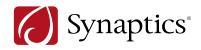


# **Welcome to CES**

Rick Bergman, President and CEO



# **Disclosure Statement**

This presentation contains forward-looking statements that are subject to the safe harbors created under the Securities Act of 1933, as amended, and the Securities Act of 1934, as amended. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business, and can be identified by the fact that they do not relate strictly to historical or current facts. Such forward-looking statements may include words such as "expect," "anticipate," "intend," "believe," "estimate," "plan," "target," "strategy," "continue," "may," "will," "should," variations of such words, or other words and terms of similar meaning. All forward-looking statements reflect our best judgment and are based on several factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Such factors include, but are not limited to, the risks as identified in the "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" sections of our Annual Report on Form 10-K for the fiscal year ended June 30, 2018, and other risks as identified from time to time in our Securities and Exchange Commission reports. Forward-looking statements are based on information available to us on the date hereof, and we do not have, and expressly disclaim, any obligation to publicly release any updates or any changes in our expectations, or any change in events, conditions, or circumstances on which any forward-looking statement is based. Our actual results and the timing of certain events could differ materially from the forward-looking statements. These forward-looking statements do not reflect the potential impact of any mergers, acquisitions, or other business combinations that had not been completed as of the date of this filing.

# Agenda

4pm to 6:30pm, January 7, 2019

Rick Bergman, President & CEO

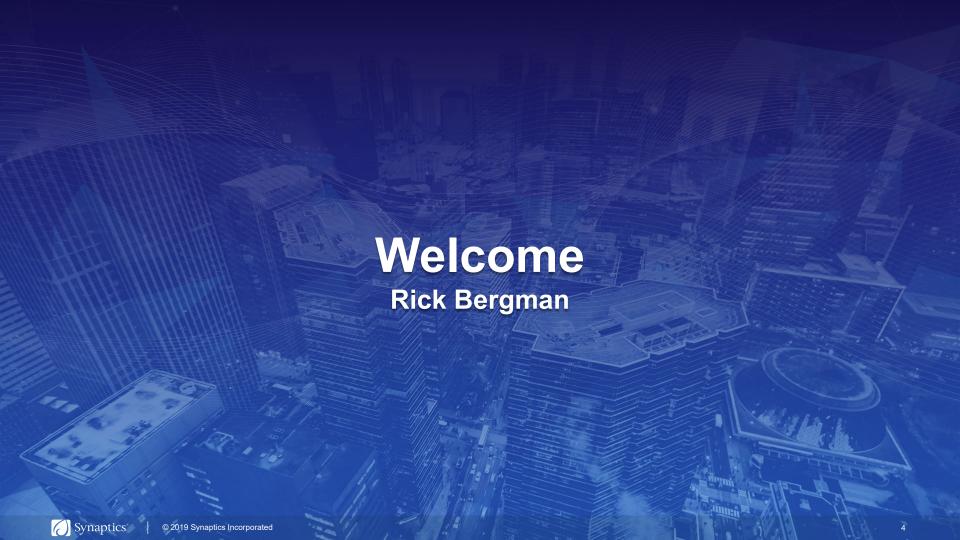
**Huibert Verhoeven, SVP & GM IoT Division** 

Richard Lu, SVP & GM Mobile/Automotive Division

Shawn Liu, SVP & GM PC Division

Wajid Ali, SVP & CFO

Wrap Up

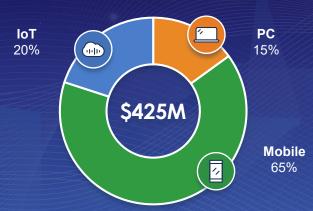


# **Synaptics 3.0 Profile**

#### **Investment Considerations**

- Gross Margins Six sequential quarters of non-GAAP growth
- Leverage Non-GAAP earnings per share accelerating
- Growth Focused on high growth IoT, OLED & Automotive
- **Diversification** Broader product line and customer base
- Execution Delivering next generation products

### **FY19 Q2 Mid-Point Revenue Guidance**



### **Products Enabled by Synaptics**



### Synaptics at a Glance

Established 1986

Listed Nasdaq: SYNA (IPO 2002)

Revenue FY18 \$1.63B

Global Footprint 20+ Locations Worldwide

• 1900+ employees (over 70% engineering)

Patents 1800+

# **Established Leadership in Growing Markets**



### IoT

- Intelligent edge solutions for smart home
- Emerging smart digital headsets



### Mobile

- Touch & DDIC winning in growing OLED market
- TDDI winning in the 1B+ unit LCD market



