

1 Steven W. Ritcheson (SBN 174062)
INSIGHT, PLC
2 578 Washington Blvd. #503
3 Marina del Rey, CA 90292
(T) 818-744-8714
4 (F): 818-337-0383
swritcheson@insightplc.com
5

6 NI, WANG & MASSAND, PLLC
Hao Ni (pro hac vice to be filed)
7 hni@nilawfirm.com
8 8140 Walnut Hill Lane, Suite 500
Dallas, TX 75231
9 Telephone: (972) 331-4600
10 Facsimile: (972) 314-0900

11 *Attorneys for Plaintiff*
12 *Ranging Optics LLC*
13
14
15

16 **IN THE UNITED STATES DISTRICT COURT**
17 **FOR THE CENTRAL DISTRICT**
18 **OF CALIFORNIA**
19

20 RANGING OPTICS LLC,

21 Plaintiff,

22 v.
23

24 NIKON INC.,

25 Defendant.
26
27
28

Civil Action No.

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

1 **COMPLAINT FOR PATENT INFRINGEMENT**

2 Plaintiff Ranging Optics LLC (“Ranging Optics” or “Plaintiff”) hereby asserts
3 the following claims for patent infringement against Defendant Nikon Inc.
4 (collectively “Defendant” or “Nikon”), and alleges as follows:
5

6 **SUMMARY**

7
8 1. Ranging Optics owns United States Patent Nos. 6,512,574; and
9 7,443,927 (the “Asserted Patents”).
10

11 2. Defendant infringes the Asserted Patents by implementing, without
12 authorization, Ranging Optic’s proprietary technologies in a number of its laser
13 range finder products including, *inter alia*, Defendant’s Monarch 3000 Stabilized
14 (“Accused Products”).
15

16 3. By this action, Ranging Optics seeks to obtain compensation for the
17 harm Ranging Optics has suffered as a result of Defendant’s infringement of the
18 Asserted Patents.
19

20 **NATURE OF THE ACTION**

21
22 4. This is a civil action for patent infringement arising under the patent
23 laws of the United States, 35 U.S.C. § 1 *et seq.*
24

25 5. Defendant has infringed and continues to infringe, and at least as early
26 as the filing and/or service of this Complaint, has induced and continues to induce
27 infringement of, and has contributed to and continues to contribute to infringement
28

1 of, at least one or more claims of each of Ranging Optics' Asserted Patents at least
2 by making, using, selling, and/or offering to sell its products and services in the
3 United States, including in this District.
4

5 6. Ranging Optics is the legal owner by assignment of the Asserted
6 Patents, which were duly and legally issued by the United States Patent and
7 Trademark Office ("USPTO"). Ranging Optics seeks monetary damages for
8 Defendant's infringement of the Asserted Patents.
9

10
11 **THE PARTIES**

12 7. Plaintiff Ranging Optics LLC is a Texas limited liability company with
13 its principal place of business at 17330 Preston Road Ste 200, Dallas, TX 75252.
14 Ranging Optics is the owner of intellectual property rights at issue in this action.
15

16 8. Defendant Nikon is a corporation organized and existing under the laws
17 of the State of New York, having its principal place of business at 1300 Walt
18 Whitman Road, Melville, NY 11747-3064
19

20 9. On information and belief, Defendant directly and/or indirectly
21 develops, designs, manufactures, distributes, markets, offers to sell and/or sells
22 infringing products and services in the United States, including in the Central
23 District of California, and otherwise directs infringing activities to this District in
24 connection with its products and services.
25
26
27
28

1 **JURISDICTION AND VENUE**

2 10. As this is a civil action for patent infringement arising under the patent
3 laws of the United States, 35 U.S.C. § 1 *et seq.*, this Court has subject matter
4 jurisdiction over the matters asserted herein under 28 U.S.C. §§ 1331 and 1338(a).
5

6 11. Defendant is subject to this Court’s specific and general personal
7 jurisdiction pursuant to due process and/or the California Long Arm Statute, due at
8 least to Defendant’s substantial business in this forum, including: (i) at least a portion
9 of the infringements alleged herein; (ii) regularly doing or soliciting business,
10 engaging in other persistent courses of conduct, and/or deriving substantial revenue
11 from goods and services provided to individuals in California and in this district; and
12 (iii) having a regular place of business in this District.
13
14
15

16 12. In particular, Defendant has committed and continues to commit acts
17 of infringement in violation of 35 U.S.C. § 271, and has made, used, marketed,
18 distributed, offered for sale, sold, and/or imported infringing products in the State of
19 California, including in this District, and engaged in infringing conduct within and
20 directed at or from this District. For example, Defendant has purposefully and
21 voluntarily placed the Accused Products into the stream of commerce with the
22 expectation that the Accused Products will be used in this District. The Accused
23 Products have been and continue to be distributed to and used in this District.
24 Defendant’s acts cause and have caused injury to Ranging Optics, including within
25
26
27
28

1 this District.

