adjusted OPEX  
(% of revenue)



22.8% of revenue on R&D  
(-0.5pp vs. Q2 2018)

- Industry average R&D spend close to 20%
- Nordic trailing higher due to cellular IoT investment
- Ratio to decrease with revenue contribution from cellular IoT

14.3% of revenue on SG&A  
(-0.1pp vs Q2 2018)

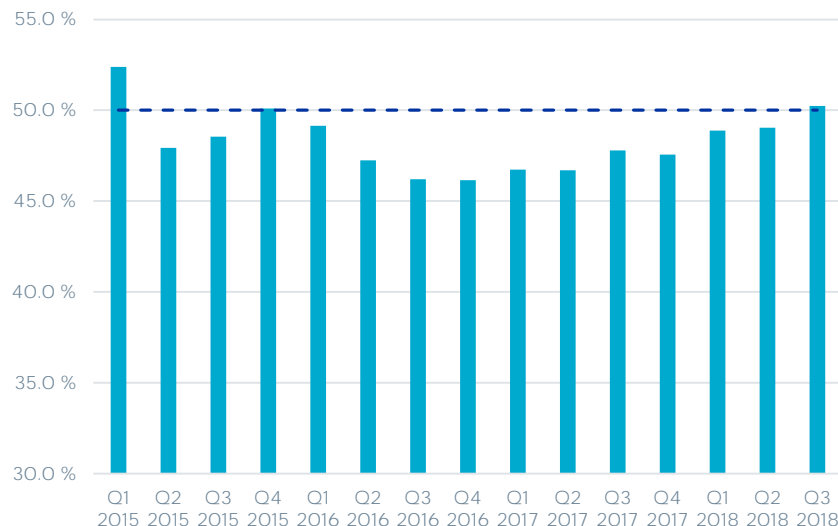
- Industry average SG&A spend 12-15% for our size
- Scaling sales and supply chain operations to fuel growth

# Revenue by market

Consumer Electronics	Wearables	Building /Retail	Healthcare	Others
MUSD 34.9	MUSD 12.4	MUSD 12.7	MUSD 7.1	MUSD 10.1
+34.0% y-o-y    +23.6% q-o-q	+16.6% y-o-y    +4.5% q-o-q	-19.1% y-o-y    -7.6% q-o-q	+52.9% y-o-y    +32.0% q-o-q	+83.6% y-o-y    +0.1% q-o-q

# Gross margin expansion

Gross margin 2015 –2018



Gross margin 50.2% +2.4pp y-o-y

- Continued positive contribution from cost improvements and stable yield on nRF52
- Pull on more high-end nRF52 products with higher ASP, and favorable product mix on proprietary
- Quarter to quarter fluctuations to be anticipated due to change in product and customer mix

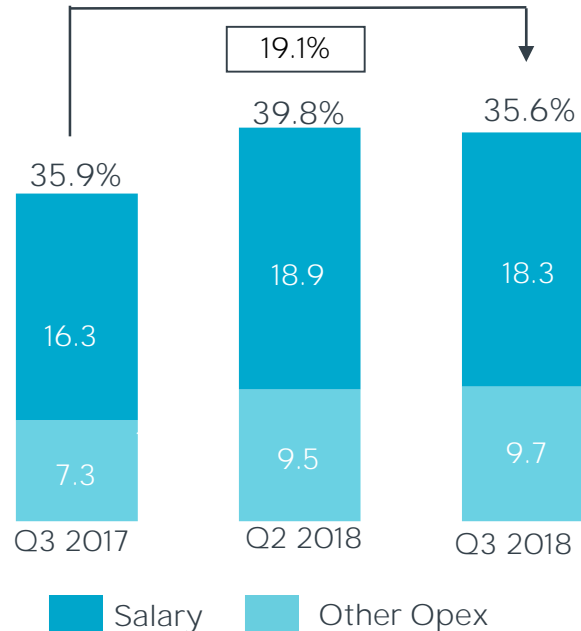
Reached our 50% target in Q3 2018

- Continued efforts on cost reductions
- Continued diversification of customer base and expanding product offering



