

AUDIENCE ENGAGEMENT REPORT



Microwaves & RF— Audience Engagement Report

JANUARY-JUNE 2023

Since 1962, *Microwaves & RF* has served the microwaves and radio frequency design and development industry. Throughout the years, our distribution channels have evolved and grown to include: magazines, website, newsletters, webinars, eBooks and videos. We provide engineers with “need-to-know” information on the latest microwave technology, as well as applications for design engineers. Our community reaches many markets from aviation and electronic warfare to medical, broadcast and test equipment.

AVERAGE MONTHLY REACH



219,994

▲ 11% increase year-over-year

REACH DECISION MAKERS

52.89%

of audience
are engineers

Job Functions	
Design Engineer	29.43%
Engineering Management	23.46%
Executive or Operating Management	20.74%
R&D/Hardware Software Dev	14.93%
Professor/Student/Academic	6.27%
Hobbyist/Maker/Other	5.15%

Top Industries Served	
Communications/Cellular/Broadcast	41%
Computers/Computer Networks	30%
Industrial	30%
Defense/Military	29%
Consumer Electronics	24%
Automotive	22%
Aviation	20%
Test Equipment	19%
Medical	18%
ICs & Semiconductors	17%

COMPANIES THAT ENGAGE



The Audience Engagement Report provides an integrated view of the Microwaves & RF community. Data provided within is obtained via internal and third party sources, including Google Analytics, Oracle Cloud-Eloqua and Omeda. Screen reader support enabled.

JANUARY-JUNE 2023

AVERAGE MONTHLY SESSIONS



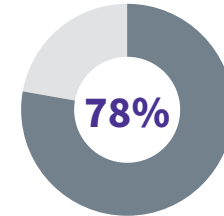
40,868

AVERAGE UNIQUE MONTHLY VISITORS

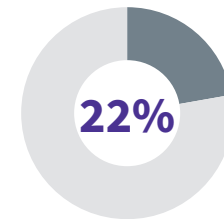


29,339

DESKTOP VISITORS AVERAGE MONTHLY



MOBILE VISITORS AVERAGE MONTHLY



AVERAGE MONTHLY PAGE VIEWS



77,537

COMBINED SOCIAL REACH



24,696

MICROWAVES & RF
MAGAZINE SUBSCRIBERS



42,000

AVERAGE MONTHLY NEW SITE REGISTRATIONS



167

JANUARY-JUNE 2023

NEWSLETTER REACH



106,430

AVERAGE TOTAL OPEN RATE



38.11%

AVERAGE TOTAL CTR



1.19%

	Monthly Average	Average Total Open Rate
Defense & Rugged Systems	23,090	33.64%
Microwaves a & RF Today	29,590	37.74%
Microwaves & RF Product Spotlight	25,522	36.38%
Wireless for Consumers	21,712	42.49%
Show Daily	30,404	40.28%

**Due to Apple's iOS 15 update, measured open rates have increased and should not be compared to previous reports.*

JANUARY-JUNE 2023

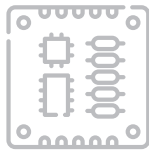
TOP TOPICS



Antenna Signal Improvements



Power Amplifiers



RF PCB Design



Wireless Power



Defense Systems

WEBINAR - ENGAGEMENT

	Average
Registrants Classified as Engineer or R&D	80.00%
Estimated registrants from typical webinar	200+
Median Attendee Conversion Rate	43%
Total webinar registrants YTD	1,830

TOP VIEWED ARTICLES

- Consortium Chases Novel IR Sensors
- Mercury Drops First Signal-Processing Board with Intel's Latest Direct RF Technology
- Phase-Noise Modeling, Simulation, and Propagation in Phase-Locked Loops
- Rad-Tolerant COTS Power-Management Device Targets LEO Space Apps
- The 7 Pillars of 5G/6G RF System Design
- A Review of RF Sampling vs. Zero-IF Radio Architectures
- RF/mmWave Design Tools Cut Prototyping Costs
- Minimizing the Signal Chain with Direct RF Technology
- Ka-band Satellites: The Key to Implementing Reliable Vehicle Connectivity
- What's the Difference Between Wi-Fi HaLow and Bluetooth?

