

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**VANTAGE MICRO LLC,**

**Plaintiff,**

**v.**

**MICROCHIP TECHNOLOGY  
INCORPORATED,**

**Defendant.**

**Civil Action No. 6:19-cv-00581-RP**

**DEMAND FOR JURY TRIAL**

**FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Vantage Micro LLC (“Vantage Micro” or “Plaintiff”) hereby alleges for its First Amended Complaint for patent infringement against Defendant Microchip Technology Incorporated (“Microchip” or “Defendant”) on personal knowledge as to its own actions and on information and belief as to the actions of others, as follows:

**NATURE OF THE ACTION**

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

**THE PARTIES**

2. Plaintiff Vantage Micro is a limited liability company organized under the laws of the State of Delaware, with its principal place of business at 717 North Union Street, Suite 9, Wilmington, DE 19805.

3. On information and belief, Defendant Microchip is a Delaware corporation with its principal place of business located in Arizona. Upon information and belief, Microchip is

authorized to do business in Texas and may be served through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

4. Microchip's primary focus is providing semiconductor devices used in a wide variety of embedded-control applications found in all end-market systems segments, including consumer products, automotive, communications, industrial, medical, and office automation (including computers for power control, battery management, interfaces, and other embedded functions).

5. Microchip's product portfolio includes about 3,700 individual microcontroller products, based on 8-, 16-, and 32-bit central processing unit ("CPU") architectures. The company's microcontrollers are branded PICmicro (or just PIC) and the SAM series, which are MCUs based on ARM's Cortex-M CPU architecture. Microchip's 16-bit digital signal controller (DSC) products are called dsPIC.

6. On information and belief, Microchip has designed, developed, manufactured, sold, offered to sell, and/or imported infringing products, devices, systems, and/or components of systems as described herein for a wide range of products, devices, systems, and/or components of systems, including mobile devices (e.g., mobile phones and personal laptops), desktops, and workstations.

7. On information and belief, Microchip sells and offers to sell products and services throughout the United States and in Texas, including in this District, through its website, through major electronics retailers in North America, and in concert and partnership with third parties.

8. Vantage Micro is the assignee and owner of the patents at issue in this action: U.S. Patents Nos. 7,414,606 and 6,546,508 (collectively, the "Asserted Patents"). Vantage Micro

holds all substantial rights and interest in the Asserted Patents, as described below, including the exclusive right to sue Defendant for infringement and recover damages.

9. Vantage Micro seeks monetary damages and prejudgment interest for Defendant Microchip's direct and indirect infringement of the Asserted Patents.

### **JURISDICTION AND VENUE**

10. This action for patent infringement arises under the patent laws of the United States, Title 35 of the United States Code.

11. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

12. This Court has personal jurisdiction over Microchip because Microchip has sufficient minimum contacts with the forum as a result of business conducted within the State of Texas and within the Western District of Texas. For example, Microchip's office located at 8601 Ranch Rd 2222, Park Centre Bldg. 3, Austin, TX 78730 is in this District. Personal jurisdiction also exists specifically over Microchip because Microchip, directly or through subsidiaries or intermediaries, made, used, offered for sale, or sold products or services that directly or indirectly infringed the Asserted Patents (as discussed further herein) within the State of Texas and within the Western District of Texas.

13. Furthermore, personal jurisdiction over Microchip in this action comports with due process. Microchip has conducted and regularly conducts business within the United States and this District. Microchip has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in the State of Texas and this District. Microchip has sought protection and benefit from the laws of the State of Texas by placing products that infringed the Asserted Patents as described herein into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District. Having purposefully availed itself of the privilege of

conducting business within this District, Microchip should reasonably and fairly anticipate being brought into court here.

14. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400(b) at least because Microchip is subject to personal jurisdiction in this district and has regularly conducted business in this District, and because certain of the acts complained of herein occurred in this District. On information and belief, Microchip made, used, offered for sale, sold and/or imported, within the state of Texas and in this District, systems and components that infringed one or more claims of the Asserted Patents.

15. Additionally, Microchip—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offered for sale, and/or sold its products in the United States and this District. Microchip has purposefully and voluntarily placed one or more of its infringing products into the stream of commerce with the awareness and/or intent that they would be purchased by consumers in this District. Microchip knowingly and purposefully shipped infringing products into, and within, this District through an established distribution channel. These products have been, and continue to be, purchased by consumers and businesses in this District.