### **Automotive**

- Increasing digital display attach in cars
- Driving leading UX technologies: Touch, display, fingerprint and audio/voice



#### PC

- Continued touch leadership
- Most secure fingerprint solutions

**IoT Voice SoCs** 

**USB-C** Headset & Dongle Solutions

**Android Service Provider Platform SoCs** 



Mobile LCD, TDDI, DDIC, OLED Touch\*



**Notebook PC Touchpad** 

**Notebook PC Fingerprint** 

\*non-captive



# **Mobile – OLED Ready for Primetime**

TDDI & OLED\* SAM (MU)

- **OLED** capacity and TDDI market growing rapidly
- More LCMs shipping in volume in 2019
- 5G + OLED will drive new form factors and device modalities



\*excludes Korea

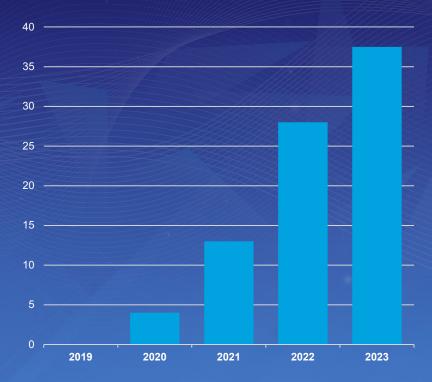


# **Automotive – TDDI and Connected Car to Drive Market**

# On track to double auto revenue by 2021

- Automotive TDDI very well received
- Connected car driving more and larger displays

### **Automotive TDDI SAM (MU)**



IHS, Internal Estimates, by unit opportunity



# **PC – Innovation Driving Growth**

- Continue to lead with touch
- Significant growth in fingerprint with industry-leading solutions
- New investments in voice/audio and high-speed connectivity

### **FPS Notebook PC TAM (MU)**

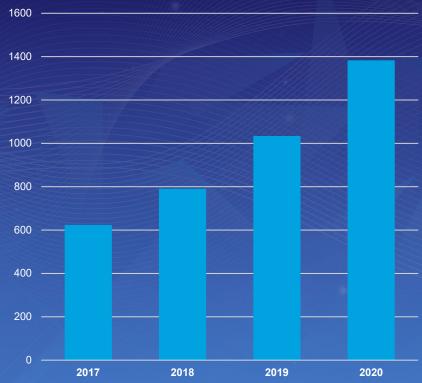




# IoT – Accelerating Adoption of Intelligent Devices

- Convergence of audio, video and display
- Voice everywhere
- Privacy & security driving need for AI on the edge

## Smart Home SAM (MU)

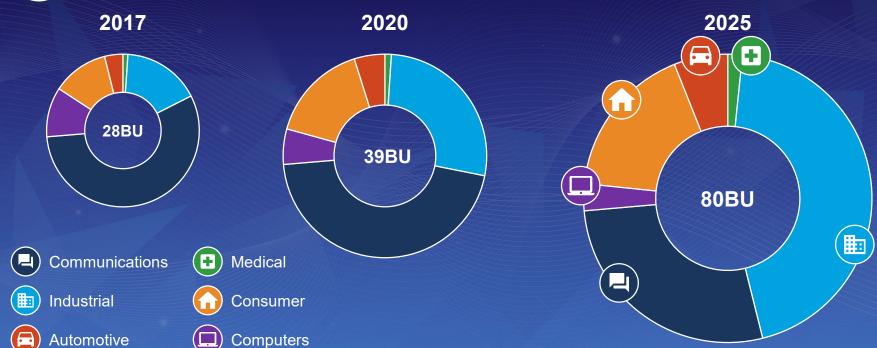


IHS Markit - IoT Device and Connectivity Intelligence Service - Q3-2018 and Synaptics Internal Estimates





# **Accelerating IoT Devices Installed Base**



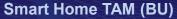
Consumer and Computers are the Launchpad into Automotive and Industrial

IHS Markit – IoT Device and Connectivity Intelligence Service – Q3-2018 Installed base of devices in Billions (B) of units (U)





# **Growing Smart Home Market**





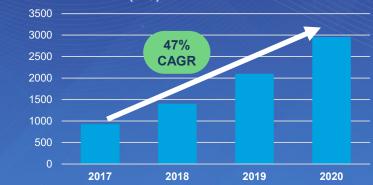
### **Smart Home SAM (MU)**



### **Growth Vectors**

- Voice / Video / Display convergence
- Increasing intelligence at the edge
- Dedicated AI / DNN technology
- Security and privacy growing differentiator

### **Smart Home SAM (M\$)**



IHS Markit – IoT Device and Connectivity Intelligence Service – Q3-2018 and Synaptics Internal Estimates Device TAM in Billions (B) of units (u); SAM in Millions (M) of units (U) and dollars (\$)





# **Edge Intelligence will Enable the True Smart Home**







# **Security and Privacy are Differentiators**

### California just became the first state with an Internet of Things cybersecurity law

https://www.theverge.com/2018/9/28/17874768/california-iot-smart-device-cybersecurity-bill-sb-327-signed-law

Governments can use their policy tools, significant resources, and market power to make security a competitive differentiator.

