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10 Attorneys for SILICON LABORATORIES,
 11 INC.

12 UNITED STATES DISTRICT COURT
 13 SOUTHERN DISTRICT OF CALIFORNIA
 14 SAN DIEGO

16	SILICON LABORATORIES INC.,)	Case No. '12CV1765 WQHWVG
17)	
18	Plaintiff,)	COMPLAINT FOR PATENT
19	vs.)	INFRINGEMENT
20	MAXLINEAR, INC.,)	
21	Defendant.)	JURY TRIAL DEMANDED
22)	

1 **COMPLAINT FOR PATENT INFRINGEMENT**

2 Plaintiff Silicon Laboratories Inc. (“Silicon Labs”) hereby files this Complaint against
3 Defendant MaxLinear, Inc. (“MaxLinear”) for infringement of U.S. Patent No. 7,035,607 (“the ’607
4 patent”).

5 **PARTIES**

6 1. Plaintiff Silicon Labs is a Delaware corporation with its principal place of business at
7 400 West Cesar Chavez, Austin, Texas 78701.

8 2. Defendant MaxLinear is a Delaware corporation with its principal place of business
9 and corporate headquarters at 2051 Palomar Airport Road, Suite 100, Carlsbad, California 92011.

10 **JURISDICTION AND VENUE**

11 3. This Complaint arises under the patent laws of the United States, Title 35 of the
12 United States Code. This Court has subject matter jurisdiction over this action under 35 U.S.C.
13 §§ 271 *et seq.*, 28 U.S.C. §§ 1331 and 1338(a).

14 4. Personal Jurisdiction over MaxLinear is proper because, *inter alia*, MaxLinear’s
15 principal place of business is located in the State of California and within this District.

16 5. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), (c) and
17 1400(b) because a substantial part of the events giving rise to the claims at issue occurred in this
18 district.

19 **SILICON LABS**

20 6. Silicon Labs was founded in 1996 to design and manufacture mixed signal integrated
21 circuits. Silicon Labs has a long history developing semiconductor based integrated circuits that are
22 more reliable, smaller, and use less power to run than their predecessors.

23 7. Silicon Labs created the first embedded modem with silicon direct access
24 arrangement technology; the first integrated radio frequency synthesizer; the first integrated
25 complementary metal-oxide-semiconductor (“CMOS”) subscriber line interface circuit; the first
26 CMOS FM tuner; and the first successful hybrid TV tuner for integrated digital television.

27 8. Silicon Labs’ products can be found in a wide variety of electronic devices, including
28 portable audio devices, digital televisions, cable set-top boxes, GPS devices, wireless routers, and

1 cellular handsets. Silicon Labs' innovations have helped enable these devices to become smaller,
2 more reliable, and more efficient.

3 9. Silicon Labs continues to innovate in this field and invests heavily in research and
4 development.

5 10. Silicon Labs performs research and development in its Sunnyvale, California campus,
6 employing approximately 80 scientists, engineers, and other personnel.

7 **TELEVISION TUNERS**

8 11. Television tuners must perform a complex process. The tuner must separate an, often
9 faint, electromagnetic signal at a particular frequency from a vast collection of signals at diverse
10 frequencies and differing power levels. This collection of signals includes a different frequency for
11 each television channel along with potentially interfering frequencies such as Wi-Fi, Bluetooth, and
12 cellular signals.

13 12. The job of the tuner is further complicated because television manufacturers expect
14 the tuner to be able to tune different types of television signals. Most countries, including the United
15 States, have some channels that are broadcast in analog form and others that are broadcast in digital
16 form. In addition, different regions broadcast television signals in different formats. These formats
17 include NTSC and PAL/SECAM for analog TV and DVB-T2/C2/T/C, ISDB-T/C, ATSC/QAM and
18 DTMB for digital TV.

19 13. Historically, tuning has been performed by mixer oscillator phase-locked loop
20 ("MOPLL") CAN tuners. These tuners consist of a printed circuit board that often requires more
21 than 150 separate components.

22 14. These large MOPLL CAN tuners are being displaced by integrated silicon TV tuners
23 that can rest comfortably on the face of a dime. Before the transition could begin in earnest,
24 however, the silicon TV tuners needed to match the performance of the older CAN tuners.

25 15. Silicon Labs has been instrumental in the development of silicon TV tuners that can
26 match, or even surpass, the performance of MOPLL CAN tuners. Silicon Labs holds over 200 U.S.
27 patents related to fundamental RF and television technology.

28 16. Silicon Labs has developed, manufactures, and sells a number of silicon TV tuner

1 products. Among these are the Si2156 and Si2158 Worldwide Digital and Analog TV Tuners.

2 17. The Si2156 and Si2158 tuners surpass the performance of MOPLL CAN tuners while
3 supporting worldwide analog and digital TV standards.

4 **THE '607 PATENT**

5 18. On April 25, 2006, United States Patent No. 7,035,607 (“the ’607 patent”), titled
6 “Systems and Methods for Providing an Adjustable Reference Signal to RF Circuitry,” was duly and
7 legally issued to Silicon Labs. The ’607 patent is owned by Silicon Labs. A copy of the ’607 patent
8 is attached as Exhibit 1.