# Cash operating expenses<sup>\*)</sup>

Cash Opex MUSD / % of revenue



## Q3 Opex<sup>\*</sup>

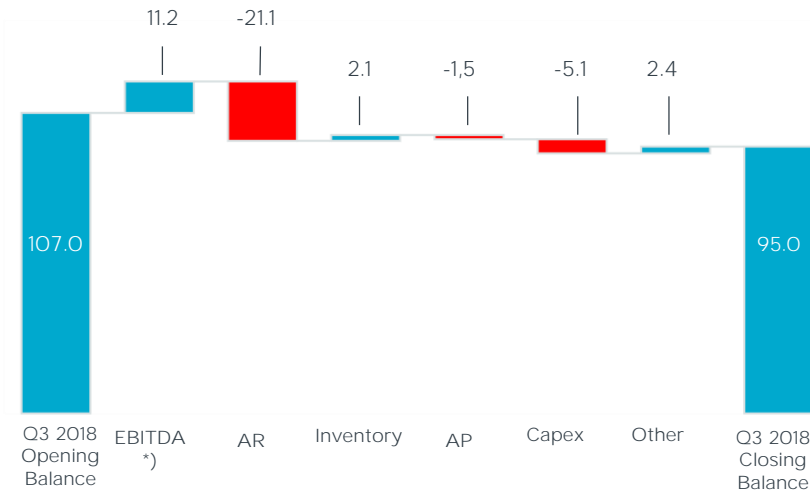
- Q3 cash operating expenses increased 19.1% y-o-y
- The increase is driven by new product releases and headcount growth of 12.8% from 588 in Q3 2017 to 663 in Q3 2018
- Continued cost discipline during the quarter, decrease in cash opex in % of revenue both year-on-year and quarter-on-quarter.
- Investments to continue in order to capture future growth

# Short-range business – strong profitability

	Q3 2018	Q3 2017	Change	YTD 2018	YTD 2017	Change
Revenue	78.7	65.7	19.9%	210.0	171.7	22.3%
Opex	21.4	18.0	18.6%	63.1	47.5	32.9%
Opex / revenue	27.2%	27.4%	-0.2 p.p.	30.0%	27.7%	2.3 p.p.
EBITDA	18.2	13.4	35.8%	40.7	33.4	21.9%
EBITDA Margin	23.1%	20.3%	2.8 p.p.	19.4%	19.5%	-0.1 p.p.

# Cash flow

Cash flow Q3 2018



## Strong financial position

- Consistent seasonal net cash flow, MUSD -12.0
- Cash negatively impacted by holidays in Asia late September (MUSD 8).
- NWC/LTM adjusted for late payments received on Oct 2 at 29.0% (26.5% in Q2 2018)
- Capex of MUSD 5.1 – test equipment for production releases on nRF52 high-end and nRF91, plus additional purchased IP

## Continued disciplined cash strategy

- Tight cash management and optimized cash generating ability

A scenic landscape featuring a calm lake reflecting the surrounding mountains. A bright sun is low on the left, creating a lens flare. A sharp, rocky mountain peak is prominent on the right. In the foreground, there is a field of tall, golden-brown grass. A faint rainbow is visible in the sky on the right side.

# Business outlook

Svenn-Tore Larsen, CEO



# Updated guidance for H2 2018

Revenue

MUSD  
150 - 160

The one application within the Building and Retail market in H2 2018 causes anticipation of revenue to be in the lower range of MUSD 150 to 160 guidance, representing a full year 2018 growth of close to 20%.

Bluetooth  
growth

20 - 25%

We expect Bluetooth growth to increase from Q3 2018. However, we expect the growth to continue to be below our long-term target in H2 2018, due to an application in the Building and Retail market.

Gross  
margin

49 - 51%

Continuous pull for higher ASP products will drive gross margin of around 50% for H2 2018.