2 13. Venue is proper in this District under the provisions of 28 U.S.C. §§
3 1391 and 1400(b) at least because a substantial part of the events or omissions giving
4 rise to the claims occurred in this District, and because Defendant has committed
5 acts of infringement in this District. Furthermore, Defendant has a regular and
6 established place of business in the District located at 6420 Wilshire Blvd #100, Los
7 Angeles, CA 90048.
8
9

10 **The '574 Patent**

11
12 14. U.S. Patent No. 6,512,574 (“the ‘574 Patent”) is titled “Light Receiving
13 Circuit of Laser Range Finder,” and was issued on January 28, 2003. A true and
14 correct copy of the ‘574 Patent is attached as Exhibit A.
15

16 15. The ‘574 Patent was filed on February 12, 2001 as U.S. Patent
17 Application No. 09/780,364.
18

19 16. Ranging Optics is the owner of all rights, title, and interest in and to the
20 ‘574 Patent, with the full and exclusive right to bring suit to enforce the ‘574 Patent,
21 including the right to recover for past infringement.
22

23 17. The ‘574 Patent is valid and enforceable under United States Patent
24 Laws.
25

26 18. The ‘574 Patent discloses, among other things, “a light receiving circuit
27 of a laser range finder comprising a photo-sensitive element, a conversion resistance
28

1 amplifying loop, and main amplification loop, and a one short circuit.” Exhibit A at
2 Abstract.

3
4 19. The '574 Patent recognized various shortcomings of existing range
5 finder device. As one example, traditional laser range funders employed a pulse
6 type of the laser transmitter to transmit short laser pulses of about 20 nanoseconds
7 onto a target. *Id.* at 1:12-15. “The reflected laser signal from the target is received
8 by employing a low noise high sensitivity laser received to evaluate the distance”
9 using a mathematical formula which includes calculating the time delay. *Id.* at 1:15-
10 20. However, noise may interfere with the calculation of the time delay and noise
11 increases as the distance measured increases. To overcome the problems in the prior
12 art, the '574 Patent discloses “a light receiving receiver with a bias stabilized main
13 amplifier followed by a one-shot circuit to get a digital output signal with fixed pulse
14 width.” *Id.* at 1:42-45. This novel apparatus provides a function of maximum
15 sensitivity for the laser receiving circuit, therefore increasing the ranging distance of
16 the laser range finger.
17
18
19
20
21

22 **The '927 Patent**

23 20. U.S. Patent No. 7,443,927 (“the '927 Patent”) is titled “Signal
24 Detector,” and was issued on October 28, 2008. A true and correct copy of the '927
25 Patent is attached as Exhibit B.
26

27 21. The '927 Patent was filed on June 12, 2007 as U.S. Patent Application
28

1 No. 11/761,439.

2 22. Ranging Optics is the owner of all rights, title, and interest in and to the
3 ‘927 Patent, with the full and exclusive right to bring suit to enforce the ‘927 Patent,
4 including the right to recover for past infringement.
5

6 23. The ‘927 Patent is valid and enforceable under United States Patent
7 Laws.
8

9 24. The ‘927 Patent discloses, among other things, “a signal detector
10 compris[ing] a signal translator, a data signal detector, a clock signal detector and
11 an inputting control circuit for detecting abnormal clock and data signals.” Exhibit
12 B at Abstract.
13

14 25. The ‘927 Patent recognized various shortcomings of existing types of
15 “[signal] detectors in the market for various uses, such as fire warning, anti-theft,
16 quantity surveying and so on...” *Id.* at 1:16-18. These signal detection devices
17 detect conditions such as temperature, pressure or light and send out a warning
18 signal. *Id.* at 1:18-20. However, once a clock signal is interrupted during a
19 transmission, the whole course of transmission is interrupted as well without any
20 warning. *Id.* at 1:21-25. These interruptions cause delays in time and transmission,
21 thereby wasting valuable resources. *Id.* at 1:26-27. Furthermore, if a short circuit
22 or some other factor cause the system, to continuously output a series of data signals,
23 the abnormal data transmission may cause the transmission facility as well as the
24
25
26
27
28

1 laser to become overly exhausted or break down. *Id.* at :28-32.

2 26. The '927 provided a solution to this problem by among other things,
3 providing a novel signal detector comprising a signal translator, a data signal
4 detector and an inputting control circuit. *Id.* at 1:38-40. The signal translator
5 converts differential data signals into a single data signal and the data signal detector
6 outputs a data detecting signal according to the signal data signal. *Id.* at 1:4-43. The
7 '927 Patent further utilized an interrupting control circuit which receives the data
8 detecting signal and outputs a shutdown signal when the single data signal is at a
9 high voltage level over a predefined ratio. *Id.* at 1:43-46.
10
11
12

13 **COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,512,574 BY NIKON**

14
15 27. Ranging Optics incorporates by reference and re-alleges paragraphs 14-
16 19 of this Complaint as if fully set forth herein.
17

18 28. Defendant has infringed and is infringing, either literally or under the
19 doctrine of equivalents, the '574 Patent in violation of 35 U.S.C. § 271 *et seq.*,
20 directly and/or indirectly, by making, using, offering for sale, or selling in the United
21 States, and/or importing into the United States without authority or license the
22 Accused Products.
23

