MODEMS – THE BACKGROUND

Established as a fully-integrated segment in August 2013, Ericsson Business Unit Modems brings 20+ years of experience in the modems field. The Modems business focuses on design, development and sales of LTE multimode modems for high end smartphones, tablets and connected devices. The unit is a fabless \(^1\) semiconductor unit with 1,800 employees and contractors. Major R&D sites are in Sweden, China, Germany, Finland, and India.

Modems ensure that a device communicates with the mobile network. As such, they are a key enabler in the Networked Society, where everything that will benefit from being connected will be connected. Already today, people are using mobile broadband handsets, tablets and other consumer electronics to stay continually connected to social networks, business applications, streaming multimedia services and internet applications. As technology matures, this opens up for new types of consumer needs and devices that need powerful modems inside.

**MARKET SIZE AND TRENDS**

The total addressable market for modems, according to Ericsson strategy forecasts, is expected to grow more than 50% in the coming four years.

By 2020 in mature markets, there will be three billion subscribers who will typically have 5-10 connected devices each. There is massive potential for further growth in mobile broadband enabled devices – the overall LTE smartphone growth is expected to be larger than 70% in 2014, and LTE volumes are expected to be larger than one billion in 2019 \(^2\).

The Ericsson Mobility Report \(^3\) measures 65% growth in data traffic between Q1 2013 and Q1 2014, and this trend is expected to continue. There were 1.9 billion smartphone subscriptions in 2013, and Ericsson predicts that mobile data traffic will increase by 10 times by 2019.

Ericsson ConsumerLab studies find that half of the users prioritize coverage and speed of their connection as the most important factor for smartphone usage satisfaction. A slow or choppy connection makes communication or apps run poorly and this means that for operators, coverage and user experience are competitive tools. 30-40% would use the internet even more with better battery life. And the modem plays a central role in this as well.

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\(^1\) Fabless manufacturing: Where there is no in-house production and a semi-conductor manufacturer is contracted to handle production.

\(^2\) Ericsson Strategy Forecast (ESF)

\(^3\) www.ericsson.com/ericsson-mobility-report
THE CHALLENGES

Ericsson sees several challenges on the mobile market that affect players in the ecosystem, such as:

- Fragmented spectrum holdings, limiting data speed
- Explosion of frequency bands leads to multiple product variants
- Providing longer battery life with 4G connection
- Adding features without increasing the size of the modem

Finding a reliable supplier that supports all five radio access technologies (LTE FDD/TDD, WCDMA, GSM and TD-SCDMA) and makes global platform certification with major operators enabling global launch for OEM

THE PRODUCT

The Ericsson multimode modem solves the multi-band challenge and supports all major access technologies for unmatched geographical coverage. The Ericsson M7450 offers the following benefits:

- The smallest form factor on the market with a single-chip radio Carrier Aggregation to enable sleek end devices
- Enabling device manufacturers to build devices with long battery lifetime in a sleek design
- LTE FDD, LTE TDD, HSPA+, GSM and TD-SCDMA in a single chip
- Extensive frequency band support, 20+ bands
- Complete and pre-tested reference design, for chipset validation and shorten time to market for device manufacturers

The M7450 is certified for use in China Mobile’s network as well as by other major operators in North America and Asia. The certification with operators in Europe is progressing as planned. The first devices integrating Ericsson M7450 will be on the market in the second half of 2014.

HISTORY

2001 Ericsson creates Ericsson Mobile Platforms, a purely platform company
2002 Ericsson introduces U100 one of the world’s first commercially available 3G chipsets
2004 Ericsson is the largest chipset provider of 3G chipsets with 40% global market share
2008 Ericsson introduced world's first commercial LTE platform for mobile devices, with peak data rates of up to 100Mbps in the downlink and up to 50Mbps in the uplink
2008 ST-Ericsson joint venture was announced
2009 ST-Ericsson started doing business
2009 ST-Ericsson announced it is first company to achieve LTE and HSPA mobility with a multimode device
2011 ST-Ericsson announced new portfolio and strategic direction to include: Nova, a series of application processors; Thor, the modem; and NovaThor, a ModAp solution
2012 STMicroelectronics announced it would leave the joint venture
2013 Ericsson and STMicroelectronics announce the dissolution of the joint venture
2013 Ericsson creates Business Unit Modems with flagship LTE thin modem, the Ericsson M7450
NOTES TO EDITORS

Download high-resolution photos and broadcast-quality video at www.ericsson.com/press

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, businesses and societies to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With more than 110,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world’s mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2013 were SEK 227.4 billion (USD 34.9 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

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