# Short term outlook

## Backlog

Solid backlog coverage for guidance

MUSD  
77.0

+17.9%  
y-o-y

-4.9%  
q-o-q

- Healthy distribution over Q4 2018 and Q1 2019
- Backlog indicates a favorable product and customer mix for gross margin in Q4 2018

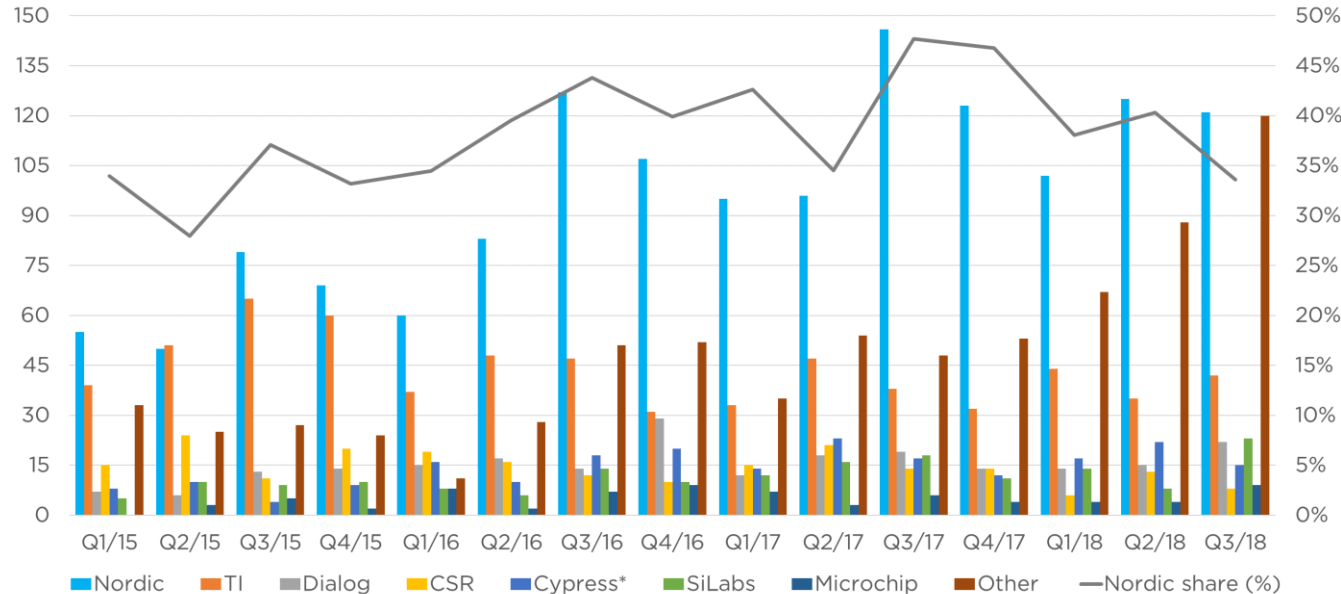
## Q4 2018

Growth contribution from nRF52840 and Thread

- Accelerating Bluetooth growth compared to Q3 2018
- Growth contribution from both consumer and non-consumer markets
- Expect first cellular IoT Revenue in Q4 2018

# Leading and broad position in Bluetooth

Bluetooth Low Energy end-product certifications\*



End-product  
certifications,  
Nordic Q3 18

121

-17%  
y-o-y

-3%  
q-o-q

\*Source: DNB Markets

# Building momentum in Thread

Particle mesh



IoT platform & modules

nRF52840 based

35.000 pre-orders\* shipping  
now

New Nordic SDK



V2.0.0 released in September

Updated OpenThread  
capabilities

\* <https://blog.particle.io/2018/10/03/particle-announces-three-new-iot-products-and-particle-mesh-shipping-at-spectra/>

# Ready for a revolution in cellular IoT



Production silicon performance meets expectations

- Characterization, qualification and testing continues as planned.