24 29. As just one non-limiting example, set forth below (with claim language
25 in bold and italics) is exemplary evidence of infringement of Claim 7 of the '574
26 Patent in connection with the Accused Products. This description is based on
27
28

1 publicly available information. Ranging Optics reserves the right to modify this
2 description, including, for example, on the basis of information about the Accused
3 Products that it obtains during discovery.
4

5 30. 7(a). *A light receiving circuit of a laser range finder, said light*
6 *receiving circuit comprising:*—Defendant makes, uses, sells, and/or offers to sell a
7 device or system that is covered by the apparatus in accordance with Claim 7.
8

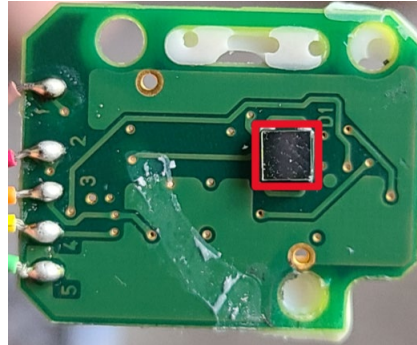
9 For instance, the Intensity 1600 Rangefinder houses a light receiving circuit.
10



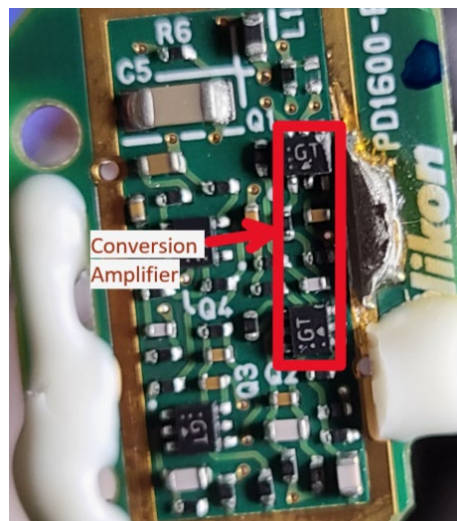
19 [https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.](https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.htm)
20 [htm](https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.htm)



1
2 **7(b): a photosensitive element for converting a light signal into a current**
3 **signal;**—Defendant makes, uses, sells, and/or offers to sell a device or system that
4 includes a photosensitive element (APD – Avalanche Photodiode).
5

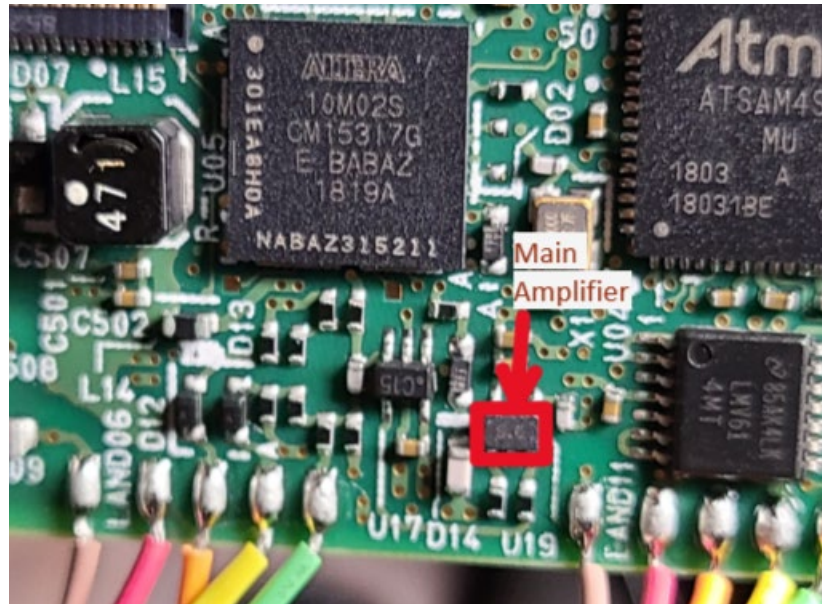


12
13 **7(c): a conversion amplifier connected with said photosensitive element for**
14 **converting the current signal outputted from the photosensitive element into a**
15 **voltage signal;**— Defendant makes, uses, sells, and/or offers to sell a device or
16 system that includes transistors that convert the current signal into a voltage signal.
17



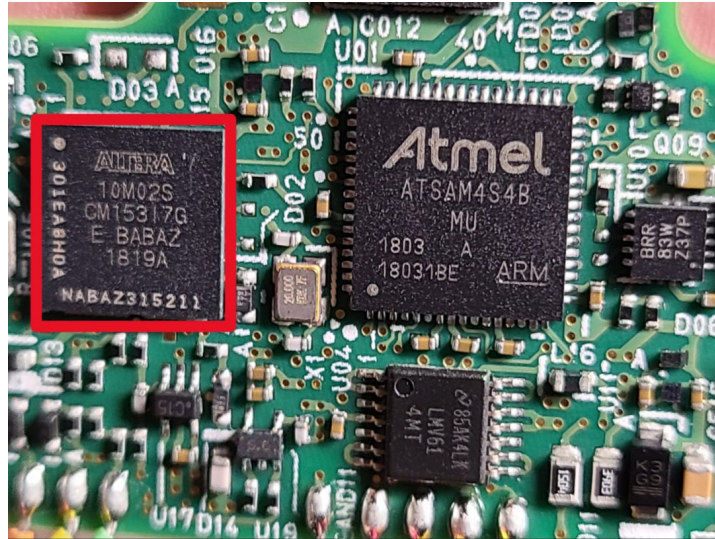
27 **7(d): a main amplifier connected with the conversion amplifier for**
28

