

Investor Presentation

Oppenheimer 22nd Annual Technology, Internet & Communications Conference

August 7, 2019



Safe Harbor Statement

This press release contains forward-looking statements regarding our future business expectations, which are subject to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are only predictions and may differ materially from actual results due to a variety of factors including: delays in the market acceptance of the Company's new products; the ability to convert design opportunities into customer revenue; our ability to replace revenue from end-of-life products; the level and timing of customer design activity; the market acceptance of our customers' products; the risk that new orders may not result in future revenue; our ability to introduce and produce new products based on advanced wafer technology on a timely basis; our ability to adequately market the low power, competitive pricing and short time-to-market of our new products; intense competition, including the introduction of new products by competitors; our ability to hire and retain qualified personnel; changes in product demand or supply; capacity constraints; and general economic conditions. These and other potential factors and uncertainties that could cause actual results to differ from the results predicted are described in more detail in the Company's public reports filed with the Securities and Exchange Commission (the "SEC"), including the risks discussed in the "Risk Factors" section in the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and in the Company's prior press releases, which are available on the Company's Investor Relations website at <u>http://ir.quicklogic.com</u>/ and on the SEC website at <u>www.sec.gov</u>. QuickLogic expressly disclaims any obligation to update or revise any forward-looking statements found herein to reflect any changes in Company expectations or results or any change in events.

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QuickLogic at a Glance

Snapshot



- Founded: 1989, public since 1999
- Ticker: QUIK (NASDAQ)
- Headquarters: San Jose, CA
- Employees: ~100
- Patents: 24 U.S. (plus 3 pending) 11 international (plus 5 pending)

(1) Per Company estimates, as displayed on pages 13, 14, 15, and 16.

Business Highlights

- We are a platform company that enables our customers to quickly and easily create intelligent ultra-low power endpoints to build a smarter, more connected world
- QuickLogic develops ultra-low power, multi-core semiconductor platforms and hardware- and software-based IP for AI, voice and sensor processing applications
- We leverage our fabless model to provide a unique combination of silicon platforms, IP cores, software drivers, and HW and SW solutions to our customers



Target Markets

\$1 Billion+⁽¹⁾ Served Addressable Market (SAM) Across:

- Hearables and wearables
- Consumer and industrial IoT
- Smartphones and tablets
- Consumer electronics
- Al-enabled devices



QuickLogic's Transformed Business Model

ML / Al Growth Story with End-to-End Solution	 Democratizing power of Machine Learning (ML) / end-to-end solution for Edge Artificial Intelligence (AI) market End-to-end hardware (HW) / software (SW) solution for Internet of Things (IoT) and AI Large high-volume markets – wearables, hearables, smartphones, consumer electronics, industrial and IoT
Acquisition of SensiML Transforms Business Model	 Acquisition expands AI capability and served available market Full-Stack Solution – Cross leverage SensiML's SW suite, QuickLogic's QuickAI platforms and eFPGA IP Drives higher SaaS margins and "stickier" revenues with subscription model
Strategic Partnership with SiFive Expands Licensing Model	 Leading provider of RISC-V core IP, development tools, silicon solutions and SoC templates SoC templates enable customers to greatly reduce design cycles and development costs Significant potential to further accelerate IP licensing, SW and SaaS revenue
Robust IP Portfolio	 30+ active patents globally in core IP – predictable and high-margin licensing revenue eFPGA HW accelerators optimize endpoint AI applications End-to-end AI solution, from semiconductor IP through SaaS software – first material subscription revenue from SensiML in Q1'19
Top Tier Customers and Ecosystem	Image: Stable winds possible Image: Stable winds possible winds possible Image: Stable winds possible winds possibl



Business Highlights – Q2'19 Conference Call

	Customer Win	Design Win	Anticipated Shipment			
Significant Increase in S3 SoC Design Win Pipeline	 Japanese Smartphone OEM 	4 smartphones, 1 feature phone	1 st phone initial ramp 2H'19; others in 2H'19 and increasing through 2020			
	 Hearable Designs 	1More, JD.COM, SF Express, Cleer, 1 st AVS Close Talk Certification	Began early 2019 and increasing through 2020			
	Consumer Electronics	1st platform with potential for 10 more	1 st OEM delayed due to Q1'20			
		Remote Control design wins	1 st product MP in Q4'19			
	 Large Consumer Goods 	Infineon design + additional module maker	Q4'19 through 2020			
eFPGA IP & QuickAl Initiatives	eFPGAFinalized license Q2'19 with DoD		QuickAl vate HDK+SensiML software			
SensiML Acquisition	 12 SaaS customers (4 Fortune Global 500 companies) through Q2'19; anticipate closing FY'19 between 50-100 SaaS customers Strong interest from large semi companies to have SensiML ported to their processors extends reach of AI Software Platform Continue to forecast EBITDA positive for business unit for FY'19 					
SiFive Partnership	 Strategic Partnership for <i>Freedom Aware</i> family of industry's first SoC templates for Edge/Endpoint AI applications Significantly extends software and IP business models 					
Outlook and Breakeven ⁽¹⁾⁽²⁾	 Expected FY'19 revenue of \$13.0 Up from \$12.6M and 51% Expected Q1'20 cash flow and no 		ow 60 percent range			

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(1) Please refer to Appendix for Non-GAAP to GAAP reconciliation.