TOP WEBINARS OF 2023

- The Importance of Spectrum Visibility – Multi-Position Monitoring
- Future Directions in RFICs and MMICs
- Wireless Coexistence Testing for Medical Devices
- The Importance of Optimal Performance in RF Amplifiers in a Cloud-Oriented Ecosystem
- Direct RF Technology to Advance Edge Digital Signal Processing

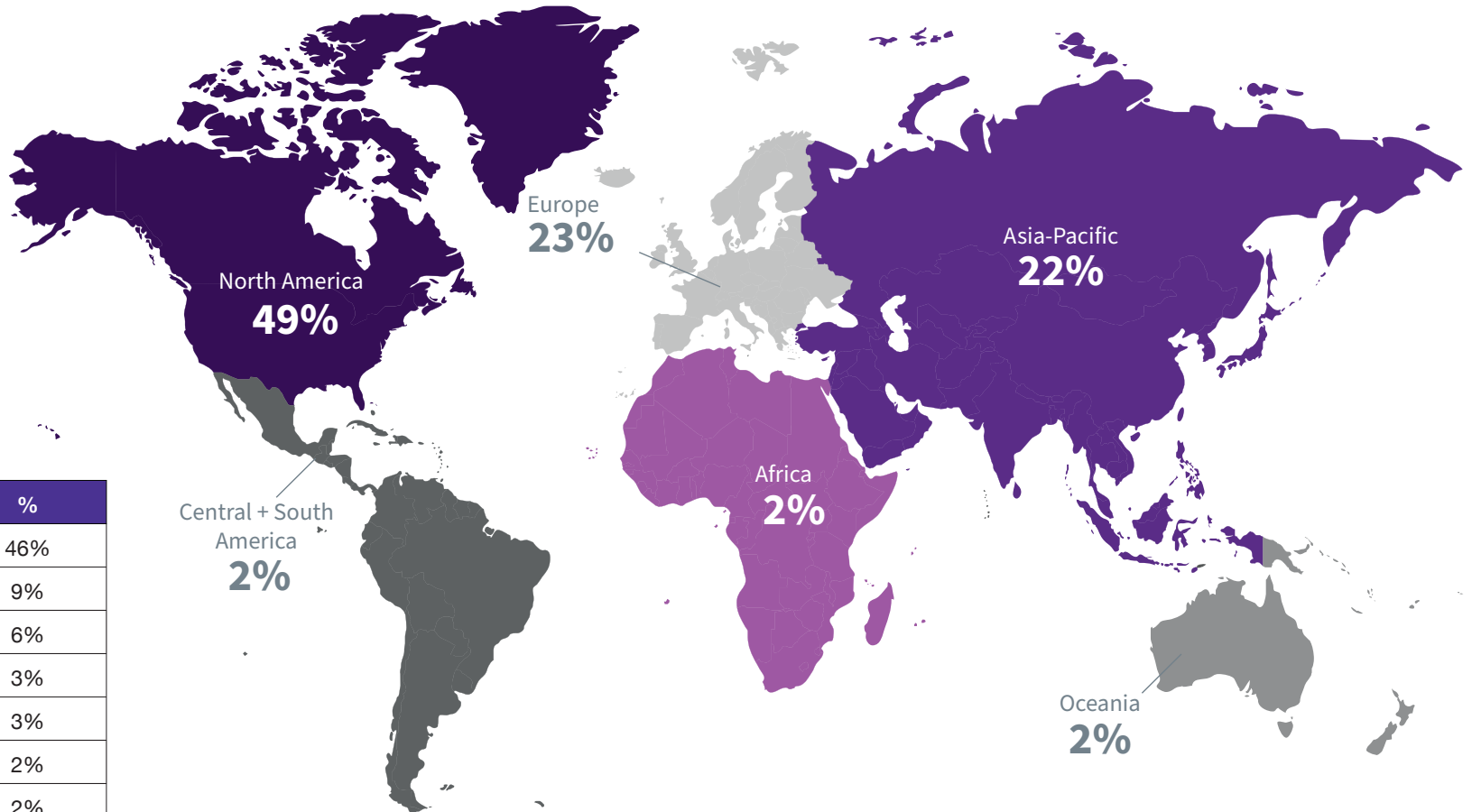
HIGHLY ENGAGED CONTACTS

7,491

Content Downloads and Articles Printed H1-23

Microwaves & RF — Visits by Region

JANUARY-JUNE 2023



Country	%
United States	46%
India	9%
United Kingdom	6%
Germany	3%
Canada	3%
Taiwan	2%
Sweden	2%
France	2%
South Korea	2%
Japan	2%
Australia	1%
Italy	1%
Singapore	1%
Netherlands	1%

JANUARY-JUNE 2023

QUALIFIED CIRCULATION BY ISSUES FOR THE PERIOD

The Microwaves & RF community includes individuals who perform an engineering or engineering management function including: design and development engineering, executive or operating management involved with design & development projects

2023 issues	Digital	Total Qualified
January/February	42,000	42,000
March/April	42,000	42,000
May/June	42,000	42,000
Average Qualified Circulation for 6-Month Period	42,000	42,000

	Total Qualified Non-Paid Print	Both	Total Qualified Non-Paid Digital	Total Qualified Non-Paid	Total Subscribers
Average Qualified Circulation	0	0	42,000	42,000	42,000

We hereby make oath and say that all data set forth in this statement are true. | July 2023 | Tracy Smith, Executive Vice President, Design & Engineering | Matt Downing, Associate Director,