1 *amplifying the output voltage signal from the conversion amplifier;*— Defendant
2 makes, uses, sells, and/or offers to sell a device or system that includes a main
3 amplifier connected to the conversion amplifier.
4



5
6
7
8
9
10
11
12
13
14
15 The Main Amplifier (TC75S51F Chip) amplifies the input voltage of an incoming
16 signal.

17 *7(e): a one-shot circuit connected with the main amplifier for shaping the*
18 *output voltage signal from the main amplifier into a digital signal by which the*
19 *range-finding computation is attained by the laser range finder;*— Defendant
20 makes, uses, sells, and/or offers to sell a device or system that includes a one-shot
21 circuit which includes a comparator. The comparator utilizes the voltage signal from
22 the main amplifier to generate a digital signal (e.g. compares the incoming voltage
23 signal with a stable input signal to generate a digital output).
24
25
26
27
28



1. Intel® MAX® 10 Analog to Digital Converter Overview

Intel® MAX® 10 devices feature up to two analog-to-digital converters (ADC). The ADCs provide the Intel MAX 10 devices with built-in capability for on-die temperature monitoring and external analog signal conversion.

The ADC solution consists of hard IP blocks in the Intel MAX 10 device periphery and soft logic through the Modular ADC Core Intel FPGA IP and Modular Dual ADC Core Intel FPGA IP.

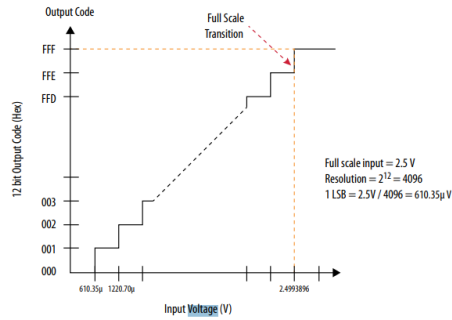
The ADC solution provides you with built-in capability to translate analog quantities to digital data for information processing, computing, data transmission, and control systems. The basic function is to provide a 12 bit digital representation of the analog signal being observed.

The ADC solution works in two modes:

- Normal mode—monitors single-ended external inputs with a cumulative sampling rate of up to 1 million samples per second (MSPS):
 - Single ADC devices—up to 17 single-ended external inputs (one dedicated analog and 16 dual function input pins)
 - Dual ADC devices—up to 18 single-ended external inputs (one dedicated analog and eight dual function input pins in each ADC block)
- Temperature sensing mode—monitors external temperature data input with a sampling rate of up to 50 kilosamples per second. In dual ADC devices, only the first ADC block supports this mode.

https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/hb/mx-10/ug_m10_adc.pdf

Figure 2. ADC Measurement Display for 2.5 V



The Intel MAX 10 ADC is a 1 MHz successive approximation register (SAR) ADC. If you set up the PLL and Modular ADC Core IP core correctly, the ADC operates at up to 1 MHz during normal sampling and 50 kHz during temperature sensing.

Note: The analog value represented by the all-ones code is not full scale but full scale - 1 LSB. This is a common convention in data conversion notation and applies to ADCs.

Related Information

- Creating Intel MAX 10 ADC Design on page 40
- Modular ADC Core Parameters Settings on page 47
- Modular Dual ADC Core Parameters Settings on page 51

1.5.1. Voltage Representation Conversion

Use the following equations to convert the voltage between analog value and digital representation.

Equation 1. Conversion from Analog Value to Digital Code

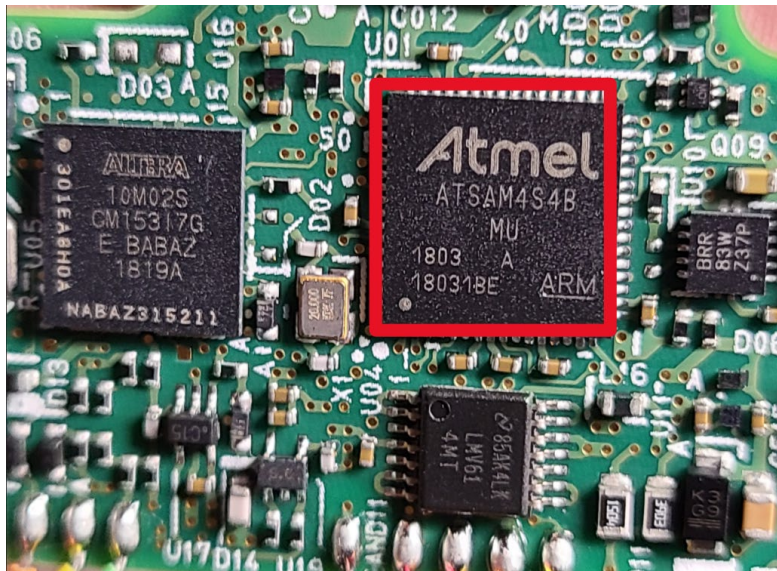
$$\text{Digital Code} = \left(\frac{V_{IN}}{V_{REF}} \right) \times 2^{12}$$