Software solutions maturing

- LTE-M protocol stack quickly moving toward production release
- Significant infrastructure vendor, carrier and in-field testing conducted
- US customers sampled

First customers sampled with NB-IoT

- Successful infrastructure vendor interoperability tests
- European customers sampled
- Wider sampling in Q4

# Certification ongoing

Strong collaboration with main infrastructure vendors

- Interoperability testing (lab and field testing) have been ongoing both in inhouse base-stations and in infrastructure vendors labs

Regulatory certifications (e.g. CE, FCC)

- Pre-certification tests passed for selected bands
- Certification projects started on final silicon with chosen test lab

Global certification (GCF)

- Full set of GCF test cases now being run on newly installed equipment
- Certification started with test lab

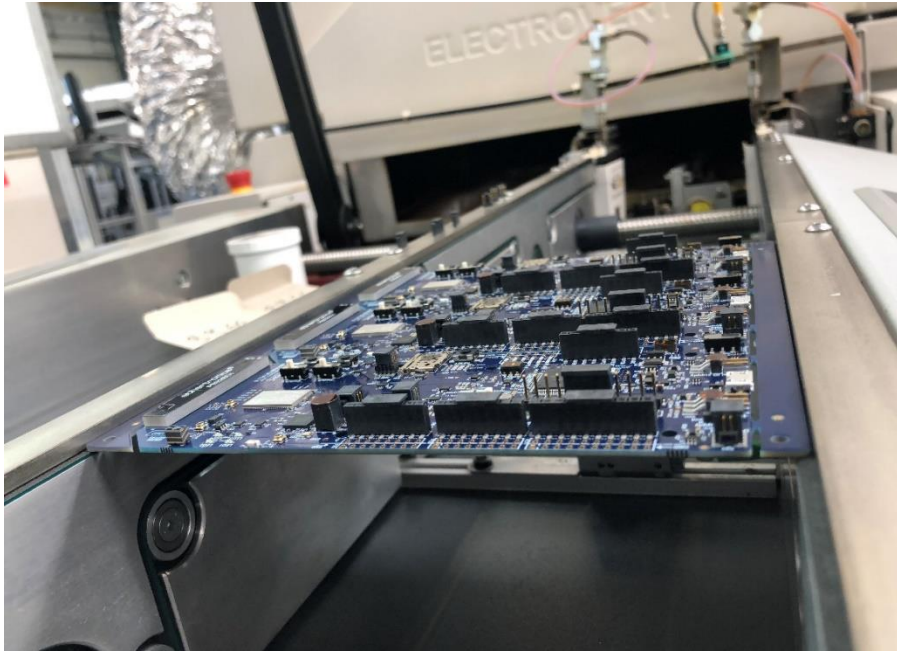
Carrier certification

- Pre-certification testing passed for initial sampling in selected carrier labs
- Field testing ongoing in several territories
- Carrier certification projects ongoing worldwide

