

Battery Management

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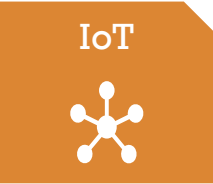



4 JUNE 2020

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.

Dialog Semiconductor is poised to enter a new multi-year growth cycle with a diverse portfolio of mixed signal products

Executing Our Growth and Diversification Strategy

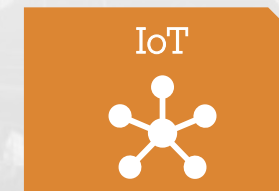
Leveraging our technology into automotive and computing	 	<ul style="list-style-type: none">▪ Power management for ADAS and infotainment systems▪ PMICs for next generation Gaming platforms and embedded computing▪ Expanding SSD PMICs and CMICs
Expanding our product portfolio for consumer IoT		<ul style="list-style-type: none">▪ Low-power Wi-Fi and TWS audio▪ BLE product portfolio expansion into connected health▪ Increased adoption of CMICs
Creating a new business in industrial IoT		<ul style="list-style-type: none">▪ Creative Chips portfolio▪ Adesto Technologies portfolio▪ Introduction of High Voltage CMICs
Addressing market adjacencies, building on strong market positioning in both sides of the charging wire	 	<ul style="list-style-type: none">▪ Increasing mixed signal opportunities in smart cameras and new display technologies▪ Expanding addressable market in Battery Management for smart phones, tablets, wearables and hearables

New growth areas

Expanding our Addressable Market in Battery Management

Winning New Opportunities in an Existing Market

- **Expanding our addressable market** by developing differentiated Battery Management solutions which are adjacent to our success in Power Management and AC/DC travel adaptor solutions.
- Winning new mobile and consumer IoT opportunities with:
 - Multiple battery management solutions based on switching converters, capacitive dividers/converters
 - In-device charging, monitoring, sensing of Battery Systems
 - Integrated safety and protection features



A Growing Addressable Market*

There is a battery management system inside every smartphone, every tablet, every earbud cradle, every smart watch, every wearable

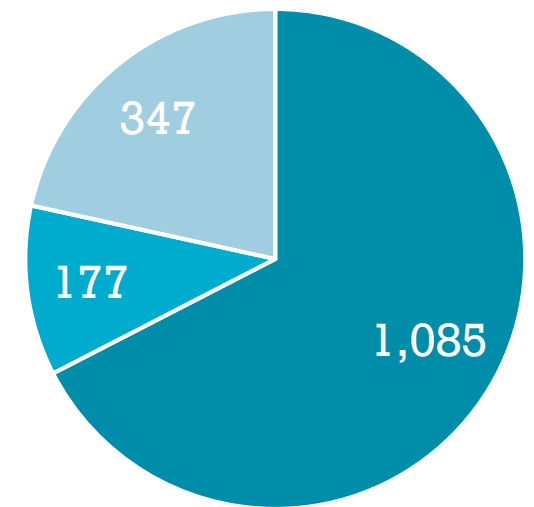
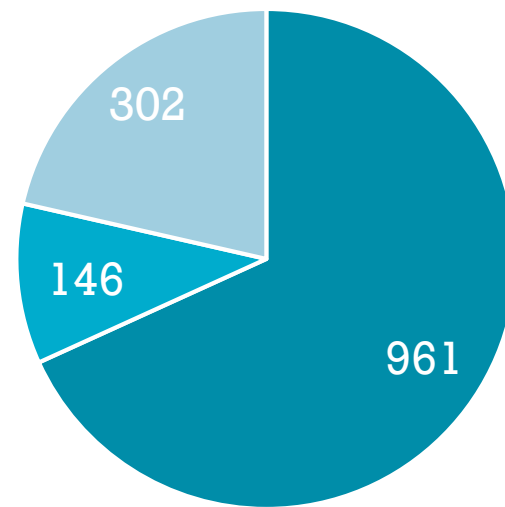
Reducing charge times and extending usable time between charges