(2) Based on Company projections, as announced on August 7, 2019 earnings call.



Q1'20 Profitability Goals Remain In Place Despite Headwinds

Several Revenue Pushouts During Past Several Weeks Outside Our Control

- 1 Military Customers were Faced with Funding Delays
- 2 Tariff Threats with Chinese Customers
- 3 Hearables Market Amazon AVS Close Talk Certification/Qualification Process Pushed Out
- 4
- Japanese Smartphone OEM Release Schedule Extended



Clarity Moving Forward - Confident Revenue Ramps Starting Q4'19

Military

Expect production demand will rebound in Q4 and hold through at least 2020

Chinese Tariffs

Large consumer electronics customer indicates it will ramp production of its first models in Q1'20 and as additional OEMs introduce voice control, we believe aggregate volume will ramp throughout 2020

Hearables Market

- Anticipated completion of first Amazon AVS Close Talk Certified design this month
- Believe AVS Close Talk Qualified Reference Design listed on the Amazon Dev Kit site later this year
- Believe hearable demand will increase significantly in Q4 and accelerate beginning in Q1'20
- Believe the first of what could be several voice-enabled TV remote controls will enter production late in Q4 and we expect it will begin ramping in Q1'20

Japanese Smartphones

Expect to have four smartphones running in production by end of 2019 with feature phone (2X-4X the volume) entering production in Q2'20



Transformed Model: End-to-End HW/SW Platform Company



Ramping Strategic New Product Revenue Driving to Achieve Profitability by Q1'20⁽²⁾



Please refer to Appendix for Non-GAAP to GAAP reconciliation. (3)

Numerous design wins in strategic new products leading to expanded **Gross Margin**

Gross margin expansion by ~10 percentage points via Software, IP and SaaS revenue



Recent Developments – Strategic Acquisition and Partnership

SensiML Acquisition

- Acquired by QuickLogic on January 4, 2019
- Software-as-a-Service AI Company
- End-to-end software platform
- Developed pattern matching sensor algorithms using ML technology
- Spin-out from Intel in 2017 and headquartered in Beaverton, Oregon



SiFive Strategic Partnership

- Partnership with QuickLogic announced on April 25, 2019
- Leading provider of market-ready processor core IP, development tools, silicon solutions and SoC templates
- Based on open RISC-V instruction set architecture
- Executive team includes RISC-V inventors
- Investors include Intel Capital, Qualcomm Ventures, SK Telecom, Spark Capital, Sutter Hill Ventures and Western Digital





QuickLogic / SensiML Combination

Creates Full-Stack Solution with Subscription Revenue Model



Cross leverage QuickLogic's QuickAl platform and eFPGA IP with SensiML's software platform Subscription Model – "Stickier" recurring revenues and higher margins



Product Lines





Customers & Partners





Al Inference Opportunity at the Edge

Deep Learning Chipset Revenue by Market Sector

Al Edge Device Shipments by Category



SensiML acquisition significantly enhances ML inference capabilities at the edge and expands QuickLogic's end market opportunities

Source: Semiconductor Engineering, 2018.



Consumer / Mobile – Voice-Enabled Products



 Optional SensiML AI toolkit for development of unique sensor algorithms

Source: ABI Research, Company Estimates.

additional sensors for user experience



Industrial IoT – Predictive Maintenance & Structural Health



Problem

- No "one size fits all" solution
- Cost and power required to send data to cloud

Solution

- SensiML toolkit for data collection, segmenting, labeling, ML and AI model creation
- EOS S3 AI Platform for Low Power Sensor Processing

Source: ABI Research, Company Estimates.



eFPGA: Licensing Model Brings New High Margin Business

Benefits of SiFive Partnership (units in millions) Strategic development partnership revolutionizes SoC design process Utilizes tested building blocks and full suite of development tools Drastically reduces design cycle times \$6.500 Reduces total cost of first silicon \$4.900 Provides custom silicon solutions without need for large design teams

~\$10Ms SAM Created **Through Cross-Leverage of End-to-End Offerings and Strategic Partnership with** SiFive

SiFive

Problem

Significant cost/time-to-market of modifying SoC/ASICs

2024

Power constraints to running AI in software on CPU/MCU

Solution

Adding re-programmable embedded FPGA technology to SoC/ASICs to accelerate AI functionality in more power efficient way



Source: Markets&Markets, Company Estimates.

2018

TAM

SensiML AI SW Platform



SensiML

"I saw a live demo of SensiML last week, and was



Capturing and labeling data for ML is so hard right now, especially for embedded applications and this solutions looks like a great step forward."

