

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

CYPRESS SEMICONDUCTOR  
CORPORATION,

Plaintiff,

v.

GSI TECHNOLOGY, INC.,

Defendant.

Civil Action No. \_\_\_\_\_

**COMPLAINT FOR PATENT  
INFRINGEMENT**

**JURY TRIAL DEMANDED**

Plaintiff complains of Defendant and alleges as follows:

**THE PARTIES**

1. Plaintiff Cypress Semiconductor Corporation (“Cypress”) is a corporation organized and existing under the laws of the State of Delaware and having its principal place of business at 198 Champion Court, San Jose, California. As further described below, Cypress owns Cypress Semiconductor Minnesota Inc., including a facility in Bloomington, Minnesota that, among other things, fabricates and manufactures products that use the inventions in the patents identified herein.

2. Upon information and belief, Defendant GSI Technology, Inc. (“GSI”) is a corporation organized and existing under the laws of the State of Delaware and having its principal place of business at 1213 Elko Drive, Sunnyvale, California. As further described below, GSI manufactures infringing products which are then shipped into Minnesota via a variety of channels.

**JURISDICTION AND VENUE**

3. This action arises under the patent laws of the United States, 35 U.S.C. §§ 271, 281-285.

4. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

5. Venue is proper in the District of Minnesota pursuant to 28 U.S.C. § 1391(b) and (c) and § 1400(b). On information and belief, GSI derives substantive revenue from the sale of infringing products distributed within this district, and/or expects or should reasonably expect its actions to have consequences within this district, and derives substantial revenue from interstate and international commerce.

6. This Court has personal jurisdiction over GSI. GSI has conducted and does conduct business within the State of Minnesota. GSI, directly or through intermediaries (including distributors, retailers, and others), ships, distributes, offers for sale, sells, and advertises products that infringe the patent claims involved in this action in the United States, the State of Minnesota, and this district. Specifically, on information and belief, and as described further below, infringing GSI products are distributed in the State of Minnesota by, among others, Cahill, Schmitz & Cahill, Nu Horizons Electronics Corp., and Arrow Electronics. In addition, GSI has purposefully and voluntarily placed one or more of its infringing products into the stream of commerce with the expectation that they will be purchased by consumers in this district. The infringing products have been and continue to be purchased by consumers in this district. GSI has committed the tort of patent infringement within the State of Minnesota and in this district.

## **BACKGROUND**

7. Cypress is headquartered in San Jose, California, and has invested extensively in developing advanced integrated circuits, including spending over \$180 million annually for research and development efforts.

8. Cypress has also invested heavily in the protection of its intellectual property, which includes approximately 1800 patents and over 1000 pending applications in a variety of semiconductor-related technologies.

9. Cypress is an industry leader in Static Random-Access Memory (SRAM), including high-performance synchronous SRAMs, low-power asynchronous SRAMs, fast asynchronous SRAMs, non-volatile SRAMs, and dual-port SRAMs. Cypress has been a pioneer in the SRAM field for decades, spending over \$<sup>3</sup>/<sub>4</sub> billion in SRAM R&D.

10. Cypress also combines analog, digital, and microcontroller technologies to deliver high-performance programmable system on chip (PSOC) devices, providing customers differentiated value with the flexibility to customize their own line of products.

11. Cypress' innovations are incorporated in, for example, consumer electronics such as touchscreen devices, mobile handsets, networking equipment, video and imaging devices as well as military communication devices.

12. Over the years, Cypress has grown its business by, among other things, funding and investing in internal startups. One of the startups funded by Cypress is Cypress Semiconductor Minnesota Inc. ("CMI"). In 1990, CMI was launched, and in

1995, CMI acquired a facility in Bloomington, Minnesota (“Cypress Minnesota Fab”) for wafer fabrication and manufacturing.

13. The Cypress Minnesota Fab is home to more than 500 employees residing in the State of Minnesota and manufactures many of the Cypress memory products that help Cypress leapfrog the competition with the world’s highest-density and highest-bandwidth SRAM. In addition to making SRAMs, the Cypress Minnesota Fab also produces USB devices, programmable clocks, and many different varieties of memory chips, which have become the centerpiece of Cypress’ programmable products strategy that brings higher value devices to market that can be customized by customers for end products.