2019 \$1.4B

+5% CAGR

2022 \$1.6B



Mobile+ Consumer Other

Main competitors: TI, Maxim, NXP & Qualcomm

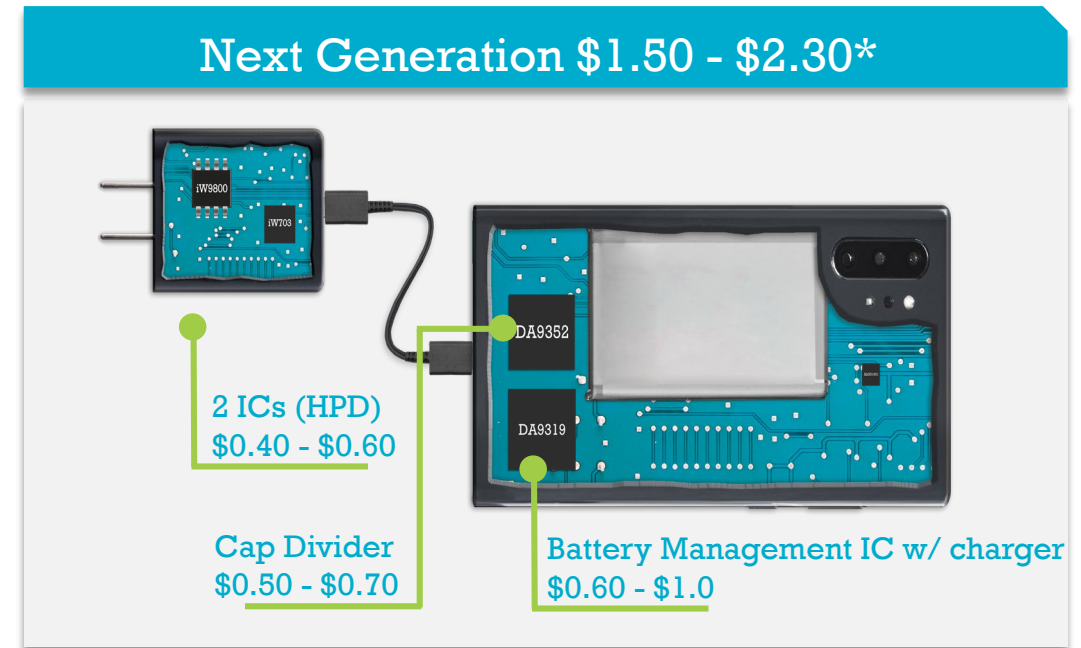
* Source: Omdia FY 2019 report

Increasing our Silicon Content

Differentiated solutions for smartphones, tablets and wearables

What drives innovation in Battery Management technologies:

- Strong consumer desire to charge their device faster
- Higher power travel adaptors delivering increased energy to device
- Safe and efficient delivery of energy into the battery



* Average selling price including all components

Advanced IP and Innovation in Battery Management

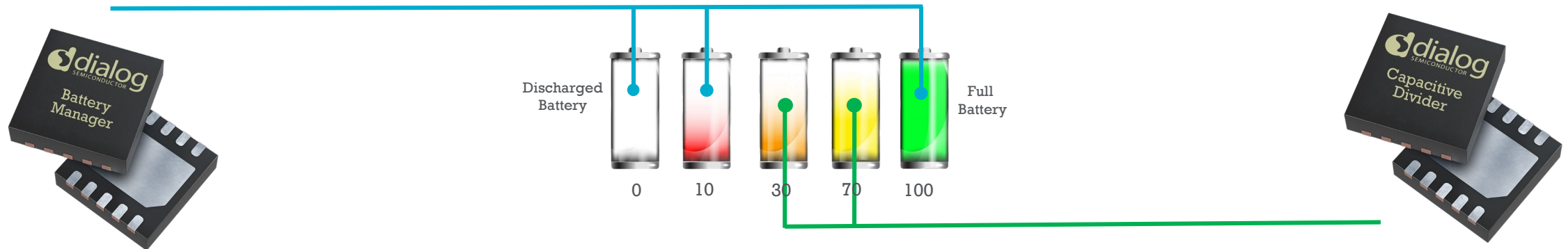
Why are we winning?



