## IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

SEMCON IP INC.,		) )	
	Plaintiff,	)	Case No. 2:16-cv-441
v.		) )	JURY TRIAL DEMANDED
ZTE CORPORATION, ZTE (USA), INC., and		) )	
ZTE (TX), INC.,		) )	
	Defendants.	)	

## COMPLAINT FOR PATENT INFRINGEMENT

)

Plaintiff Semcon IP Inc. ("Semcon" or "Plaintiff"), for its Complaint against Defendants ZTE Corporation, ZTE (USA), Inc., and ZTE (TX), Inc. (collectively, "Defendants" or "ZTE") alleges as follows:

### THE PARTIES

1. Semcon is a corporation organized and existing under the laws of the State of Texas, with its principal place of business located at 100 W. Houston Street, Marshall, Texas 75670.

2. Upon information and belief, ZTE Corporation is a Chinese corporation with its principal place of business at ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong Province, People's Republic of China 518057. Upon information and belief, ZTE Corporation does business in Texas, directly or through intermediaries, and maintains its principal place of business in Shenzhen, China.

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 2 of 12 PageID #: 2

3. Upon information and belief, ZTE (USA), Inc. is a corporation existing under the laws of the State of New Jersey, with its principal place of business at 2425 N. Central Expressway, Suite 600, Richardson, Texas 75080 and may be served with process through its registered agent, Jing Li at 2425 N. Central Expressway, Suite 323, Richardson, Texas 75080. Upon information and belief, ZTE (USA), Inc. is a wholly-owned subsidiary of ZTE Corporation.

4. Upon information and belief, ZTE (TX), Inc. is a corporation existing under the laws of the State of Texas, with its principal place of business at 2500 Dallas Parkway, Plano, Texas 75093 and may be served with process through its registered agent, Ferguson, Braswell & Fraser, PC at 2500 Dallas Parkway, Suite 501, Plano, Texas 75093. Upon information and belief, ZTE (TX), Inc. is a wholly-owned subsidiary of ZTE Corporation.

#### **JURISDICTION**

5. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 1, *et seq*. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Defendants. Defendants conduct business in this judicial district and have committed acts of patent infringement in this judicial district, and/or have induced acts of patent infringement by others in this judicial district, the State of Texas, and elsewhere in the United States.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b) because, among other things, Defendants are subject to personal jurisdiction in this judicial district, Defendants have regularly conducted business in this judicial district, and certain of the acts complained of herein occurred in this judicial district.

#### PATENTS-IN-SUIT

 On August 29, 2006, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,100,061 (the "'061 Patent") entitled "Adaptive Power Control." A true and correct copy of the '061 Patent is attached hereto as Exhibit A.

9. On September 29, 2009, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 7,596,708 (the "708 Patent") entitled "Adaptive Power Control Integration System." A true and correct copy of the '708 Patent is attached hereto as Exhibit B.

 On October 22, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,566,627 (the "'627 Patent") entitled "Adaptive Power Control."
 A true and correct copy of the '627 Patent is attached hereto as Exhibit C.

11. On August 14, 2014, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,806,247 (the "247 Patent") entitled "Adaptive Power Control."A true and correct copy of the 247 Patent is attached hereto as Exhibit D.

12. Semcon is the sole and exclusive owner of all rights, title and interest in the '061 Patent, '708 Patent, '627 Patent and '247 Patent (collectively, the "Patents-In-Suit"), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-In-Suit, including the filing of this patent infringement lawsuit. Semcon also has the right to recover all damages for past, present, and future infringement of the Patents-In-Suit and to seek injunctive relief as appropriate under the law.

#### FACTUAL ALLEGATIONS

13. The Patents-In-Suit generally cover methods for controlling the power used by a computer, specifically, the adjustment of the clock frequency and voltage supply to a processor

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 4 of 12 PageID #: 4

to conserve processor power and extend battery life. The claims of the Patents-In-Suit generally call for the frequency generator and power management logic to be located on the processor itself, rather than in a separate component that would consume power.

14. Non-party ARM Holdings ("ARM") licenses chip designs and ARM instruction set architectures to third parties, who design their own products that implement one of those architectures including system on chip ("SoC") architectures that incorporate memory, interfaces, radios, etc. The ARM architecture is the most widely used architecture in smartphones and other mobile devices and is widely used in other products such as televisions.

15. The ARM Intelligent Energy Management ("IEM") and Intelligent Energy Controller ("IEC") are incorporated into ARM-based SoCs and associated software to perform power management for the processor on the SoC. The IEC performs Dynamic Voltage and Frequency Scaling (DVFS)—a technique where the voltage used in a component is increased or decreased in order to increase performance or conserve power, depending on the circumstances—which includes power management techniques. ARM IEC and IEM are incorporated into processors implementing the ARM Cortex architecture, including, but not limited to, the ARM Cortex-A5, Cortex-A7, and Cortex A-9 architectures. ARM Cortex processors are incorporated into chips made by numerous manufacturers, including ZTE.