9 19. To operate properly, a TV tuner requires a consistent and accurate reference
10 frequency. Without the reference frequency, the tuner would not be able to reliably identify a given
11 signal at a particular frequency from the other signals at similar frequencies.

12 20. The reference frequency is typically generated from a vibrating quartz crystal. These
13 crystals are typically sold at specific vibration frequencies and the frequency can vary somewhat
14 depending on the operating conditions of the crystal, such as its temperature.

15 21. It is often desirable for a TV manufacturer to tune, or “pull,” this reference frequency.
16 This pulling has typically been done by adding external load capacitors to the crystal oscillator
17 circuit. But this method requires additional components external to the TV tuner.

18 22. Silicon Labs invented circuitry for providing adjustable capacitance in a crystal
19 oscillator circuit. One benefit of this circuitry is that it allowed the adjustable capacitance to be
20 integrated within the silicon TV tuner, eliminating the need for adjustable external capacitors.
21 Silicon Labs patented this invention in the ’607 patent.

22 23. The Si2156 and Si2158 products include crystal oscillator circuitry that is patented in
23 the ’607 patent.

24 **MAXLINEAR**

25 24. MaxLinear manufactures and/or sells a number of products, including, but not limited
26 to, MxL101, MxL111, MxL131, MxL135, MxL201, MxL203, MxL241, MxL242 MxL256,
27 MxL258, MxL261, MxL265, MxL267, MxL301, MxL601, MxL602, MxL603, MxL605, MxL703,
28 MxL751, MxL800SM, MxL801SM, MxL805SM, MxL806SM, MxL810SM, MxL800SM-EVK,

1 MxL5003, MxL5007, MxL7001, MxL7002, and MaxLinear's S/S2 satellite receiver products..

2 25. Among these is the MxL601 TV tuner. Upon information and belief, MaxLinear
3 began manufacture and sale of the MxL601 product in mid to late 2011. The MxL601 product
4 competes with Silicon Labs' Si2156 and Si2158 products.

5 26. Upon information and belief, MaxLinear sells the MxL601 product to customers in
6 the United States.

7 27. Furthermore, MaxLinear sells the MxL601 product to customers outside the United
8 States with knowledge that these customers will incorporate the MxL601 product into their own
9 devices (such as televisions) and with knowledge that the customers will import their devices that
10 contain the MxL601 product into the United States for sale to and use by end users within the United
11 States.

12 28. For example, MaxLinear's May 2012 investor presentation¹ shows that approximately
13 10 percent of its revenue is generated from sales to customers within the United States and
14 approximately 30 percent of its revenue is generated for sales of products in which the end user is
15 within the United States.

16 29. MaxLinear announced in November 2011 that it would supply the MxL601 to Sharp
17 Corp. ("Sharp") for implementation into its TVs.

18 30. MaxLinear's sales of the MxL601 to Sharp displaced Silicon Labs sales to Sharp of
19 Silicon Labs' Si2156 product.

20 31. MaxLinear sold devices to Sharp with the knowledge that Sharp would incorporate
21 the MxL601 product into its TVs and then import those TVs into the United States for sale to end
22 users who would use those TVs within the United States.

23 32. When the MxL601 was announced, Silicon Labs suspected that MaxLinear used
24 some of Silicon Labs' patented technology. As such, Silicon Labs diligently sought product samples
25 and datasheets for analysis.

26
27 ¹ Attached as Exhibit 2, at 21 (retrieved on July 17, 2012 from [http://phx.corporate-
28 ir.net/External.File?item=UGFyZW50SUQ9NDY2ODgwfENoaWxkSUQ9NDk2NjA5fFR5cGU9MQ==&t=1](http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NDY2ODgwfENoaWxkSUQ9NDk2NjA5fFR5cGU9MQ==&t=1)).

1 33. Silicon Labs purchased a 2012 model Sharp TV at Best Buy in Austin, Texas. The
2 purchased TV was disassembled and found to include the MxL601 product.

3 34. Because of the potential overlap between the intellectual property developed by
4 Silicon Labs and the MxL601 product, as well as other MaxLinear products, Silicon Labs also sent
5 MaxLinear an inquiry letter on March 26, 2012, highlighting Silicon Labs' prior work in this area
6 and requesting assurances that MaxLinear was not infringing Silicon Labs' intellectual property.

7 35. In response, counsel for MaxLinear sent Silicon Labs a letter on April 2, 2012
8 requesting additional information. MaxLinear stated that, upon receipt of the information it would
9 "review the information and schedule a time to meet with Silicon Labs' representatives to address
10 the patent(s) identified by Silicon Labs."