Equation 2. Conversion from Digital Code to Analog Value

$$\text{Analog Value} = \text{Digital Code} \times \left(\frac{V_{REF}}{2^{12}} \right)$$

https://www.mouser.com/datasheet/2/612/m10_datasheet-1115242.pdf

The digital signal is then sent to the logic chip (e.g. Atmel ATSAM4S4B) which performs the range finding computation.





SAM4S Series

Atmel | SMART ARM-based Flash MCU

DATASHEET

Description

The Atmel® | SMART SAM4S series is a member of a family of Flash microcontrollers based on the high-performance 32-bit ARM® Cortex®-M4 RISC processor. It operates at a maximum speed of 120 MHz and features up to 2048 Kbytes of Flash, with optional dual-bank implementation and cache memory, and up to 160 Kbytes of SRAM. The peripheral set includes a full-speed USB Device port with embedded transceiver, a high-speed MCI for SDIO/SD/MMC, an External Bus Interface featuring a Static Memory Controller to connect to SRAM, PSRAM, NOR Flash, LCD Module and NAND Flash, 2 USARTs, 2 UARTs, 2 TWIs, 3 SPIs, an I2S, as well as a PWM timer, two 3-channel general-purpose 16-bit timers (with stepper motor and quadrature decoder logic support), an RTC, a 12-bit ADC, a 12-bit DAC and an analog comparator.

The SAM4S series is ready for capacitive touch, offering native support for the Atmel QTouch® library for easy implementation of buttons, wheels and sliders.

The Atmel | SMART SAM4S devices have three software-selectable low-power modes: Sleep, Wait and Backup. In Sleep mode, the processor is stopped while all other functions can be kept running. In Wait mode, all clocks and functions are stopped but some peripherals can be configured to wake up the system based on predefined conditions. In Backup mode, only the low-power RTC and wakeup logic are running.

The real-time event management allows peripherals to receive, react to and send events in Active and Sleep modes without processor intervention.

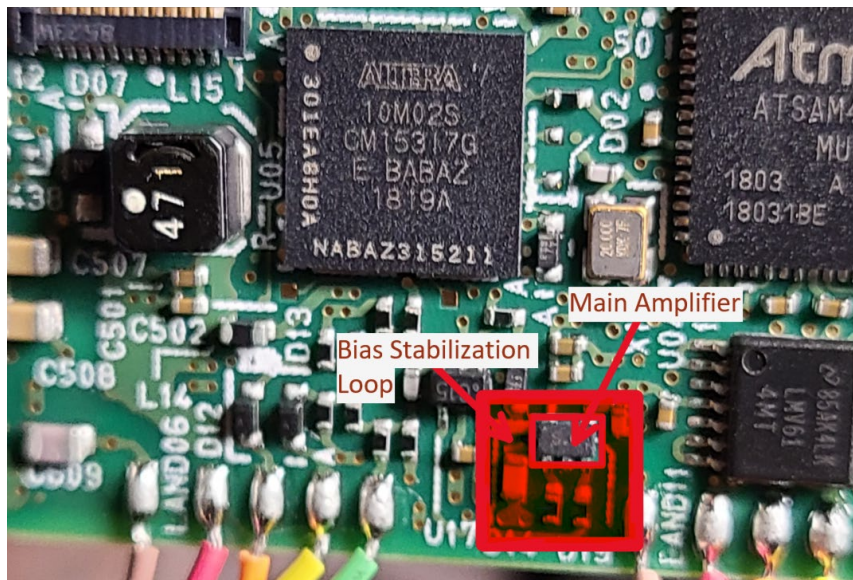
The SAM4S device is a medium-range general-purpose microcontroller with the best ratio in terms of reduced power consumption, processing power and peripheral set. This enables the SAM4S to sustain a wide range of applications that includes consumer, industrial control, and PC peripherals.

SAM4S devices operate from 1.62V to 3.6V.

The SAM4S series is pin-to-pin compatible with the SAM3N, SAM3S series (48-, 64- and 100-pin versions), SAM4N and SAM7S legacy series (64-pin versions).

http://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-11100-32-bit%20Cortex-M4-Microcontroller-SAM4S_Datasheet.pdf

7(f): wherein said main amplifier is a bias stabilized amplifier..— Defendant makes, uses, sells, and/or offers to sell a device or system that includes the main amplifier as a bias stabilized amplifier (e.g. The main amplifier is connected to a plurality of capacitors and resistors, which bias-stabilize the input current.)