- End-to-end technology expertise
 - Ultra-high efficient power conversion
 - Innovative architectures for size and performance
 - Mission critical safety and monitoring of battery
- Customization
 - Integrates complex power path and control
 - Delivers best possible solution in size and cost
 - Enabling customers to differentiate

Battery Management IC and Capacitive Divider

Complementary technologies working hand-in-hand to manage battery and system power



Battery Manager

- Controls charging in deep discharge and near full charge
- Precisely measures voltage, current, and temperature: critical to battery health and safety
- Manages charge cycles
- Selects power source (adaptor, wireless charging) and delivers power to phone battery and accessories

Capacitive Divider / Direct Charger*

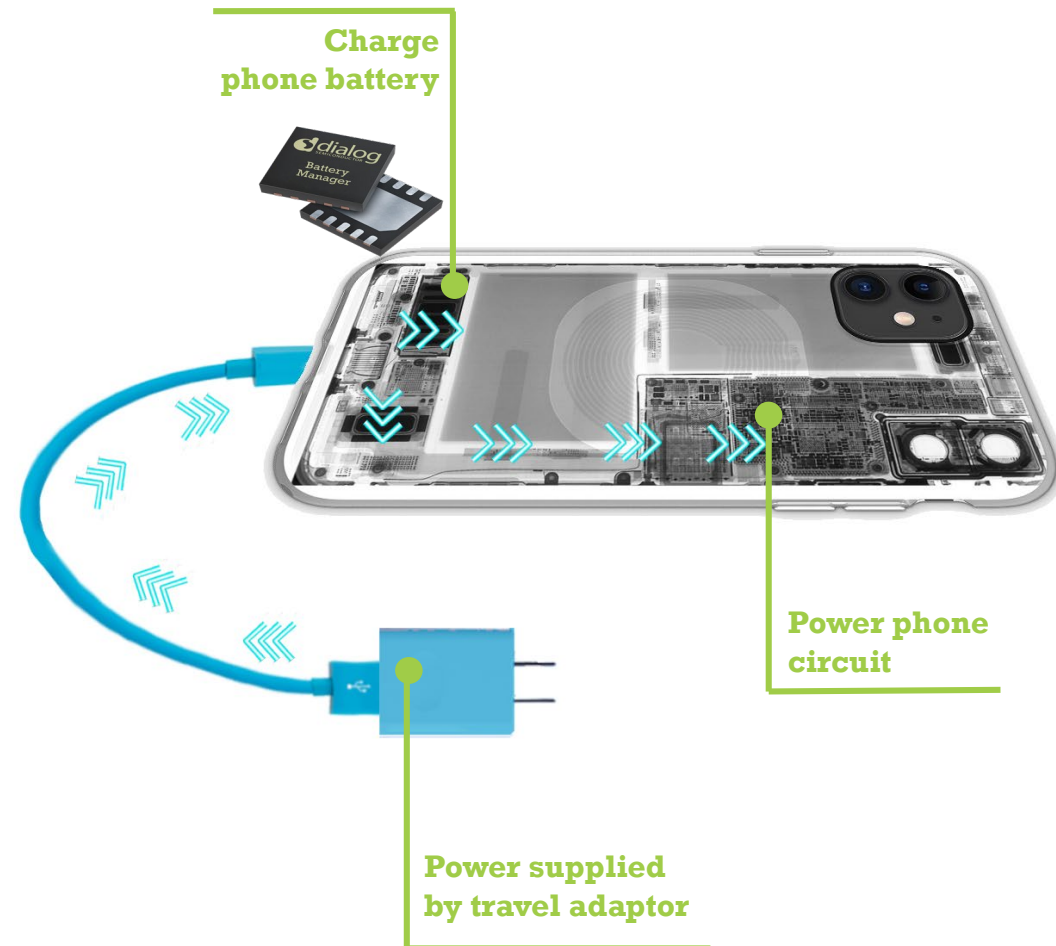
- Delivers peak charge current
- Ultra-efficient delivery of highest power: least loss
- Reduces charge time
- Limited ability to sense battery state