11 36. On May 3, 2012 Silicon Labs sent MaxLinear a letter providing additional
12 information about Silicon Labs' patented technology. In this letter, Silicon Labs provided a list of 19
13 patents that are "exemplary" of Silicon Labs' more than 200 issued U.S. RF and TV patents. Silicon
14 Labs also requested "assurances that MaxLinear products, in particular the MXL301 and MXL601
15 products, do not implement any of Silicon Labs' patented technology."

16 37. Rather than "schedule a time to meet with Silicon Labs' representatives to address the
17 patent(s) identified by Silicon Labs" as promised in its April 2 letter, MaxLinear filed a complaint
18 for declaratory judgment in this District on May 13, 2012. *See* Case No. 3:12CV1161-H-MDD.

19 38. The '607 patent is not among the 19 patents at issue in the suit filed by MaxLinear.

20 39. On May 22, 2012, Silicon Labs sent MaxLinear a letter requesting datasheets and
21 product samples for the MaxLinear Products. Upon information and belief, MaxLinear provides
22 datasheets and product samples to third parties, including prospective customers.

23 40. On May 25, 2012, MaxLinear responded to Silicon Labs' letter by refusing to provide
24 the requested information.

25 41. Silicon Labs performed an analysis of the MxL601. This analysis was completed in
26 July 2012.

27 42. The MxL601 product includes the crystal oscillator tuning circuitry that was invented
28 by Silicon Labs and patented by Silicon Labs in the '607 patent.

1 43. Among MaxLinear's products is the MxL242 cable tuner.

2 44. Upon information and belief, MaxLinear sells the MxL242 product to customers in
3 the United States.

4 45. Furthermore, MaxLinear sells the MxL242 product to customers outside the United
5 States with knowledge that these customers will incorporate the MxL242 product into their own
6 devices (such as cable modems and set-top boxes) and with knowledge that the customers will
7 import their devices that contain the MxL242 product into the United States for sale to and use by
8 end users within the United States.

9 46. In September 2011, Silicon Labs purchased an Arris TM802G Telephony Modem
10 online from Austin, Texas for delivery to Austin, Texas. The purchased modem was disassembled
11 and found to include the MxL242 product.

12 47. The Arris TM802G modem is a currently available for purchase via Amazon.com at
13 <http://www.amazon.com/Arris-TM802G-Telephony-Modem/dp/B005O3PLF2>

14 48. The MxL242 product is configured to be coupled to a crystal.

15 49. On information and belief, the MxL242 product comprises capacitors that are
16 configured to adjust the resonance frequency of a crystal oscillator circuit.

17 50. On information and belief, the MxL242 product contains a frequency synthesizer.

18 51. On information and belief, the MxL242 product is configured to provide a reference
19 frequency from a crystal oscillator circuit to a frequency synthesizer.

20 52. Among MaxLinear's products are the MxL201 and MxL301 TV tuners.

21 53. MaxLinear's December 3, 2009 press briefing presentation shows that the MxL201 is
22 related to the MxL301 and MxL241.²

23 54. On information and belief, the architecture of the MxL601 is derived from the
24 MxL201 and MxL301.

25 55. Upon information and belief, MaxLinear sells the MxL301 product to customers in
26 the United States.

27
28 ² Attached as Exhibit 3, at 12 (retrieved on July 17, 2012 from http://www.eefocus.com/data/09-12/27_1261129166/File/1261131346.pdf).

1 56. Furthermore, MaxLinear sells the MxL301 product to customers outside the United
2 States with knowledge that these customers will incorporate the MxL301 product into their own
3 devices (such as cable modems and set-top boxes) and with knowledge that the customers will
4 import their devices that contain the MxL301 product into the United States for sale to and use by
5 end users within the United States.

6 57. On information and belief, the MxL301 product is configured to be coupled to a
7 crystal.

8 58. On information and belief, the MxL301 product comprises capacitors that are
9 configured to adjust the resonance frequency of a crystal oscillator circuit.

10 59. On information and belief, the MxL301 product contains a frequency synthesizer.

11 60. On information and belief, the MxL301 product is configured to provide a reference
12 frequency from a crystal oscillator circuit to a frequency synthesizer.

13 61. Upon information and belief, MaxLinear sells the MxL201 product to customers in
14 the United States.

15 62. Furthermore, MaxLinear sells the MxL201 product to customers outside the United
16 States with knowledge that these customers will incorporate the MxL201 product into their own
17 devices (such as cable modems and set-top boxes) and with knowledge that the customers will
18 import their devices that contain the MxL201 product into the United States for sale to and use by
19 end users within the United States.

20 63. On information and belief, the MxL201 product is configured to be coupled to a
21 crystal.

22 64. On information and belief, the MxL201 product comprises capacitors that are
23 configured to adjust the resonance frequency of a crystal oscillator circuit.

24 65. On information and belief, the MxL201 product contains a frequency synthesizer.

25 66. On information and belief, the MxL201 product is configured to provide a reference
26 frequency from a crystal oscillator circuit to a frequency synthesizer.

27 67. On information and belief, the architecture of the MxL242 is derived from the
28 MxL201 and MxL241.

1 68. Upon information and belief, MaxLinear sells the MxL241 product to customers in
2 the United States.