DC Characteristics ($V_{DD} = 3.0\text{ V}$, $V_{SS} = \text{GND}$, $T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Input offset voltage	V_{IO}	1	$R_S = 1\text{ k}\Omega$, $R_F = 100\text{ k}\Omega$	—	2	10	mV
Input offset current	I_{IO}	—	—	—	1	—	pA
Input bias current	I_I	—	—	—	1	—	pA
Common mode input voltage	CMV_{IN}	2	$R_S = 1\text{ k}\Omega$, $R_F = 100\text{ k}\Omega$	0	—	2.5	V
Voltage gain (open loop)	G_V	—	—	60	70	—	dB
Maximum output voltage	V_{OH}	3	$R_L \geq 100\text{ k}\Omega$	2.9	—	—	V
	V_{OL}	4	$R_L \geq 100\text{ k}\Omega$	—	—	0.1	V
Common mode input signal rejection ratio	CMRR	2	$V_{IN} = 0.0\text{ to }2.5\text{ V}$	55	65	—	dB
Supply voltage rejection ratio	SVRR	1	$V_{DD} = 1.5\text{ to }7.0\text{ V}$	60	70	—	dB
Supply current	I_{DD}	5	—	—	60	200	μA

31. Ranging Optics is in compliance with any applicable marking and/or notice provisions of 35 U.S.C. § 287 with respect to the ‘574 Patent.

32. Ranging Optics is entitled to recover from Defendant all damages that Ranging Optics has sustained as a result of Defendant’s infringement of the ‘574 Patent, including, without limitation, a reasonable royalty.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 7,443,927 BY NIKON

33. Ranging Optics incorporates by reference and re-alleges paragraphs 20-26 of this Complaint as if fully set forth herein.

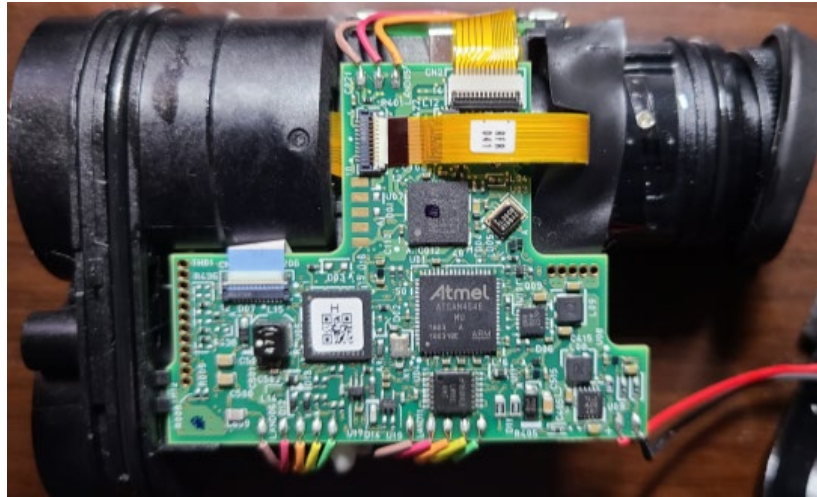
1 34. Defendant has infringed and is infringing, either literally or under the
2 doctrine of equivalents, the '927 Patent in violation of 35 U.S.C. § 271 et seq.,
3 directly and/or indirectly, by making, using, offering for sale, or selling in the United
4 States, and/or importing into the United States without authority or license the
5 Accused Products.
6

7
8 35. As just one non-limiting example, set forth below (with claim language
9 in bold and italics) is exemplary evidence of infringement of Claim 1 of the '927
10 Patent in connection with the Accused Products. This description is based on
11 publicly available information. Ranging Optics reserves the right to modify this
12 description, including, for example, on the basis of information about the Accused
13 Products that it obtains during discovery.
14
15

16 36. ***1(a): A signal detector, comprising:***—Defendant makes, uses, sells,
17 and/or offers to sell a signal detector (e.g. the Accused Products detects an incoming
18 light signal)
19



1 [https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.](https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.htm)
2 [htm](https://imaging.nikon.com/lineup/sportoptics/laser/monarch_3000_stabilized/spec.htm)



11 ***1(b): receiving data at a data communication system operating on a node at***
12 ***an edge of a network a signal translator converting differential data signals into***
13 ***a single data signal:***— Defendant makes, uses, sells, and/or offers to sell a device
14 or system that includes a signal translator (e.g. LMV7219 Comparator) operable to
15 convert differential data signals into a signal data signal.
16
17





LMV7219

SNOS458I – APRIL 2000 – REVISED JUNE 2016

LMV7219 7-ns 2.7-V to 5-V Comparator with Rail-to-Rail Output

1 Features

- $(V_S = 5\text{ V}, T_A = 25^\circ\text{C}, \text{Typical Values Unless Specified})$
- Propagation Delay 7 ns
- Low Supply Current 1.1 mA
- Input Common Mode Voltage Range Extends 200 mV Below Ground
- Ideal for 2.7-V and 5-V Single Supply Applications
- Internal Hysteresis Ensures Clean Switching
- Fast Rise and Fall Time 1.3 ns
- Available in Space-saving Packages: SC-70 and SOT-23
- Supports 105°C PCB Temperature

2 Applications

- Portable and Battery-powered Systems
- Scanners
- Set Top Boxes
- High Speed Differential Line Receiver
- Window Comparators
- Zero-crossing Detectors
- High-speed Sampling Circuits

3 Description

The LMV7219 is a low-power, high-speed comparator with internal hysteresis. The LMV7219 operating voltage ranges from 2.7 V to 5 V with push-pull rail-to-rail output. This device achieves a 7-ns propagation delay while consuming only 1.1 mA of supply current at 5 V.