16. ZTE has infringed and is continuing to infringe the Patents-In-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or importing, products including chips utilizing SoCs that incorporate ARM processors that use DVFS for power management, including at least the ARM Cortex-A5, Cortex-A7, and Cortex-A9 processors.

## <u>COUNT I</u> (Infringement of the '061 Patent)

17. Paragraphs 1 through 16 are incorporated herein by reference as if fully set forth in their entireties.

18. Semcon has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '061 Patent.

19. Defendants have and continue to directly infringe the '061 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '061 Patent. Such products include those incorporating any and all chipsets with ARM Cortex-A5, Cortex-A7, and Cortex-A9 processor designs that use DVFS for power management. Upon information and belief, these products include ZTE smartphones, tablets, and accessories including at least the ZTE Avail 2, ZTE Avid Plus, ZTE Blade C, ZTE Blade II, ZTE Compel, ZTE Fanfare, ZTE Grand X, ZTE Grand X 3, ZTE Grand X Max, ZTE Grand X Max+, ZTE Grand X Pro, ZTE Grand X2 Premium Pack, ZTE Groove, ZTE Illustra, ZTE Imperial II, ZTE Majesty, ZTE Nubia 5s Mini, ZTE Optik 2, ZTE Orbit, ZTE Prelude, ZTE Prelude 2, ZTE Prestige, ZTE Quartz, ZTE Render, ZTE Skate Acqua, ZTE Solar, ZTE Sonata 2, ZTE Valet, ZTE Warp Sync, ZTE Whirl, ZTE Z667, ZTE Zinger, and ZTE ZMax.

20. Defendants have and continue to indirectly infringe one or more claims of the '061 Patent by knowingly and intentionally inducing others to directly infringe, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States products that include infringing technology such as ARM Cortex-A5, Cortex-A7, and Cortex-A9 processor designs that use DVFS for power management. Upon

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 6 of 12 PageID #: 6

information and belief, these products include ZTE smartphones, tablets, and accessories including at least the ZTE Avail 2, ZTE Avid Plus, ZTE Blade C, ZTE Blade II, ZTE Compel, ZTE Fanfare, ZTE Grand X, ZTE Grand X 3, ZTE Grand X Max, ZTE Grand X Max+, ZTE Grand X Pro, ZTE Grand X2 Premium Pack, ZTE Groove, ZTE Illustra, ZTE Imperial II, ZTE Majesty, ZTE Nubia 5s Mini, ZTE Optik 2, ZTE Orbit, ZTE Prelude, ZTE Prelude 2, ZTE Prestige, ZTE Quartz, ZTE Render, ZTE Skate Acqua, ZTE Solar, ZTE Sonata 2, ZTE Valet, ZTE Warp Sync, ZTE Whirl, ZTE Z667, ZTE Zinger, and ZTE ZMax.

21. Defendants, with knowledge that these products, or the use thereof, infringe the '061 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '061 patent by supplying these products to end users for use in an infringing manner.

22. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '061 Patent, but while remaining willfully blind to the infringement.

23. Semcon has suffered damages as a result of Defendants' direct infringement of the '061 Patent in an amount to be proved at trial.

24. Semcon has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '061 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

## <u>COUNT II</u> (Infringement of the '708 Patent)

25. Paragraphs 1 through 24 are incorporated herein by reference as if fully set forth in their entireties.

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 7 of 12 PageID #: 7

26. Semcon has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '708 Patent.

27. Defendants have and continue to directly infringe the '708 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '708 Patent. Such products include those incorporating any and all chipsets with ARM Cortex-A5, Cortex-A7, and Cortex-A9 processor designs that use DVFS for power management. Upon information and belief, these products include ZTE smartphones, tablets, and accessories including at least the ZTE Avail 2, ZTE Avid Plus, ZTE Blade C, ZTE Blade II, ZTE Compel, ZTE Fanfare, ZTE Grand X, ZTE Grand X 3, ZTE Grand X Max, ZTE Grand X Max+, ZTE Grand X Pro, ZTE Grand X2 Premium Pack, ZTE Groove, ZTE Illustra, ZTE Imperial II, ZTE Majesty, ZTE Nubia 5s Mini, ZTE Optik 2, ZTE Orbit, ZTE Prelude, ZTE Prelude 2, ZTE Prestige, ZTE Quartz, ZTE Render, ZTE Skate Acqua, ZTE Solar, ZTE Sonata 2, ZTE Valet, ZTE Warp Sync, ZTE Whirl, ZTE Z667, ZTE Zinger, and ZTE ZMax.

28. Defendants, with knowledge that these products, or the use thereof, infringe the '708 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '708 Patent by supplying these products to end users for use in an infringing manner.

29. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '708 Patent, but while remaining willfully blind to the infringement.

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 8 of 12 PageID #: 8

30. Semcon has suffered damages as a result of Defendants' direct infringement of the '708 Patent in an amount to be proved at trial.