3 69. Furthermore, MaxLinear sells the MxL241 product to customers outside the United
4 States with knowledge that these customers will incorporate the MxL241 product into their own
5 devices (such as cable modems and set-top boxes) and with knowledge that the customers will
6 import their devices that contain the MxL241 product into the United States for sale to and use by
7 end users within the United States.

8 70. On information and belief, the MxL241 product is configured to be coupled to a
9 crystal.

10 71. On information and belief, the MxL241 product comprises capacitors that are
11 configured to adjust the resonance frequency of a crystal oscillator circuit.

12 72. On information and belief, the MxL241 product contains a frequency synthesizer.

13 73. On information and belief, the MxL241 product is configured to provide a reference
14 frequency from a crystal oscillator circuit to a frequency synthesizer.

15 **THE TV DESIGN CYCLE**

16 74. TV manufacturers typically design their products early in a calendar year. They select
17 their component suppliers in approximately the fall, and then manufacture their product for sale
18 beginning early the following year.

19 75. Thus, TVs on sale in 2012 were designed in early 2011 and component suppliers
20 were chosen in the fall of 2011.

21 76. Within the next few months, TV manufacturers will select their component suppliers
22 for the 2013 calendar year.

23 77. MaxLinear announced its MxL601 product in the fall of 2011 such that it was
24 available to TV manufacturers developing their 2012 models.

25 78. On information and belief, MaxLinear has offered the MxL601 product at a price
26 substantially below the price Silicon Labs' has offered its Si2156 and Si2158 products.

27 79. MaxLinear has not licensed the '607 patent.

28 80. MaxLinear has not sought to license the '607 patent.

1 81. On information and belief, the MxL601's lower price was possible, at least in part,
2 because it incorporated technology, such as the crystal oscillator circuitry disclosed and patented in
3 the '607 patent, for which MaxLinear did not have to bear the research and development costs
4 incurred by Silicon Labs.

5 82. Because of MaxLinear's infringement of the '607 patent Silicon Labs has been
6 harmed in ways for which monetary damages are inadequate, such as price erosion, loss of goodwill,
7 lost business opportunities, and lost reputation.

8 83. Because of MaxLinear's infringement of the '607 patent Silicon Labs has suffered
9 monetary damages.

10 84. MaxLinear's continuing infringement will compound the harm to Silicon Labs. This
11 is particularly true in the next few months as TV manufacturers choose their component suppliers for
12 the 2013 calendar year.

13 **COUNT I**

14 **(Infringement of U.S. Patent No. 7,035,607 by MxL601)**

15 85. Silicon Labs incorporates by reference paragraphs 1 through 84 above as if fully set
16 forth herein.

17 86. To the extent that MaxLinear was unaware of the '607 patent prior to the date of this
18 suit, this Complaint provides MaxLinear with notice of the '607 patent. MaxLinear has knowledge
19 of the '607 patent and its infringement of the '607 patent.

20 87. On information and belief, MaxLinear intended its MxL601 product to be a
21 replacement for Silicon Labs' Si2156 product, at least as early as November 2011.

22 88. On information and belief, MaxLinear, through its counsel, reviewed the '607 patent
23 and its prosecution history on or before May 13, 2012.

24 89. On information and belief, MaxLinear, through its counsel, considered the effect, if
25 any, of the prosecution history of the '607 patent on the scope of each of the claims of U.S. Patent
26 No. 7,200,364.

27 90. On information and belief, MaxLinear knew or should have known of the '607 patent
28 before MaxLinear sued Silicon Labs on May 13, 2012. *See* Case No. 3:12CV1161-H-MDD.

1 91. On information and belief, MaxLinear offers to sell the MxL601 product within the
2 United States.

3 92. On information and belief, MaxLinear sells the MxL601 product within the United
4 States.

5 93. On information and belief, MaxLinear imports the MxL601 product into the United
6 States.

7 94. On information and belief, MaxLinear has previously tested the MxL601 product in
8 the United States.

9 95. On information and belief, MaxLinear plans to continue to test the MxL601 product
10 in the United States.

11 96. MaxLinear has been and is currently infringing and will continue to directly infringe,
12 either literally or under the doctrine of equivalents, one or more claims of the '607 patent by making,
13 using, offering to sell, and selling within the United States and/or importing into the United States
14 the MxL601 product.

15 97. MaxLinear has been and is currently actively inducing and encouraging infringement,
16 and will continue to actively induce and encourage infringement, of one or more claims of the '607
17 patent. MaxLinear has knowledge of the '607 patent and that the MxL601 product, on its own and/or
18 when incorporated into devices, such as televisions, infringes the '607 patent. MaxLinear has
19 induced and encouraged the direct infringement of the patent by its customers and end users by
20 directing them and encouraging them to make, use, sell, and offer to sell within the United States
21 and/or to import into the United States one or more devices that embody the patented invention and
22 that incorporate the MxL601 product.

23 98. MaxLinear has and is currently contributorily infringing, and will continue to
24 contributorily infringe, one or more claims of the '607 patent.