#### **THE ASSERTED PATENTS**

16. On August 19, 2008, the USPTO duly and legally issued U.S. Patent No. 7,414,606 (“the ’606 Patent”), entitled “Method and Apparatus for Detecting a Flat Panel Display Monitor.” A copy of the ’606 Patent is attached hereto as Exhibit 1.

17. Vantage Micro owns all substantial right, title, and interest in the ’606 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

18. On May April 8, 2003, the USPTO duly and legally issued U.S. Patent No. 6,546,508 (“the ’508 Patent”), entitled “Method and Apparatus for Fault Detection of a Processing Tool in an Advanced Process Control (APC) Framework.” A copy of the ’508 Patent is attached hereto as Exhibit 2.

19. Vantage Micro owns all substantial right, title, and interest in the ’508 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

**COUNT I - INFRINGEMENT OF U.S. PATENT NO. 7,414,606**

20. Vantage Micro incorporates and realleges the preceding paragraphs as if fully set forth herein.

21. At least as of the filing and service of the original Complaint, Microchip was on actual notice of the ’606 Patent and had actual notice that its actions constitute infringement of the ’606 Patent.

22. On information and belief, Microchip has infringed one or more claims of the ’606 Patent, including but not limited to Claim 6, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, selling, offering to sell, and/or importing in the United States without authority integrated circuits (“IC”), systems-on-chips (“SoCs”), microcontrollers and microprocessors, drivers, graphics controllers and chipsets and similar products, devices, systems, and/or components of systems that detect, or support the detection of, monitors (“’606 Infringing Products”). The ’606 Infringing Products include, as examples and without limitation, Liquid Crystal Display (“LCD”), Light-Emitting Diode (“LED”), and Plasma Display Panel (“PDP”) monitors using various connection interfaces or “ports,” including, but not limited to, High-Definition Multimedia Interface (“HDMI”), DisplayPort (“DP”), and/or Digital Visual Interface (“DVI”) connections that support or comply with the HDMI, DP, and/or

DVI specification, including, without limitation, Microchip's controllers (e.g., MEC1621/x, UPD350 and UPD360), graphics controllers (e.g., UFX6000 and UFX7000), evaluation kits and development boards (e.g., SAMA5D3x/4x, EVB-UFX7000, EVB-UFX6000-TC, EVB-USB5816, EVB-USB7x56, Arrow Everest Kit, PolarFire Video Kit, SmartFusion@2 Advanced Dev Kit with Imaging FMC, CoaXPress FMC daughter cards, and PolarFire CoaXpress 12G Video Kit), interface controllers (e.g., MEC1621/MEC1621i, MEC1618/MEC1618), video and image processing solutions (e.g., smart embedded vision solutions such as PolarFire Video and Imaging Kit such as MPF300-VIDEO-KIT), crosspoint switches (e.g., VSC3340), evaluation boards employing those controllers, expansion boards (e.g., HiFive Unleashed Expansion Board), MCUs and MPUs (e.g., PIC32xxxx, SAM S70/E70, and ATSAM5/9xxx series), ZigBee® RF4CE compliant systems and devices (e.g., AN1417), interfaces (e.g., Camera/HDMI Video Input Interface, LCD HDMI Video Output Interface), HDMI-compliant receivers (e.g., UG0863 and ADV7611), and software supporting any of these products (e.g., IP Suite that supports PolarFire product families).

23. Discovery is expected to uncover the full extent of Microchip's infringement of the '606 Patent beyond the '606 Infringing Products already identified through public information.

24. Attached hereto as Exhibit 3, and incorporated by reference herein, is a claim chart detailing how a '606 Infringing Product (Microchip's Evaluation Board with UPD350 controller) satisfies each element of independent Claim 6 of the '606 Patent. Microchip, through its actions, directly infringed, literally infringed, and/or infringed the '606 Patent under the doctrine of equivalents. Microchip is thus liable for infringement of the '606 Patent pursuant to 35 U.S.C. § 271.

25. On information and belief, Microchip has induced infringement of one or more claims of the '606 Patent, including, but not limited to, Claim 6, pursuant to 35 U.S.C. § 271(b) by encouraging its customers and other third parties such as users, distributors, wholesalers, and retailers of the '606 Infringing Products to make, use, sell, offer to sell, and/or import in the United States without authorization the '606 Infringing Products (or products of which the '606 Infringing Products are components).