14. Cypress has invested heavily in the Cypress Minnesota Fab. The Cypress Minnesota Fab has now become a launch-point and world-class facility for Cypress’ process and manufacturing innovation, and the main facility for high-volume and mass production for memory products. The Cypress Minnesota Fab makes SRAM products that compete with GSI’s infringing products and use inventions of the patents-in-suit identified below.

15. GSI was founded in San Jose, California in March 1995. GSI designs, develops and markets SRAMs primarily for the networking and telecommunications markets.

16. On information and belief, GSI has not made a significant investment in the development and protection of intellectual property, holding less than a dozen patents.

17. GSI's marketing and sales operations as well as a portion of the research and development operations are located in its Sunnyvale, California principal office that was acquired in the third quarter of 2010. GSI also leases space in Georgia, Texas, and Hsin Chu, Taiwan for its manufacturing activities.

18. Upon information and belief, GSI's product sales in the State of Minnesota are primarily derived from sales of product shipped into the state and then sold by its Minnesota distributors. Among GSI's Minnesota distributors are Cahill, Schmitz & Cahill, which has a distribution office in St. Paul, Minnesota; Nu Horizons Electronics Corp., which has a distribution office in Eden Prairie, Minnesota; and Arrow Electronics, which has a distribution office in Eden Prairie, Minnesota. Products distributed in Minnesota by GSI's Minnesota distributors include GSI's Sigma DDR and SigmaQuad families of memory products, including SigmaQuad II devices, which are accused of infringement in this case. Upon information and belief, GSI's infringing SigmaQuad family of memory products also includes its SigmaQuad III memory products which are currently being made available to customers for sampling.

19. In its 2010 10-K annual report, GSI states that its revenues are derived primarily from the sales of SRAM products, which account for 65% to 80% of GSI's net revenues during the last three fiscal years.

### **GENERAL ALLEGATIONS**

20. On May 11, 1999, the United States Patent and Trademark Office duly and legally issued United States Patent No. 5,903,174 ("the '174 Patent"), entitled "METHOD AND APPARATUS FOR REDUCING SKEW AMONG INPUT SIGNALS

WITHIN AN INTEGRATED CIRCUIT,” to Cypress. Cypress owns the ’174 Patent by assignment. A copy of the ’174 Patent is attached as Exhibit A to this Complaint.

21. On March 18, 2003, the United States Patent and Trademark Office duly and legally issued United States Patent No. 6,534,805 (“the ’805 Patent”), entitled “SRAM CELL DESIGN,” to Cypress. Cypress owns the ’805 Patent by assignment. A copy of the ’805 Patent is attached as Exhibit B to this Complaint.

22. On November 18, 2003, the United States Patent and Trademark Office duly and legally issued United States Patent No. 6,651,134 (“the ’134 Patent”), entitled “MEMORY DEVICE WITH FIXED LENGTH NON INTERRUPTIBLE BURST,” to Cypress. Cypress owns the ’134 Patent by assignment. A copy of the ’134 Patent is attached as Exhibit C to this Complaint.

23. On November 28, 2006, the United States Patent and Trademark Office duly and legally issued United States Patent No. 7,142,477 (“the ’477 Patent”), entitled “MEMORY INTERFACE SYSTEM AND METHOD FOR REDUCING CYCLE TIME OF SEQUENTIAL READ AND WRITE ACCESSES USING SEPARATE ADDRESS AND DATA BUSES,” to Cypress. Cypress owns the ’477 Patent by assignment. A copy of the ’477 Patent is attached as Exhibit D to this Complaint.

24. On January 2, 2007, the United States Patent and Trademark Office duly and legally issued United States Patent No. 7,158,429 (“the ’429 Patent”), entitled “SYSTEM FOR READ PATH ACCELERTION,” to Cypress. Cypress owns the ’429 Patent by assignment. A copy of the ’429 Patent is attached as Exhibit E to this Complaint.