31. Semcon has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '708 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

## **<u>COUNT III</u>** (Infringement of the '627 Patent)

32. Paragraphs 1 through 32 are incorporated herein by reference as if fully set forth in their entireties.

33. Semcon has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '627 Patent.

34. Defendants have and continue to directly infringe the '627 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '627 Patent. Such products include those incorporating any and all chipsets with ARM Cortex-A5, Cortex-A7, and Cortex-A9 processor designs that use DVFS for power management. Upon information and belief, these products include ZTE smartphones, tablets, and accessories including at least the ZTE Avail 2, ZTE Avid Plus, ZTE Blade C, ZTE Blade II, ZTE Compel, ZTE Fanfare, ZTE Grand X, ZTE Grand X 3, ZTE Grand X Max, ZTE Grand X Max+, ZTE Grand X Pro, ZTE Grand X2 Premium Pack, ZTE Groove, ZTE Illustra, ZTE Imperial II, ZTE Majesty, ZTE Nubia 5s Mini, ZTE Optik 2, ZTE Orbit, ZTE Prelude, ZTE Prelude 2, ZTE Prestige, ZTE Quartz, ZTE Render, ZTE Skate Acqua, ZTE Solar, ZTE Sonata 2, ZTE Valet, ZTE Warp Sync, ZTE Whirl, ZTE Z667, ZTE Zinger, and ZTE ZMax.

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 9 of 12 PageID #: 9

35. Defendants, with knowledge that these products, or the use thereof, infringe the '627 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '627 Patent by supplying these products to end users for use in an infringing manner.

36. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '627 Patent, but while remaining willfully blind to the infringement.

37. Semcon has suffered damages as a result of Defendants' direct infringement of the '627 Patent in an amount to be proved at trial.

38. Semcon has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '627 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

## **<u>COUNT IV</u>** (Infringement of the '247 Patent)

39. Paragraphs 1 through 40 are incorporated herein by reference as if fully set forth in their entireties.

40. Semcon has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '247 Patent.

41. Defendants have and continue to directly infringe the '247 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '247 Patent. Such products include those incorporating any and all chipsets with ARM Cortex-A5, Cortex-A7, and Cortex-

#### Case 2:16-cv-00441 Document 1 Filed 04/25/16 Page 10 of 12 PageID #: 10

A9 processor designs that use DVFS for power management. Upon information and belief, these products include ZTE smartphones, tablets, and accessories including at least the ZTE Avail 2, ZTE Avid Plus, ZTE Blade C, ZTE Blade II, ZTE Compel, ZTE Fanfare, ZTE Grand X, ZTE Grand X 3, ZTE Grand X Max, ZTE Grand X Max+, ZTE Grand X Pro, ZTE Grand X2 Premium Pack, ZTE Groove, ZTE Illustra, ZTE Imperial II, ZTE Majesty, ZTE Nubia 5s Mini, ZTE Optik 2, ZTE Orbit, ZTE Prelude, ZTE Prelude 2, ZTE Prestige, ZTE Quartz, ZTE Render, ZTE Skate Acqua, ZTE Solar, ZTE Sonata 2, ZTE Valet, ZTE Warp Sync, ZTE Whirl, ZTE Z667, ZTE Zinger, and ZTE ZMax.

42. Defendants, with knowledge that these products, or the use thereof, infringe the '247 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '247 patent by supplying these chips to others for inclusion in their products.

43. Defendants, with knowledge that these products, or the use thereof, infringe the '247 Patent at least as of the date of this Complaint, knowingly and intentionally induced, and continue to knowingly and intentionally induce, direct infringement of the '247 Patent by supplying these products to end users for use in an infringing manner.

44. Defendants induced infringement by others, including end users, with the intent to cause infringing acts by others or, in the alternative, with the belief that there was a high probability that others, including end users, infringe the '247 Patent, but while remaining willfully blind to the infringement.

45. Semcon has suffered damages as a result of Defendants' direct infringement of the '247 Patent in an amount to be proved at trial.

46. Semcon has suffered, and will continue to suffer, irreparable harm as a result of Defendants' infringement of the '247 Patent, for which there is no adequate remedy at law, unless Defendants' infringement is enjoined by this Court.

## **DEMAND FOR JURY TRIAL**

Plaintiff hereby demands a jury for all issues so triable.

## **PRAYER FOR RELIEF**

WHEREFORE, Semcon prays for relief against Defendants as follows:

a. Entry of judgment declaring that Defendants have directly and/or indirectly infringed one or more claims of each of the Patents-In-Suit;

b. An order pursuant to 35 U.S.C. § 283 permanently enjoining Defendants, their officers, agents, servants, employees, attorneys, and those persons in active concert or participation with them, from further acts of infringement of the Patents-In-Suit;

c. An order awarding damages sufficient to compensate Semcon for Defendants' infringement of the Patents-In-Suit, but in no event less than a reasonable royalty, together with interest and costs;

d. Entry of judgment declaring that this case is exceptional and awarding Semcon its costs and reasonable attorney fees under 35 U.S.C. § 285; and

e. Such other and further relief as the Court deems just and proper.

Dated: April 25, 2016

Respectfully submitted,

## MCKOOL SMITH, P.C.

/s/ Samuel F. Baxter

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# ATTORNEYS FOR PLAINTIFF, SEMCON IP INC.