26. Microchip's acts of inducement include, without limitation: providing the '606 Infringing Products to its customers and other third parties and intending them to use the '606 Infringing Products with hardware, software, and other infrastructure that enable and/or make use of these products; providing sales information, advertising, and instructions for these products through its own and third-party websites (*see, e.g.*, <https://www.microchip.com/wwwproducts/en/UPD350> (advertising and selling the UPD350, one of the '606 Infringing Products) and <https://www.digikey.com/product-detail/en/microchip-technology/UPD350CT-Q8X/UPD350CT-Q8XCT-ND/8639357> (identifying the UPD350, one of the '606 Infringing Products, through a third party)); encouraging customers and other third parties to communicate directly with Microchip's representatives about these products for purposes of technical assistance and repair as well as sales and marketing (*see, e.g.*, <https://microchipsupport.force.com/s/> (providing consumers with a login portal through which technical issues and concerns regarding the '606 Infringing Products can be addressed)); encouraging customers and other third parties to use the '606 Infringing Products (e.g., <https://www.microchip.com/design-centers/data-and-video-transceivers/protocols/displayport> (recommending consumers to use the '606 Infringing Products, because "remote circuits can be powered from the image source or the monitor")); and providing instructions on how to use the

'606 Infringing Products (e.g.,

[http://ww1.microchip.com/downloads/en/devicedoc/Atmel\\_11180\\_32-bit-Cortex-A5-](http://ww1.microchip.com/downloads/en/devicedoc/Atmel_11180_32-bit-Cortex-A5-)

[Microcontroller\\_SAMA5D3-Series-EK\\_User-Guide.pdf](#) (offering instructions on how to use the HDMI interface in the '606 Infringing Products); *see also*

<http://ww1.microchip.com/downloads/en/devicedoc/6000.pdf> (offering details on configuring the

'606 Infringing Products) and <http://ww1.microchip.com/downloads/en/DeviceDoc/UPD350-Data-Sheet-DS00002643B.pdf> (offering configuration information that supports the '606

Infringing Products)).

27. For example, Microchip's technical documentation supplied with a '606 Infringing Product, the UPD350 controller, instructs users to configure the product for use with HDMI, DisplayPort, and/or DVI connections, and thus to detect an HDMI-compliant, DisplayPort-compliant, and/or DVI-compliant monitor (*see, e.g.*, "DisplayPort Alternate Mode," at 21, *available at* <http://ww1.microchip.com/downloads/en/DeviceDoc/EVB-USB7056-Evaluation-Board-User-Guide-50002887A.pdf> (last accessed Aug, 6, 2019)).

28. Microchip performed acts of inducement despite its actual knowledge of the '606 Patent no later than the filing and service of the original Complaint and its knowledge that the specific actions it actively induced on the part of its customers and other third parties constituted infringement of the '606 Patent. At the very least, because Microchip was on notice of the '606 Patent at least as of the filing and service of the original Complaint, and the accused infringement, it remained willfully blind regarding the infringement that it induced.

29. On information and belief, Microchip has contributed to infringement of one or more claims of the '606 Patent, including but not limited to Claim 6, pursuant to 35 U.S.C. § 271(c) by offering to sell or selling within the United States, importing and/or supplying in the



United States without authority one or more components of the '606 Infringing Products (or products of which the '606 Infringing Products are components) with the knowledge that such components are especially made or especially adapted for use in an infringement of the '606 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

30. For example, these components, products, or devices detect, or supported the detection of, a monitor and were also critical and material components to displaying, or controlling the display of, images on a smartphone, tablet, desktop, laptop, television, and other consumer product. Microchip supplied these system on-chip components, products, or devices, including, without limitation, the '606 Infringing Products with the knowledge of the '606 Patent and with the knowledge that these components constituted critical and material parts of the claimed inventions of the '606 Patent. Moreover, Microchip knew at least by virtue of its knowledge of its own products and the '606 Patent that these components were especially made and/or especially adapted for use as claimed in the '606 Patent and there was no substantial non-infringing use of the claimed elements of these components.

31. Vantage Micro has suffered, and continues to suffer, damages as a result of Microchip's infringement of the '606 Patent.

