Connectivity and Audio
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Forward Looking Statements

This document contains “forward-looking statements” that reflect management’s current views with respect to future events. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “project” and “should” and similar expressions identify forward-looking statements. Examples include statements regarding financial metrics, operational matters, and closing conditions and regulatory approvals required under the new contract with Apple. Forward-looking statements are subject to risks and uncertainties, including, but not limited to: an economic downturn in the semiconductor and telecommunications markets; changes in currency exchange rates and interest rates, the timing of customer orders and manufacturing lead times, insufficient, excess or obsolete inventory, the impact of competing products and their pricing, political risks in the countries in which we operate or sale and supply constraints. If any of these or other risks and uncertainties occur (some of which are described under the heading “Risks and their management” in Dialog Semiconductor’s most recent Annual Report) or if the assumptions underlying any of these statements prove incorrect, then actual results may be materially different from those expressed or implied by such statements. We do not intend or assume any obligation to update any forward-looking statement which speaks only as of the date on which it is made, however, any subsequent statement will supersede any previous statement.
Bluetooth® low energy Market Opportunity

- Shipped more than 200 million chips to date
- #2 market-share in Bluetooth low energy (BLE)
- Further opportunities in new verticals

Bluetooth low energy SAM ($M)

Source: IHS Q1'18 tracker and Dialog estimates
Technology Focus

Stream audio
between two devices

- Wireless headsets
- Wireless speakers
- In-car audio

Transfer data
between two devices

- Sports & fitness devices
- Health & wellness devices
- Peripherals & accessories

Broadcast information
from one to many devices

- Point of interest beacons
- Item-finding beacons
- Way finding beacons

Exchange messages
between many devices

- Building automation
- Wireless sensor networks
- Asset tracking

Bluetooth low energy
- short burst connections -
Targeting High-Growth Low Power Connectivity Verticals

2021 Low Power Connectivity SAM ($762M)

- Home CE/HID: 30%
- Wearables, Health & Fitness: 21%
- Proximity: 16%
- PC Accessories: 8%
- Medical: 6%
- Smart Toys: 3%
- Wireless Charging: 5%
- Smart Home: 5%
- Automotive: 2%
- Others: 4%

Source: IHS Q1’ 18 tracker and Dialog estimates
Wearables: Market Leader with the Broadest Portfolio of Solutions

Wearables

#1 in BLE for wearable applications

Dialog advantage

- Strong investment in targeted ICs
  - USB charging
  - Low power sensor hub management
  - Color screens and watch movements drivers
  - Best-in-class power consumption and BOM
- Comprehensive application resources supporting fast time-to-market
Proximity Sensing: Leader with Best-in-Class Battery Lifetime

Proximity Sensing

A leader in BLE tags and beacons

Dialog advantage

- Low power for longest battery life
- Complete reference designs
- Experienced production ramp support
HID: Winning with Small Form Factor Battery Lifetime and USB Charge

Human Interface Devices (HID)

Key supplier across a wide range of use cases

Dialog advantage

- USB charging and sensor management targeting Virtual / Augmented Reality
- Industry leading low power ICs
  - Deep application knowledge to optimize system power
- First to market with voice over BLE targeting remote controls
New Growth Drivers: Smart Home

Smart Home

#1 in HomeKit shipments that feature only Bluetooth low energy

Dialog advantage

- HomeKit
  - Apple pre-certified solution
  - Support profiles, iOS app and HW design
  - Lowest power consumption for battery applications
- BLE Mesh
  - Complete implementation supporting all roles and models
New Growth Drivers: Connected Health

Connected Health

A billion-unit opportunity

Dialog advantage

- Cooperation with leading players in the industry
- Investment in new IC roadmap
- Optimizations to target disposable medical products
- Enabling new ways to meet market needs
  - Glucose monitoring
  - Timestamping and dose of drug delivery

Worldwide Number of Patients 2017 (Millions)

- Injectors: 150
- Diabetes: 422
- COPD (Asthma): 251
- High Blood Pressure: 1,000

Source: Statista and 2017 Dialog analysis
SmartBond™ Bluetooth low energy Roadmap

### 2018 Offering

**DA14680/1**
- Cortex M0@96Mhz, 128KB RAM
- Integrated system PMU
- 8Mb flash (on DA14680)
- Bluetooth 4.2 core

**DA14682/3**
- Cortex M0@96Mhz, 128KB RAM
- Enhanced security
- PMU with improved efficiency
- 8Mb flash (on DA14682)
- Bluetooth 5.0 core

**DA14580/1/2/3**
- Cortex M0@16Mhz
- 50KB RAM, 32KB OTP
- 1Mb Flash (on DA14583)
- Bluetooth 4.2 core

**DA14585/6**
- Cortex M0@16Mhz
- 96KB RAM, 32KB OTP
- 2Mb Flash (on DA14586)
- PDM I/F
- Bluetooth 5.0 core

### Future Offering

**DA1469x**
- Autonomous sensor data processing
- World’s most sophisticated PMU for BLE
- Display and motor drivers

**DA1453x**
- Enabling the next billion units
- Power-optimized with high functionality for disposable Connected Health
Connectivity Key Takeaways

- Bluetooth low energy market expected to grow at 23% CAGR
- Dialog achieved top-two position among > 20 competitors
- Increasing customer base
- Leadership position in key vertical applications
- Optimized product offering and roadmap towards enabling the next billion devices
Audio
Audio Market Opportunity

Wireless Stereo Headset SAM (Million Units)

Source: Futuresource Consulting, GrandView Research and Dialog estimates
Applications

Unified Communication (UC) Headsets
- #1 chip-set supplier in UC Headsets
- DECT* technology leader
- Portfolio supplier – USB, DECT, Bluetooth co-processor

*DECT is Digital Enhanced Cordless Telecommunications

CE Headsets / Hearables (True Wireless Stereo Digital USB)
- DSP audio supplier – USB, Bluetooth co-processor
- Active noise cancellation by DSP software
- Voice pick up sensor to eliminate false triggers
- Beamforming microphones for noise reduction

Microphones and Other
- DECT and 2.4GHz digital signal processor audio supplier
- Low latency sample-based codecs in the digital signal processor
- Modules enable fast time to market
Leading Customers in a Growing Digital Audio Market

**Heritage**
Over 20 years leadership in DECT voice terminals driving our transition from voice ICs to full Hi-Fi audio chip solutions

**Focus on Digital Audio Market**
Complete optimized IP portfolio including power management, USB interface, ultra-low power codecs and Audio DSPs with 1.9GHz RF

- Jabra
- Sennheiser
- audio-technica
- beyerdynamic
- plantronics
- Panasonic
- Polycom
- HUAWEI
Customer Spotlight: Broad Chip Adoption in Huawei Honor FlyPods in China

- Multiple chips in true wireless headphone solution
- Combination of Audio and CMIC products across headphone and charging case

Huawei Honor FlyPods made possible using 5 Dialog ICs:

- 2x DA14195 Audio Co-processor (voice detection)
- 3x GreenPAK ICs (Power Line Communication)
Audio Key Takeaways

- DECT voice technology leader driving innovation in Hi-Fi audio ICs
- Powerful reusable audio platform for rapid market adoption
  - Bluetooth co-processor audio
  - USB Type-C and DECT
- Differentiated technologies target unified communication headsets, true wireless and microphones
Powering the Smart Connected Future

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