> Pete Warden, Lead of the TensorFlow, Mobile / Embedded team at Google

Problem

- Lack of understanding of the entire IoT stack requirements in the marketplace
- Requirement for an end-to-end solution that facilitates adoption without the need for data science

Solution

 SensiML is an end-to-end software toolkit for automating the entire pipeline for capturing, labeling, analyzing, auto-generating code for a variety of ML algorithms on resource constrained microcontrollers

Source: ABI Research, Deloitte Research, Company Estimates, Pete Warden's Twitter (@petewarden, March, 26, 2019, 1:16 PM PT).



The QuickLogic / SiFive Partnership

SiFive SoC templates extend the potential and reach of our IP and SensiML business models by enabling customers to quickly and cost-effectively scale their technologies



Significantly **reduces time-to-samples** from 24 months to 3-4 months, at **less than 50% the development cost**

Cloud-Based SoC Design Platform







Financial Overview



Financial Summary

Revenue and Non-GAAP Gross Margin^(1,2)



(1) Please refer to Appendix for Non-GAAP to GAAP reconciliation.

(2) Based on Company projections, as announced on August 7, 2019 earnings call.

QuickLogic

Transformed Financial Model



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Balance Sheet and Capitalization Summary

Balance Sheet Summary as of June	30, 2019	Capitalization as of June 30, 2019			
(\$ in thousands)		Common Stock Outstanding (in thousands of shares)			116,121
Assets		Debt	Interest Rate	Maturity	Amount
Current assets:		Revolving Credit Line – Heritage Bank	6.0%	Sep. 28, 2020	\$15.0M
Cash and cash equivalents	\$ 28,151				
Accounts receivable	1,519	Stock-Based Compensation (in thousands of shares)	Weighted Exercise Price		Amount
Inventories	3,502	Options Outstanding	\$2.29		2,617
Other current assets	1,717	Restricted Stock Units (in thousands of shares)			5,391
Total current assets	\$ 34,889				
		Warrants (in thousands of shares)	Exercise Price	Maturity	Amount
Long-term assets	\$ 5,242	May 2018 Offering	\$1.38	May 29, 2023	5,405
Total assets	\$ 40,131				
Liabilities					
Total current liabilities	\$ 18,716				
Long-term liabilities / other	1,553				
Total liabilities	\$ 20,269				
Stockholders' equity					
Common stock	\$ 116				
Additional paid-in capital	295,670				
Accumulated deficit	(275,924)				
Total stockholders' equity	\$ 19,862				
Total liabilities and stockholders' equity	\$ 40,131				

Source: SEC filings.



Non-GAAP Trended Income Statement

(\$ in millions, except per share data)	Q2'18	Q3'18	Q4'18	Q1'19	Q2'19
New product revenue	\$ 1.6	\$ 1.5	\$ 1.3	\$ 0.7	\$ 0.7
Mature revenue	1.5	2.0	1.9	2.5	1.4
Total revenue	3.1	3.5	3.2	3.2	2.1
Gross margin %	50%	51%	53%	63%	50%
Operating expense					
Research and development	2.2	2.2	2.3	2.6	2.7
Sales, general and administrative	2.3	2.3	2.0	2.1	2.1
Total operating expense	4.5	4.5	4.3	4.7	4.8
Loss from operations	(3.0)	(2.7)	(2.6)	(2.8)	(3.7)
Net loss	\$ (3.0)	\$ (2.7)	\$ (2.6)	\$ (2.5)	\$ (3.8)
Basic and diluted net loss per share	\$ (0.04)	\$ (0.03)	\$ (0.03)	\$ (0.03)	\$ (0.04)



Investment Highlights







Addendum



GAAP to Non-GAAP Reconciliation

(\$ in thousands, except per share data)	Q2'18	Q3'18	Q4'18	Q1'19	Q2'19
Non-GAAP operating loss	\$ (2,967)	\$ (2,711)	\$ (2,578)	\$ (2,758)	\$ (3,740)
Adjustments:					
Stock-based compensation	(479)	(516)	(474)	(951)	(791)
FA impairment and/or write-off	-	-	-	-	(2)
GAAP operating loss	\$ (3,446)	\$ (3,227)	\$ (3,052)	\$ (3,709)	\$ (4,533)
Non-GAAP net loss	\$ (3,005)	\$ (2,744)	\$ (2,591)	\$ (2,525)	\$ (3,841)
Adjustments:					
Stock-based compensation	(479)	(516)	(474)	(951)	(791)
FA impairment and/or write-off	-	-	-	-	(2)
GAAP net loss	\$ (3,484)	\$ (3,260)	\$ (3,065)	\$ (3,476)	\$ (4,634)
Non-GAAP net loss per share	\$ (0.04)	\$ (0.03)	\$ (0.03)	\$ (0.03)	\$ (0.04)
Adjustment for stock-based compensation	-	-	-	(0.01)	(0.01)
GAAP net loss per share	\$ (0.04)	\$ (0.03)	\$ (0.03)	\$ (0.04)	\$ (0.05)
Non-GAAP gross margin %	50.1%	50.5%	52.6%	62.8%	49.8%
Adjustment for stock-based compensation	(1.1%)	(0.8%)	(0.9%)	(0.8%)	(0.8%)
GAAP gross margin %	49.0%	49.7%	51.7%	62.0%	49.0%