32. Microchip has infringed the '606 Patent since at least the filing and service of the original Complaint, despite being on notice of the '606 Patent and its infringement. Microchip has therefore infringed the '606 Patent knowingly, willfully, deliberately, and in disregard of Plaintiff's patent rights, at least by infringing with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Vantage Micro is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

33. Vantage Micro reserves the right to modify its infringement theories as discovery progresses in this case. Vantage Micro shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with the original Complaint. Vantage Micro intends the claim chart (Exhibit 3) for the '606 Patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Vantage Micro's preliminary or final infringement contentions or preliminary or final claim construction positions.

**COUNT II - INFRINGEMENT OF U.S. PATENT NO. 6,546,508**

34. Vantage Micro incorporates and realleges the preceding paragraphs as if fully set forth herein.

35. At least as of the filing and service of the original Complaint, Microchip was on actual notice of the '508 Patent and had actual notice that its actions constituted infringement of the '508 Patent.

36. On information and belief, Microchip has infringed one or more claims of the '508 Patent, including but not limited to Claim 1, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, at least by its use of camLine SPACE, RM, and eCAP Modules or a similar system at its fabrication facilities to produce semiconductor products ("'508 Infringing Products").

37. Discovery is expected to uncover the full extent of Microchip's infringement of the '508 Patent beyond the '508 Infringing Products already identified through public information.

38. Attached hereto as Exhibit 4, and incorporated by reference herein, is a claim chart detailing how Microchip's implementation of camLine SPACE, RM, and eCAP Modules

or a similar system at its fabrication facilities performs each of the elements of Claim 1 of the '508 Patent.

39. On information and belief, Microchip implemented substantially similar methods throughout its fabrication facilities and other facilities with similar equipment in the United States and overseas, and imported the products it manufactures overseas into the United States.

40. On information and belief, Microchip has infringed at least Claim 1 of the '508 Patent, pursuant to 35 U.S.C. § 271(g), by importing into the United States, selling, offering to sell, or using within the United States products that Microchip or a corporate affiliate of Microchip has manufactured or otherwise produced overseas using a process that practices at least one claimed method of the '508 Patent.

41. Microchip has directly infringed the '508 Patent and is thus liable for infringement of the '508 Patent pursuant to 35 U.S.C. § 271.

42. Vantage Micro has suffered, and continues to suffer, damages as a result of Microchip's infringement of the '508 Patent.

43. Vantage Micro reserves the right to modify its infringement theories as discovery progresses in this case. Vantage Micro shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Vantage Micro intends the claim chart (Exhibit 4) for the '508 Patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Vantage Micro's preliminary or final infringement contentions or preliminary or final claim construction positions.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Vantage Micro demands judgment for itself and against Defendant Microchip as follows:

- a. A judgment that Microchip has infringed one or more claims of each of the Asserted Patents;
- b. A judgment that Microchip has induced infringement of one or more claims of the '606 Patent;
- c. A judgment that Microchip has contributed to the infringement of one or more claims of each of the '606 Patent;
- d. A judgment that Microchip has willfully infringed one or more claims of each of the Asserted Patents;
- e. A judgment awarding Vantage Micro all damages adequate to compensate for Microchip's infringement, and in no event less than a reasonable royalty for Microchip's acts of infringement, including all pre-judgment and post-judgment interest at the maximum rate allowed by law;
- f. A judgment awarding Vantage Micro treble damages pursuant to 35 U.S.C. § 284 as a result of Microchip's willful conduct;
- g. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding Vantage Micro its reasonable attorneys' fees; and
- h. A judgment awarding Vantage Micro such other relief as the Court may deem just and equitable.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff Vantage Micro demands a trial by jury of this action.

Dated: February 4, 2020

DEVLIN LAW FIRM LLC

/s/ Alex Chan

Timothy Devlin (*pro hac vice* to be filed)

tdevlin@devlinlawfirm.com

Henrik D. Parker (*pro hac vice* to be filed)

hparker@devlinlawfirm.com

Chad Henson (*pro hac vice* to be filed)

(Texas State Bar No. 24087711)

chenson@devlinlawfirm.com

Alex Chan (Texas State Bar No. 24108051)

achan@devlinlawfirm.com

1526 Gilpin Ave.

Wilmington, Delaware 19806

Telephone: (302) 449-9010

Facsimile: (302) 353-4251

*Attorneys for Plaintiff,*

*Vantage Micro LLC*

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via the Court's ECF system on February 4, 2020.

/s/ Alex Chan  
Alex Chan