25. Cypress is the owner of all rights, title, and interest in and to the '174 Patent, '805 Patent, '134 Patent, '477 Patent, and '429 Patent (“the Cypress Patents”). Cypress possesses all rights to sue and recover for past and future infringement of the Cypress Patents.

26. Pursuant to 35 U.S.C. § 271(a), GSI is infringing the Cypress Patents by making, using, selling, offering to sell, and/or importing into the United States SRAMs covered by one or more claims of the Cypress Patents, including at least the SigmaDDR and SigmaQuad families of memory products, including the SigmaQuad II and SigmaQuad III product lines (hereinafter “accused GSI SRAM devices”).

27. Cypress has been damaged as a result of GSI’s infringing conduct. Cypress and GSI generally compete for the same customers with their respective SRAM products. Cypress’ damages include lost profits caused by GSI’s use of the inventions of the patents-in-suit to offer to sell, and sell, infringing products that take sales away from Cypress. GSI is, therefore, liable to Cypress in an amount that adequately compensates Cypress for GSI’s infringement, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## **COUNT I**

### **Infringement of the '174 Patent**

28. Cypress repeats and realleges the allegations in paragraphs 1-27 as though fully set forth herein.

29. GSI has been and is now infringing the '174 Patent in this district by making, using, selling, offering for sale, importing into the United States, and/or

exporting accused GSI SRAM devices that practice or embody one or more claims of the '174 Patent. GSI's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).

## **COUNT II**

### **Infringement of the '805 Patent**

30. Cypress repeats and realleges the allegations in paragraphs 1-27 as though fully set forth herein.

31. GSI has been and is now infringing the '805 Patent by making, using, selling, offering for sale, importing into the United States, and/or exporting accused GSI SRAM devices that practice or embody one or more claims of the '805 Patent. GSI's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).

## **COUNT III**

### **Infringement of the '134 Patent**

32. Cypress repeats and realleges the allegations in paragraphs 1-27 as though fully set forth herein.

33. GSI has been and is now infringing the '134 Patent by making, using, selling, offering for sale, importing into the United States, and/or exporting accused GSI SRAM devices that practice or embody one or more claims of the '134 Patent. GSI's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).



**COUNT IV**

**Infringement of the '477 Patent**

34. Cypress repeats and realleges the allegations in paragraphs 1-27 as though fully set forth herein.

35. GSI has been and is now infringing the '477 Patent by making, using, selling, offering for sale, importing into the United States, and/or exporting accused GSI SRAM devices that practice or embody one or more claims of the '477 Patent. GSI's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).

**COUNT V**

**Infringement of the '429 Patent**

36. Cypress repeats and realleges the allegations in paragraphs 1-27 as though fully set forth herein.

37. GSI has been and is now directly infringing the '429 Patent by making, using, selling, offering for sale, importing into the United States, and/or exporting accused GSI SRAM devices that practice or embody one or more claims of the '429 Patent. GSI's actions are in violation of one or more of the provisions of 35 U.S.C. § 271(a), (b), (c), (f), and (g).

**PRAYER FOR RELIEF**

Cypress respectfully asks this Court to:

- a. Enter judgment that GSI has infringed the Cypress Patents;

b. Enter an order permanently enjoining GSI and its officers, directors, agents, servants, employees, attorneys, licensees, successors, assigns, and customers, and those in active concert or participation with any of them, from making, using, offering to sell, or selling in the United States or importing into the United States any devices that infringe any claim of the Cypress Patents;

c. Award Cypress its damages, including lost profits, resulting from GSI's infringement in an amount to be determined at trial, pursuant to 35 U.S.C. § 284;

d. Find this to be an exceptional case pursuant to 35 U.S.C. § 285;

e. Award Cypress prejudgment interest and post-judgment interest on its damages and award Cypress its costs;

f. Perform an accounting of GSI's infringing sales not presented at trial and award Cypress additional damages from any such infringing sales; and

g. Award Cypress its costs and attorneys' fees and such other and further relief as the Court deems just and appropriate.

**DEMAND FOR JURY TRIAL**

Cypress demands a trial by jury on all issues appropriately triable by a jury.

Dated: March 30, 2011

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