Internet Society (IoT Global Report – April 2018)

#### SECURITY )

#### **PRIVACY**





# Alexa beware! New smart home tests reveal serious privacy flaws

 ${\it https://internet of business.com/alexa-beware-many-smart-home-devices-vulnerable-says-report}$ 

EU Privacy Rules Can Cloud Your IoT Future – Many GDPR compliance issues revolve around privacy policies that must be designed into IoT devices and services

https://www.eetimes.com/document.asp?doc\_id=1331386&page\_number=2

The Smart Home, it seems, is pretty dumb when it comes to security

BBC News https://www.bbc.com/news/business-37776964

# #1 in Voice – Complete Solutions to Lead the Convergence





# **Leading with Differentiated Technologies**



**Voice / Audio** 



Video / Display

Vertically integrated SW/FW/HW solutions

Fastest time-to-market for certification

POM

IZE/POM/TDM

Award wining Qdeo® video processing

Broadest suite of technologies

SyNAP<sup>™</sup> – on-device intelligence

Secure video and data analytics

Mic-to-cloud secure path

Dedicated carrier-grade security engine



**Artificial Intelligence** 



**Security / Privacy** 



### Highlights

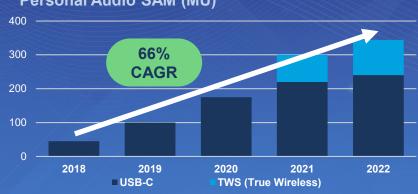
- 8+ years of headset experience
- 3<sup>rd</sup> gen Hi-Fi USB-C codec sampling at top-tier mobile OEMs
- USB-C Codec adopted for "Made for Google" program



#### **Growth Vectors**

- Adoption of USB-C in mobile accelerating
- Growth in gaming headset market
- Strong interest in ANC/Voice in headset market

### Personal Audio SAM (MU)



Futuresource, TechNavio and Synaptics Internal Estimates; Device SAM in Millions (M) of units (u)





### **Highlights**

- #1 in TDDI
- #1 in OLED Touch\*
- Shipping in volume OLED DDIC
- VR DDIC in development with major customers



#### **Growth Vectors**

- 5G technology
- Changing display form factors
- VR market emerging

#### SAM OLED\* & TDDI (MU) 35.5% 1250 **CAGR** 1000 750 500 250 2017 2018 2019 2020 2021 **TDDI OLED Capacity** IHS, Internal estimates \*excludes Korea

\*of non-captive Market



# **Mobile: Foundational Technologies**



- 1B+ mobile touch shipped
- Leading capacitive touch
- Supports all OLED types
- Next-generation flexible and foldable displays



- In flagship OLED phones
- · Leading OLED image IP
- High frame-rate for gaming / 5G
- High-performance 2K/2K DDIC customized for VR space



- 350MU+ shipped
- Leading transition to TDDI
- Next-gen features for 5G phones

# Automotive Profile

### **Highlights**

- 10+ years of experience
- Discrete touch and display on the road now at major OEMs
- 8 of 9 top display manufacturers developing with SYNA TDDI
- Match-in-Sensor fingerprint module in production in 2019





DAIMLER







#### **Growth Vectors**

- Connected car transforming the driving experience
- Services and entertainment driving display growth
- Identification and security driving biometrics





# **Automotive: Foundational Technologies**



- On the road now
- Broad product portfolio
- Designed-in at top OEMs



- Pioneered by Synaptics
- Only auto supplier with both display + touch
- Strong adoption by many top OEMs



- Connected car driving security and identification
- Only integrated solution
- Designed-in at top OEMs



# **Automotive HMI Evolution**

VOICE & MULTI-MODAL

FINGERPRINT solutions





**TOUCH** solutions





TDDI, OLED

solutions

**DDIC** solutions







# Synaptics – Undisputed Leader in PC







Touch Buttons

TouchStyk

### **TouchPad**





ClickPad

ForcePad



SecurePad



### **Display Interface**



**AudioSmart®** 







Voice/Audio Processing

HW+SW

### **Fingerprint**









# **Growth Engine – Fingerprint and Voice/Audio**

# **Fingerprint**



- 50% revenue growth in 2018
- Drive higher attach rate in PC
- Expand to adjacent market