25 99. The apparatus and method claims of the '607 patent are directly infringed by
26 MaxLinear's United States customers and end users in the United States. These customers and end
27 users use the MxL601 product to practice methods that are patented in the '607 patent.

28 100. The MxL601 product embodies all, or a majority, of the elements of the infringed

1 claims and is thus a material part of the patented invention and is not staple article or commodity of
2 commerce suitable for substantial noninfringing use.

3 101. MaxLinear knew and does now know that devices incorporating the MxL601 product
4 infringe the '607 patent. MaxLinear knew and does now know that use of those devices infringes the
5 '607 patent.

6 102. As a direct and proximate consequence of MaxLinear's direct and indirect
7 infringement of the '607 patent, Silicon Labs has suffered and will continue to suffer irreparable
8 injury and damages for which Silicon Labs is entitled to relief.

9 103. MaxLinear has continued to infringe and will continue to infringe despite its
10 knowledge of the '607 patent and its infringement of the '607 patent.

11 104. MaxLinear's acts of infringement have been objectively reckless making this case
12 exceptional and entitling Silicon Labs to enhanced damages and reasonable attorneys' fees pursuant
13 to 35 U.S.C. §§ 284 and 285.

14 **COUNT II**

15 **(Infringement of U.S. Patent No. 7,035,607 by MxL242)**

16 105. Silicon Labs incorporates by reference paragraphs 1 through 104 above as if fully set
17 forth herein.

18 106. On information and belief, MaxLinear offers to sell the MxL242 product within the
19 United States.

20 107. On information and belief, MaxLinear sells the MxL242 product within the United
21 States.

22 108. On information and belief, MaxLinear imports the MxL242 product into the United
23 States.

24 109. On information and belief, MaxLinear has previously tested the MxL242 product in
25 the United States.

26 110. On information and belief, MaxLinear plans to continue to test the MxL242 product
27 in the United States.

28 111. MaxLinear has been and is currently infringing and will continue to directly infringe,

1 either literally or under the doctrine of equivalents, one or more claims of the '607 patent by making,
2 using, offering to sell, and selling within the United States and/or importing into the United States
3 the MxL242 product.

4 112. MaxLinear has been and is currently actively inducing and encouraging infringement,
5 and will continue to actively induce and encourage infringement, of one or more claims of the '607
6 patent. MaxLinear has knowledge of the '607 patent and that the MxL242 product, on its own and/or
7 when incorporated into devices, such as televisions, infringes the '607 patent. MaxLinear has
8 induced and encouraged the direct infringement of the patent by its customers and end users by
9 directing them and encouraging them to make, use, sell, and offer to sell within the United States
10 and/or to import into the United States one or more devices that embody the patented invention and
11 that incorporate the MxL242 product.

12 113. MaxLinear has and is currently contributorily infringing, and will continue to
13 contributorily infringe, one or more claims of the '607 patent.

14 114. The apparatus and method claims of the '607 patent are directly infringed by
15 MaxLinear's United States customers and end users in the United States. These customers and end
16 users use the MxL242 product to practice methods that are patented in the '607 patent.

17 115. The MxL242 product embodies all, or a majority, of the elements of the infringed
18 claims and is thus a material part of the patented invention and is not staple article or commodity of
19 commerce suitable for substantial noninfringing use.

20 116. MaxLinear knew and does now know that devices incorporating the MxL242 product
21 infringe the '607 patent. MaxLinear knew and does now know that use of those devices infringes the
22 '607 patent.

23 117. As a direct and proximate consequence of MaxLinear's direct and indirect
24 infringement of the '607 patent, Silicon Labs has suffered and will continue to suffer irreparable
25 injury and damages for which Silicon Labs is entitled to relief.

26 118. MaxLinear has continued to infringe and will continue to infringe despite its
27 knowledge of the '607 patent and its infringement of the '607 patent.

28 119. MaxLinear's acts of infringement have been objectively reckless making this case

1 exceptional and entitling Silicon Labs to enhanced damages and reasonable attorneys' fees pursuant
2 to 35 U.S.C. §§ 284 and 285.

3 **COUNT III**

4 **(Infringement of U.S. Patent No. 7,035,607 by MxL241)**

5 120. Silicon Labs incorporates by reference paragraphs 1 through 119 above as if fully set
6 forth herein.

7 121. On information and belief, MaxLinear offers to sell the MxL241 product within the
8 United States.

9 122. On information and belief, MaxLinear sells the MxL241 product within the United
10 States.

11 123. On information and belief, MaxLinear imports the MxL241 product into the United
12 States.

13 124. On information and belief, MaxLinear has previously tested the MxL241 product in
14 the United States.

15 125. On information and belief, MaxLinear plans to continue to test the MxL241 product
16 in the United States.

17 126. MaxLinear has been and is currently infringing and will continue to directly infringe,
18 either literally or under the doctrine of equivalents, one or more claims of the '607 patent by making,
19 using, offering to sell, and selling within the United States and/or importing into the United States
20 the MxL241 product.