Progressing  
towards  
GCF/CE/FCC by  
December 2018

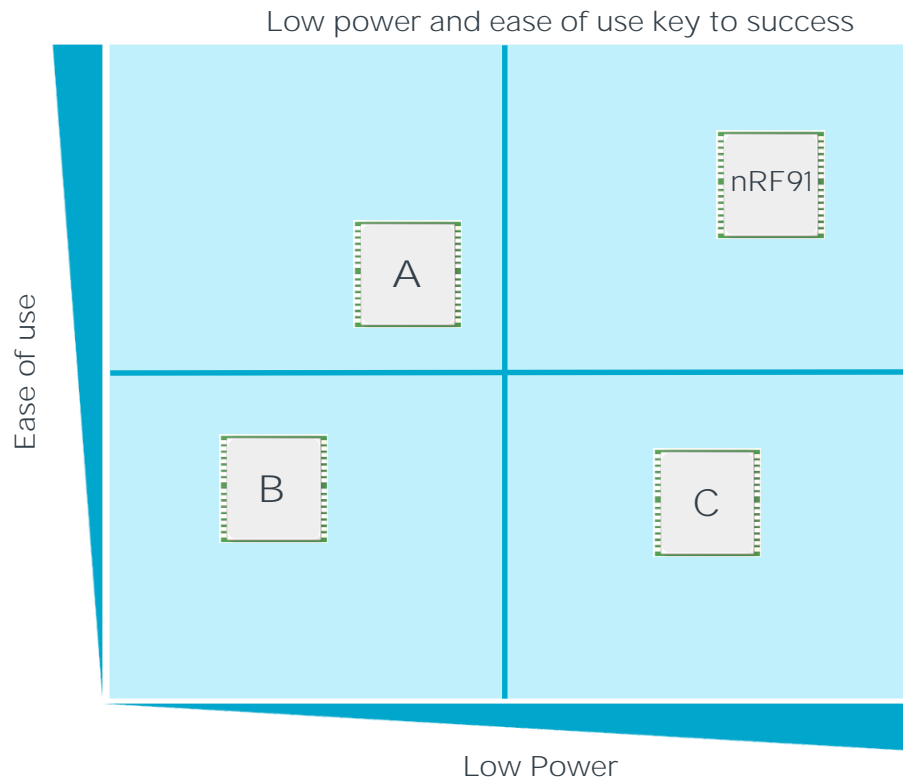


# Device, Development Kit and Certifications- ready for market



- Planned production of 4 000 development kits during Q4
- Significant material in production already, securing demand for Q4, Q1 and Q2
  - Wafers, ICs, SiPs

# Excellent competitive position



## Low Power

- Built everything from scratch for low power
- Integrate memories and use low-leakage process features

## Ease of Use

- Enable self-service for thousands of customers and hundreds of applications
- Similar to our successful Bluetooth Low energy products

## Integration

- Highly integrated solution with application MCU
- Advanced packaging techniques to reduce solution size – 10x16x1

## Security

- Arm® TrustZone® for ARMv8 and CryptoCell® technology
- Root of trust and trusted execution environment

## Connectivity

- Full ownership of connectivity solution; RF, Baseband, Protocol SW ensuring quality connectivity

# Simplified customer engagement model

## Traditional model

Chipset supplier → Module supplier → Customer

- Module supplier does value add integration and solutions
- Module supplier often handle sales, marketing and support

## Nordic model

Nordic → Customer



- Nordic is one-stop shop for Cellular IoT
- Building on Nordic's proven broad market engagement model

# Taking our four year cellular IoT Investment to the market



## Accelerated customer sampling in Q3

- > 120 lead customers sampled
- Objective is 300 for the full year
- Expect first revenue to be recognized in Q4 2018
- Reiterate our ambitions for break even in 2020

## Wide customer availability in Q4

- Secured supply of development kits and high-volume samples to meet demand

# Design-in with StalkIT



<https://stalkit.no/>

## StalkIT waste management asset tracking

"It is a great pleasure for us to work with the leading low power semiconductor company for Bluetooth and IoT. Our application require low power, high quality radio and high integration at the right price, and all of that is met by the Nordic chipsets", says Einar Aaland, Chief Product Officer of StalkIT.



# On track for a strong 2018

## Q3 2018

Strong revenue and profitability

- Revenue up +19.9% y-o-y driven by +35.5% y-o-y growth in proprietary +19.0% y-o-y growth in Bluetooth
- EBITDA MUSD 14.3 +71.0% y-o-y, +5.5pp EBITDA margin y-o-y
- Gross margin above 50%

## Full year outlook for 2018

Continued growth and on track to meet our objectives

- Implied full year revenue growth of above +20% y-o-y
- On track to meet profitability improvement
- Revenue in Q4 2018 for cellular IoT
- Continued design win momentum on Bluetooth and design wins on cellular IoT

A scenic landscape of a Norwegian fjord. The water is calm, reflecting the surrounding green mountains and the blue sky with white clouds. A small village is visible on the right side of the fjord. The text "Q&A" is overlaid on the left side of the image.

Q&A

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