100MU+ shipped since 2014 80%+ market share

**22.6%** CAGR

## Voice/Audio

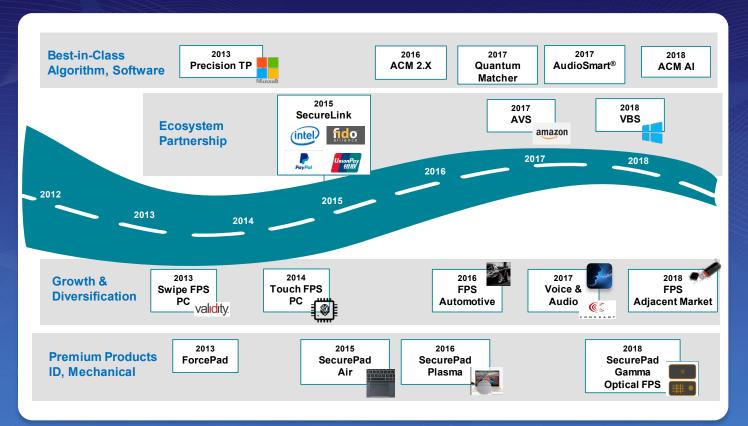


- 300% increase in voice certifications since 2014
- Transform ubiquitous PCs into voice gateways
- Align PC experience with consumer IoT devices

200MU+ shipped since 2014 15%+ hardware market share 35%+ software market share



# **PC – Continue to Innovate**



## **Path Forward**

- High speed video & audio connectivity for AR/VR
- New products enabling voice/audio
- Integrated solutions for thin & light
- Monetize software



# **Financial Model Improving**



<sup>1.</sup> Non-GAAP Gross Margin reflects revenue less cost of revenue as a percentage of revenue

2. Q2'19E (estimate) using mid-point guidance

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# Synaptics Earnings Power

# Six consecutive quarters of Non-GAAP gross margin improvement

	FY18	1H'FY18	1H'FY19E*	Short-Term Target Model	Mid-Term Target Model
Revenue	\$1,630M	\$848M	\$843M		
Non-GAAP Gross Margin	36.4%	35.5%	38.3%	35% - 39%	36% - 41%
Non-GAAP Operating Expense	26.4%	25.5%	25.5%	25% - 27%	24% - 26%
Non-GAAP Operating Margin	9.9%	10.0%	12.8%	10% - 13%	12% - 15%
Non-GAAP EPS	\$4.05	\$2.14	\$2.64		
Debt Net of Cash/ Non-GAAP EDITDA (LTM)	1.1x	1.2x	1.2x		

<sup>\* 1</sup>HFY19E Financial estimate includes Q1'19 actuals and Q2'19 mid-point guidance

# Investor Highlights



Diversified and growing customer base



Laser-focused on gross margin



Positioned for sustainable EPS growth



Active share buyback program



Prudent cost management



# **Key Takeaways**



### Well Positioned for Leadership in IoT

- Vertically integrated SW/FW/HW solutions
- Strategic supplier to market leaders



## Winning in Mobile Market

- Strong growth opportunities across LCD TDDI and OLED display and touch
- 5G will drive the next generation of thinner, flexible and foldable smartphones



# **Growing in Automotive**

- Leading transition to TDDI
- Connected car to drive revolution in displays



# **Innovating in PC Market**

- Continue to lead with touch
- Grow with Fingerprint & Voice/Audio



### **Delivering to Target Financial Model**

- · Accelerating margin and profitability
- Investing to win

# 2019 CES – Synaptics Booth Preview

### **Smart Home & IOT**

- Smart Edge SoC: Integrated AI and voice driving new home hubs, STBs
- Voice-enabled smart home devices: Worldwide leadership in far-field voice-enabled SoC and DSPs
- Digital Audio: Headphones featuring cutting-edge ANC (for both wireless and wired USB-C)
- VR headset featuring 2K/2K displays and high-speed interface

#### **Mobile and Automotive**

- Leadership in OLED display and touch driving mobile infinity displays globally
- Leadership in TDDI for Mobile, and Auto TDDI that is cascadeready for any screen size
- Automotive fingerprint vision, secure cloud-based authentication

### PC

 Broad footprint and leadership in touchpad, secure fingerprint, audio codec, interface





# **Thank You**



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