21 127. MaxLinear has been and is currently actively inducing and encouraging infringement,
22 and will continue to actively induce and encourage infringement, of one or more claims of the '607
23 patent. MaxLinear has knowledge of the '607 patent and that the MxL241 product, on its own and/or
24 when incorporated into devices, such as televisions, infringes the '607 patent. MaxLinear has
25 induced and encouraged the direct infringement of the patent by its customers and end users by
26 directing them and encouraging them to make, use, sell, and offer to sell within the United States
27 and/or to import into the United States one or more devices that embody the patented invention and
28 that incorporate the MxL241 product.

1 128. MaxLinear has and is currently contributorily infringing, and will continue to
2 contributorily infringe, one or more claims of the '607 patent.

3 129. The apparatus and method claims of the '607 patent are directly infringed by
4 MaxLinear's United States customers and end users in the United States. These customers and end
5 users use the MxL241 product to practice methods that are patented in the '607 patent.

6 130. The MxL241 product embodies all, or a majority, of the elements of the infringed
7 claims and is thus a material part of the patented invention and is not staple article or commodity of
8 commerce suitable for substantial noninfringing use.

9 131. MaxLinear knew and does now know that devices incorporating the MxL241 product
10 infringe the '607 patent. MaxLinear knew and does now know that use of those devices infringes the
11 '607 patent.

12 132. As a direct and proximate consequence of MaxLinear's direct and indirect
13 infringement of the '607 patent, Silicon Labs has suffered and will continue to suffer irreparable
14 injury and damages for which Silicon Labs is entitled to relief.

15 133. MaxLinear has continued to infringe and will continue to infringe despite its
16 knowledge of the '607 patent and its infringement of the '607 patent.

17 134. MaxLinear's acts of infringement have been objectively reckless making this case
18 exceptional and entitling Silicon Labs to enhanced damages and reasonable attorneys' fees pursuant
19 to 35 U.S.C. §§ 284 and 285.

20 **COUNT IV**

21 **(Infringement of U.S. Patent No. 7,035,607 by MxL201)**

22 135. Silicon Labs incorporates by reference paragraphs 1 through 134 above as if fully set
23 forth herein.

24 136. On information and belief, MaxLinear offers to sell the MxL201 product within the
25 United States.

26 137. On information and belief, MaxLinear sells the MxL201 product within the United
27 States.

28 138. On information and belief, MaxLinear imports the MxL201 product into the United

1 States.

2 139. On information and belief, MaxLinear has previously tested the MxL201 product in
3 the United States.

4 140. On information and belief, MaxLinear plans to continue to test the MxL201 product
5 in the United States.

6 141. MaxLinear has been and is currently infringing and will continue to directly infringe,
7 either literally or under the doctrine of equivalents, one or more claims of the '607 patent by making,
8 using, offering to sell, and selling within the United States and/or importing into the United States
9 the MxL201 product.

10 142. MaxLinear has been and is currently actively inducing and encouraging infringement,
11 and will continue to actively induce and encourage infringement, of one or more claims of the '607
12 patent. MaxLinear has knowledge of the '607 patent and that the MxL201 product, on its own and/or
13 when incorporated into devices, such as televisions, infringes the '607 patent. MaxLinear has
14 induced and encouraged the direct infringement of the patent by its customers and end users by
15 directing them and encouraging them to make, use, sell, and offer to sell within the United States
16 and/or to import into the United States one or more devices that embody the patented invention and
17 that incorporate the MxL201 product.

18 143. MaxLinear has and is currently contributorily infringing, and will continue to
19 contributorily infringe, one or more claims of the '607 patent.

20 144. The apparatus and method claims of the '607 patent are directly infringed by
21 MaxLinear's United States customers and end users in the United States. These customers and end
22 users use the MxL201 product to practice methods that are patented in the '607 patent.

23 145. The MxL201 product embodies all, or a majority, of the elements of the infringed
24 claims and is thus a material part of the patented invention and is not staple article or commodity of
25 commerce suitable for substantial noninfringing use.

26 146. MaxLinear knew and does now know that devices incorporating the MxL201 product
27 infringe the '607 patent. MaxLinear knew and does now know that use of those devices infringes the
28 '607 patent.

1 147. As a direct and proximate consequence of MaxLinear's direct and indirect
2 infringement of the '607 patent, Silicon Labs has suffered and will continue to suffer irreparable
3 injury and damages for which Silicon Labs is entitled to relief.

4 148. MaxLinear has continued to infringe and will continue to infringe despite its
5 knowledge of the '607 patent and its infringement of the '607 patent.

6 149. MaxLinear's acts of infringement have been objectively reckless making this case
7 exceptional and entitling Silicon Labs to enhanced damages and reasonable attorneys' fees pursuant
8 to 35 U.S.C. §§ 284 and 285.

9 **COUNT V**

10 **(Infringement of U.S. Patent No. 7,035,607 by MxL301)**

11 150. Silicon Labs incorporates by reference paragraphs 1 through 149 above as if fully set
12 forth herein.