The LMV7219 inputs have a common mode voltage range that extends 200 mV below ground, allowing ground sensing. The internal hysteresis ensures clean output transitions even with slow-moving inputs signals.

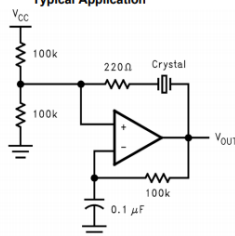
The LMV7219 is available in the SC-70 and SOT-23 packages, which are ideal for systems where small size and low power are critical.

Device Information⁽¹⁾

PART NUMBER	PACKAGE	BODY SIZE (NOM)
LMV7219	SC-70 (5)	2.00 mm × 1.25 mm
	SOT-23 (5)	2.88 mm × 1.60 mm

(1) For all available packages, see the orderable addendum at the end of the datasheet.

Typical Application



7.3 Feature Description

If one of the inputs goes above the positive common mode limit, the output will still maintain the correct logic level as long as the other input stays within the common mode range. However, the propagation delay will increase. When both inputs are outside the common mode voltage range, current saturation occurs in the input stage, and the output becomes unpredictable.

7.4 Device Functional Modes

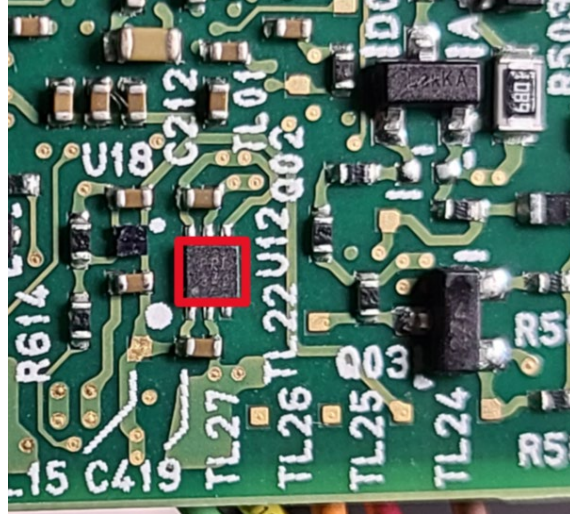
The propagation delay does not increase significantly with large differential input voltages. However, large differential voltages greater than the supply voltage should be avoided to prevent damages to the input stage.

The LMV7219 has a push-pull output. When the output switches, there is a direct path between V_{CC} and ground, causing high output sinking or sourcing current during the transition. After the transition, the output current decreases and the supply current settles back to about 1.1 mA at 5 V, thus conserving power consumption.

Most high-speed comparators oscillate when the voltage of one of the inputs is close to or equal to the voltage on the other input due to noise or undesirable feedback. The LMV7219 has 7 mV of internal hysteresis to counter parasitic effects and noise. The hysteresis does not change significantly with the supply voltages and the common mode input voltages as reflected in the specification table.

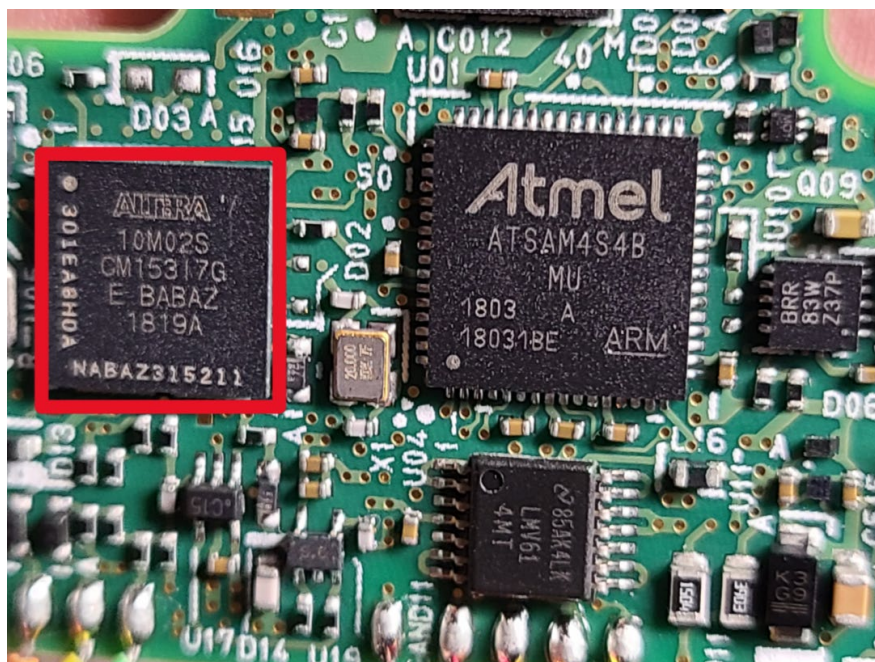
https://www.ti.com/lit/ds/symlink/lmv7219.pdf?ts=1604422459214&ref_url=http%253A%252F%252Fwww.ti.com%252Fproduct%252FLMV7219

