EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TEXARKANA DIVISION

MAXELL, LTD.,		
	Plaintiff,	Case No. 5:19-cv-0036-RWS
v.		
APPLE INC.		JURY TRIAL DEMANDED
	Defendant.	

DECLARATION OF MICHAEL C. BROGIOLI, PH.D.

IN SUPPORT OF MAXELL LTD.'S PROPOSED CLAIM CONSTRUCTIONS



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I. INTRODUCTION

1. My name is Michael Brogioli, and I have prepared this report at the request of the plaintiff in this case, Maxell, Ltd. ("Maxell"). This report provides my opinions with respect to the parties' proposed constructions for certain claim terms of U.S. Patent No. 6,329,794 ("the '794 Patent").

A. Qualifications

- 1. I am currently an Adjunct Professor of Electrical and Computer engineering at Rice University in Houston, Texas, and Managing Director of Polymathic Consulting in Austin, Texas. I received my Bachelor of Electrical Engineering in 1999 from Rensselaer Polytechnic Institute. I received my Master of Science in Electrical and Computer Engineering in 2003 from Rice University. I received my Doctorate of Electrical and Computer Engineering in 2007 from Rice University.
- 2. I am a named inventor on multiple U.S. patents as well as various pending applications.
- 2. I have held the position of Adjunct Professor at Rice University since 2009, and the position of Managing Director at Polymathic Consulting since 2011. At Rice University, I instruct graduate level curriculum in the areas of embedded and low-power computing, hardware and software systems. I also advise on university research and various design initiatives. At Polymathic Consulting, I work with a range of technologists from early stage start-ups to Fortune 500 companies on similar technologies including, but not limited to, intellectual property. From November 2009 to October 2011, I was Chief Architect, Senior Member Technical Staff at Freescale Semiconductor in Austin, TX (formerly Motorola), responsible for management of technology, engineering roadmaps, design lead on software infrastructure and next generation microprocessor architectures for embedded computing. From 2008 to 2009, I was Senior



Engineer working in high performance compiler design and next generation microprocessor and next generation microprocessor architecture at Freescale Semiconductor in Austin, TX.

- 3. From June 2006 to August 2007, I worked as the Technical Co-Founder of Method Seven LLC, in Boston, MA, working with high performance software and hardware systems architecture. I am currently a co-founder, co-inventor, and Chief Technology Officer of Network Native, an Internet of Things technology company.
- 3. I have previously worked for Texas Instruments' Advanced Architecture and Chip Technology division in Houston Texas in the areas of high performance mobile and low-power embedded systems design, at the hardware and systems software level specifically around heterogeneous computing, and high speed bus and interconnect technologies. I also have worked at Intel Corporation's Microprocessor Research Labs in the areas of computer architecture and compiler technologies.
- 4. In the late 1990s, I was a hardware and software developer at Vicarious Visions in New York, developing 3rd party titles for Nintendo's handheld consoles, in addition to various peripheral technologies. This role specifically focused around battery operated, portable, low power computing hardware and software systems. During my career, I have served as Chief Technology Officer, often in co-founding roles.
- 5. While at Rice University, I developed various computer architecture designs for embedded systems and microcontroller based SOC architectures and peripherals. For example, from 2002 to 2004, I developed Spinach, a simulator design toolset for modeling programmable network interface architectures, which models system components common to all programmable computing environments as well as components specific to embedded. From 2004 to 2009, I developed Spinach DSP-FPGA, a modular and composable simulator design infrastructure for



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