* Direct Charger = Capacitive Divider + Regulation

Charging of Phone and System Power

Complex power needs seamlessly handled by Battery Management IC

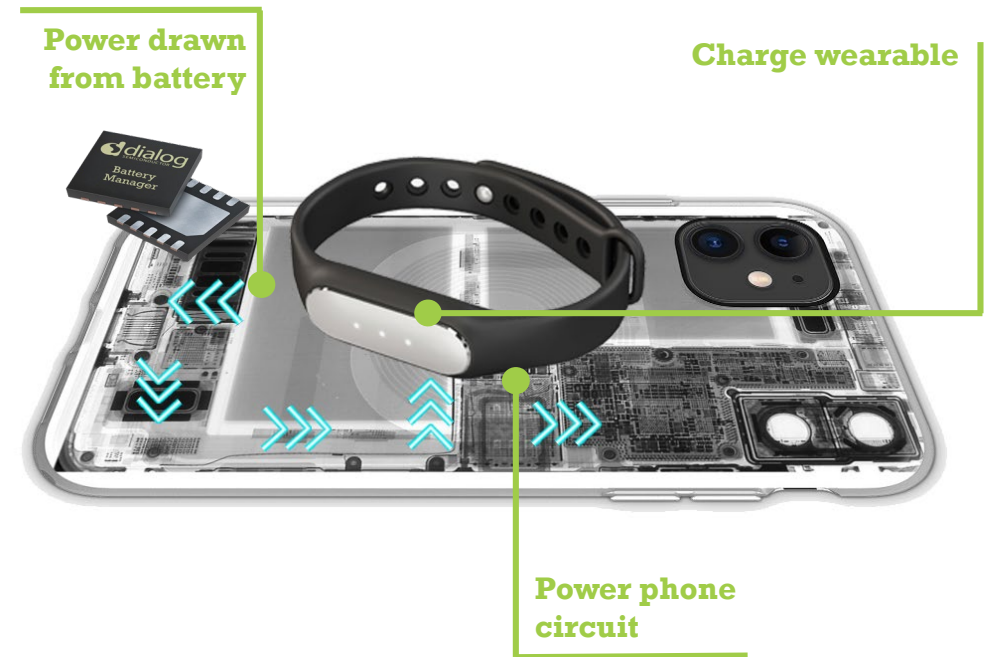
- Condition:
 - Phone plugged into wall
- Battery Manager inside phone:
 - Powers the phone
 - Charges the phone battery



Charging of Accessory from Phone Battery

Battery Manager draws from phone battery to power an accessory device

- Condition:
 - Phone not plugged into wall
 - Phone battery provides power to phone
- Battery Manager inside phone:
 - Ensures power to phone circuits
 - Reverses current to charge an accessory device



True Wireless Stereo (TWS) Charging

Three battery management ICs used in a TWS solution

- **Case:**
 - Battery manager charges case battery and delivers power to earbuds
- **Earbuds:**
 - Each has battery management function to charge battery



Other Portfolio Products in Battery Management

Additional complementary solutions for battery charging, protection, and monitoring

- Power for Battery Management
 - Customized power conversion products
 - High-efficiency, small solution size
- Integrated Protection Switches (IPS)
 - Smart FETs providing protection in battery powered systems
 - Advanced protection features in smallest size



Further integration on the roadmap...

Winning and Growing in Battery Management

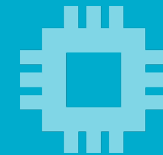
Significant near-term contribution to revenue growth

KEY TAKEAWAYS:

Dialog investing, growing in
Battery Management



Multiple designs with
Top 5 smartphone
customers worldwide



Revenue growing tenfold in
next three years to
\$250M+ in 2023



A Diverse and Growing Mixed Signal Business

- **Structural growth – Multi-year growth cycle**
 - Secular trend in power efficient technologies in our target end markets
 - Multiple medium-term growth drivers: Battery Management, gaming and automotive PMICs, IoT BLE and Wi-Fi; CMICs, display backlighting and controllers, industrial ASICs
- **Solid competitive positioning**
 - Addressing market adjacencies with leading low power mixed signal expertise and IP
 - Strong foothold in IoT - consumer and Industry 4.0
- **High returns, strong cash flow generation**
 - Flexibility and low capital intensity of fabless business model
 - Attractive long-term operating margin profile – high gross margin and efficient OPEX management
 - Strong cash flow generation and consistent returns to shareholders through share buybacks
- **Support organic and inorganic growth**
 - Reinvesting in growth and diversification of revenue stream

Q&A





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