1(c): a data signal detector outputting a data detecting signal according to the single data signal; and:— Defendant makes, uses, sells, and/or offers to sell a device or system that includes a data signal detector operable to output a data detecting signal (e.g. A CMOS voltage regulator which outputs a specific voltage signal) according to the single data signal (e.g. The comparator output).

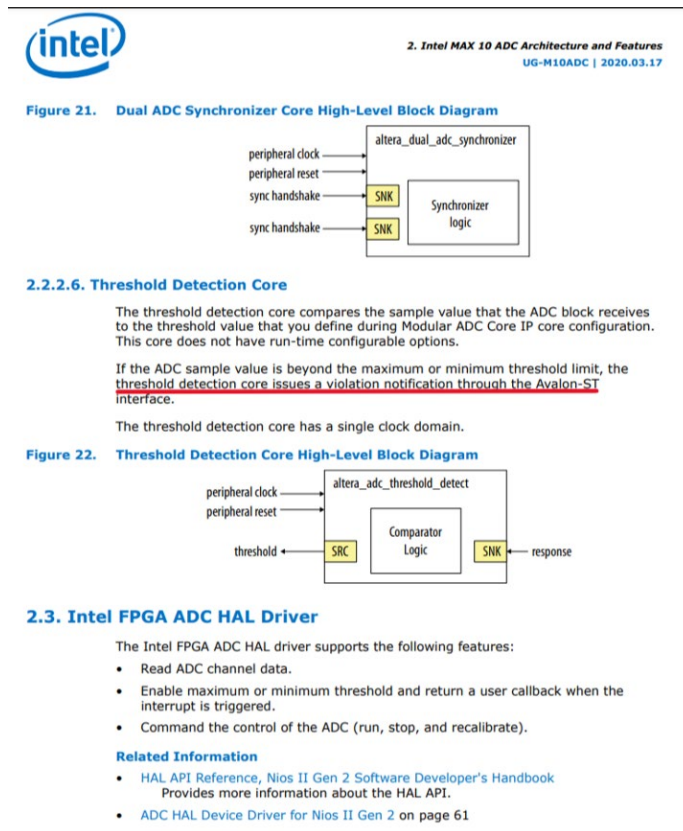


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

1(d): an interrupting control circuit receiving the data detecting signal and outputting a shutdown signal when the single data signal is at high voltage level over a predefined ratio:— Defendant makes, uses, sells, and/or offers to sell a device or system that includes an interrupting control circuit (e.g. STM32F103C8T6) for receiving the data detecting signal and outputting a shutdown signal according to the voltage of the data detecting signal.



The STM32F103C8T6 contains an Interrupt service routine which outputs a shutdown signal when the input voltage the single data signal is at a high voltage over a predefined ratio.



https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/hb/mx-10/ug_m10_adc.pdf

37. Ranging Optics is in compliance with any applicable marking and/or notice provisions of 35 U.S.C. § 287 with respect to the ‘927 Patent.

38. Ranging Optics is entitled to recover from Defendant all damages that Ranging Optics has sustained as a result of Defendant’s infringement of the ‘927 Patent, including, without limitation, a reasonable royalty.

PRAYER FOR RELIEF

WHEREFORE, Ranging Optics respectfully requests:

A. That Judgment be entered that Defendant has infringed at least one or more claims of the Asserted Patents, directly and/or indirectly,

1 literally and/or under the doctrine of equivalents;

2 B. An award of damages sufficient to compensate Ranging Optics
3 for Defendant's infringement under 35 U.S.C. § 284, including an
4 enhancement of damages on account of Defendant's willful infringement;
5

6 C. That the case be found exceptional under 35 U.S.C. § 285 and
7 that Ranging Optics be awarded its reasonable attorneys' fees;
8

9 D. Costs and expenses in this action;

10 E. An award of prejudgment and post-judgment interest; and
11

12 F. Such other and further relief as the Court may deem just and
13 proper.
14

15 **DEMAND FOR JURY TRIAL**

16 Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Ranging
17 Optics respectfully demands a trial by jury on all issues triable by jury.
18

19 Dated: December 28, 2020

20 /s/ Steven W. Ritcheson
21 Steven W. Ritcheson (SBN 174062)
22 INSIGHT, PLC
23 578 Washington Blvd. #503
24 Marina del Rey, CA 90292
25 (T) 818-744-8714
26 (F): 818-337-0383
27 switcheson@insightplc.com

28 *Attorney for Plaintiff*
Ranging Optics LLC

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28