13 151. On information and belief, MaxLinear offers to sell the MxL301 product within the
14 United States.

15 152. On information and belief, MaxLinear sells the MxL301 product within the United
16 States.

17 153. On information and belief, MaxLinear imports the MxL301 product into the United
18 States.

19 154. On information and belief, MaxLinear has previously tested the MxL301 product in
20 the United States.

21 155. On information and belief, MaxLinear plans to continue to test the MxL301 product
22 in the United States.

23 156. MaxLinear has been and is currently infringing and will continue to directly infringe,
24 either literally or under the doctrine of equivalents, one or more claims of the '607 patent by making,
25 using, offering to sell, and selling within the United States and/or importing into the United States
26 the MxL301 product.

27 157. MaxLinear has been and is currently actively inducing and encouraging infringement,
28 and will continue to actively induce and encourage infringement, of one or more claims of the '607

1 patent. MaxLinear has knowledge of the '607 patent and that the MxL301 product, on its own and/or
2 when incorporated into devices, such as televisions, infringes the '607 patent. MaxLinear has
3 induced and encouraged the direct infringement of the patent by its customers and end users by
4 directing them and encouraging them to make, use, sell, and offer to sell within the United States
5 and/or to import into the United States one or more devices that embody the patented invention and
6 that incorporate the MxL301 product.

7 158. MaxLinear has and is currently contributorily infringing, and will continue to
8 contributorily infringe, one or more claims of the '607 patent.

9 159. The apparatus and method claims of the '607 patent are directly infringed by
10 MaxLinear's United States customers and end users in the United States. These customers and end
11 users use the MxL301 product to practice methods that are patented in the '607 patent.

12 160. The MxL301 product embodies all, or a majority, of the elements of the infringed
13 claims and is thus a material part of the patented invention and is not staple article or commodity of
14 commerce suitable for substantial noninfringing use.

15 161. MaxLinear knew and does now know that devices incorporating the MxL301 product
16 infringe the '607 patent. MaxLinear knew and does now know that use of those devices infringes the
17 '607 patent.

18 162. As a direct and proximate consequence of MaxLinear's direct and indirect
19 infringement of the '607 patent, Silicon Labs has suffered and will continue to suffer irreparable
20 injury and damages for which Silicon Labs is entitled to relief.

21 163. MaxLinear has continued to infringe and will continue to infringe despite its
22 knowledge of the '607 patent and its infringement of the '607 patent.

23 164. MaxLinear's acts of infringement have been objectively reckless making this case
24 exceptional and entitling Silicon Labs to enhanced damages and reasonable attorneys' fees pursuant
25 to 35 U.S.C. §§ 284 and 285.

26 **PRAYER FOR RELIEF**

27 WHEREFORE PLAINTIFF Silicon Labs prays for a judgment as follows:

28 a) that MaxLinear's MxL601, MxL301, MxL201, MxL242 and MxL241 products infringe

1 the '607 patent;

2 b) that use of MaxLinear's MxL601, MxL301, MxL201, MxL242 and MxL241 products
3 infringe the '607 patent;

4 c) that a preliminary injunction be issued against further direct or indirect infringement of
5 the '607 patent by MaxLinear, and its officers, agents, servants, employees, attorneys,
6 and all persons in active concert or participation with them, through making, using,
7 selling, or importing the MxL601 product;

8 d) that a permanent injunction be issued against further direct or indirect infringement of
9 the '607 patent by MaxLinear and its officers, agents, servants, employees, attorneys,
10 and all persons in active concert or participation with them, through making, using,
11 selling, or importing the MxL601, MxL301, MxL201, MxL242 and MxL241 products;

12 e) that MaxLinear account and pay actual damages, but no less than a reasonable royalty,
13 to Silicon Labs to compensate for MaxLinear's infringement as provided by 35 U.S.C.
14 § 284;

15 f) that MaxLinear's infringement was willful;

16 g) that MaxLinear pay treble damages in light of its willful infringement as provided by
17 35 U.S.C. § 284;

18 h) that this is an exceptional case and that, as a result, Silicon Labs is entitled to recover its
19 attorneys' fees pursuant to 35 U.S.C. § 285;

20 i) that MaxLinear pay interest and costs to Silicon Labs as provided for by 35 U.S.C.
21 § 284; and

22 j) such other and further relief as the Court may deem just and fair.

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DEMAND FOR A JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Silicon Labs demands a jury trial on all issues triable of right by a jury.

Dated: July 17, 2012

SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

By

/s/ Elizabeth S. Balfour

ELIZABETH S. BALFOUR

DANIEL N. YANNUZZI

MICHAEL MURPHY

Attorneys for Plaintiff

SILICON LABORATORIES, INC.

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CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS
SILICON LABORATORIES, INC.
(b) County of Residence of First Listed Plaintiff Santa Clara
(c) Attorneys (Firm Name, Address, and Telephone Number)
Daniel N. Yannuzzi, Sheppard Mullin Richter & Hampton LLC
12275 El Camino Real, Suite 200, San Diego, CA 92130
Tel: 858-720-8900

DEFENDANTS
MAXLINEAR, INC.
County of Residence of First Listed Defendant San Diego
NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.
Attorneys (If Known)
James C. Yoon, WILSON SONSINI GOODRICH & ROSATI P.C.
650 Page Mill Road, Palo Alto, CA 94304-1050
Tel: 650-493-9300

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)
[] 1 U.S. Government Plaintiff
[] 2 U.S. Government Defendant
[X] 3 Federal Question (U.S. Government Not a Party)
[] 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)
Citizen of This State PTF [] DEF []
Citizen of Another State PTF [] DEF []
Citizen or Subject of a Foreign Country PTF [] DEF []

IV. NATURE OF SUIT (Place an "X" in One Box Only)
CONTRACT: [] 110 Insurance, [] 120 Marine, [] 130 Miller Act, [] 140 Negotiable Instrument, [] 150 Recovery of Overpayment & Enforcement of Judgment, [] 151 Medicare Act, [] 152 Recovery of Defaulted Student Loans (Excl. Veterans), [] 153 Recovery of Overpayment of Veteran's Benefits, [] 160 Stockholders' Suits, [] 190 Other Contract, [] 195 Contract Product Liability, [] 196 Franchise
PERSONAL INJURY: [] 310 Airplane, [] 315 Airplane Product Liability, [] 320 Assault, Libel & Slander, [] 330 Federal Employers' Liability, [] 340 Marine, [] 345 Marine Product Liability, [] 350 Motor Vehicle, [] 355 Motor Vehicle Product Liability, [] 360 Other Personal Injury, [] 362 Personal Injury - Med. Malpractice
PERSONAL INJURY: [] 365 Personal Injury - Product Liability, [] 367 Health Care/Pharmaceutical Personal Injury Product Liability, [] 368 Asbestos Personal Injury Product Liability
PERSONAL PROPERTY: [] 370 Other Fraud, [] 371 Truth in Lending, [] 380 Other Personal Property Damage, [] 385 Property Damage Product Liability
FORFEITURE/PENALTY: [] 625 Drug Related Seizure of Property 21 USC 881, [] 690 Other
LABOR: [] 710 Fair Labor Standards Act, [] 720 Labor/Mgmt. Relations, [] 740 Railway Labor Act, [] 751 Family and Medical Leave Act, [] 790 Other Labor Litigation, [] 791 Empl. Ret. Inc. Security Act
IMMIGRATION: [] 462 Naturalization Application, [] 463 Habeas Corpus - Alien Detainee (Prisoner Petition), [] 465 Other Immigration Actions
BANKRUPTCY: [] 422 Appeal 28 USC 158, [] 423 Withdrawal 28 USC 157
PROPERTY RIGHTS: [] 820 Copyrights, [X] 830 Patent, [] 840 Trademark
SOCIAL SECURITY: [] 861 HIA (1395ff), [] 862 Black Lung (923), [] 863 DIWC/DIWW (405(g)), [] 864 SSID Title XVI, [] 865 RSI (405(g))
FEDERAL TAX SUITS: [] 870 Taxes (U.S. Plaintiff or Defendant), [] 871 IRS—Third Party 26 USC 7609
OTHER STATUTES: [] 375 False Claims Act, [] 400 State Reapportionment, [] 410 Antitrust, [] 430 Banks and Banking, [] 450 Commerce, [] 460 Deportation, [] 470 Racketeer Influenced and Corrupt Organizations, [] 480 Consumer Credit, [] 490 Cable/Sat TV, [] 850 Securities/Commodities/Exchange, [] 890 Other Statutory Actions, [] 891 Agricultural Acts, [] 893 Environmental Matters, [] 895 Freedom of Information Act, [] 896 Arbitration, [] 899 Administrative Procedure Act/Review or Appeal of Agency Decision, [] 950 Constitutionality of State Statutes

V. ORIGIN (Place an "X" in One Box Only)
[X] 1 Original Proceeding
[] 2 Removed from State Court
[] 3 Remanded from Appellate Court
[] 4 Reinstated or Reopened
[] 5 Transferred from another district (specify)
[] 6 Multidistrict Litigation

VI. CAUSE OF ACTION
Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):
35 U.S.C. §§ 271 et seq., 28 U.S.C. §§ 1331 and 1338(a)
Brief description of cause:
Patent infringement

VII. REQUESTED IN COMPLAINT:
[] CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23 DEMAND \$ CHECK YES only if demanded in complaint:
JURY DEMAND: [X] Yes [] No

VIII. RELATED CASE(S) IF ANY (See instructions):
JUDGE Larry Alan Burns DOCKET NUMBER 12CV1161 LAB MDD

DATE 07/17/2012 SIGNATURE OF ATTORNEY OF RECORD /s/ Elizabeth S. Balfour

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RECEIPT # AMOUNT APPLYING IFP JUDGE MAG. JUDGE