Microwaves & RF — Primary Business & Industry

JANUARY-JUNE 2023

Primary Job Function										
Industry (multiple choice)	Design and Development Engineer	Component Engineer	Design and Development Engineering Mgmt	Executive or Operating Mgmt	Research and Development	Hardware or Software Development	Hobbyist or Maker	Student/ Professor/ Instructor Academic	Other	TOTAL Magazine
Aerospace	1,680	109	1,264	1,554	878	316	53	221	206	6,281
Automotive	2,257	121	1,778	2,290	991	467	99	373	240	8,616
Aviation	2,352	108	1,679	1,991	939	400	89	290	250	8,098
Computers/Computer Networks	3,158	160	2,633	3,175	1,374	1,138	278	660	311	12,887
Communications/Cellular/Broadcast	4,688	217	3,955	3,941	2,063	996	254	932	516	17,562
Consumer Electronics	2,749	126	2,012	2,350	1,134	629	210	509	261	9,980
Data Centers	807	79	787	1,183	392	269	57	153	98	3,825
Defense/Military	3,514	149	2,517	2,639	1,590	565	88	401	375	11,838
ICs & Semiconductors	2,304	134	1,633	1,626	1,049	452	116	456	185	7,955
Industrial	3,599	164	2,632	3,053	1,387	634	121	479	335	12,404
Medical	1,874	103	1,391	1,950	975	367	83	416	216	7,375
Test Equipment	3,006	146	2,223	2,232	1,547	605	162	550	360	10,831
Smart Home/Buildings	984	67	819	1,314	493	256	76	247	107	4,363
Other including Lab/Con	652	18	457	819	385	83	35	335	230	3,014
Total	33,624	1,701	25,780	30,117	15,197	7,177	1,721	6,022	3,690	125,029
Total Respondents	11,929	497	8,506	9,550	4,725	2,526	647	2,050	1,570	42,000
Average Number of Industries Specified Per Respondent*	2.82	3.42	3.03	3.15	3.22	2.84	2.66	2.94	2.35	2.98

Microwaves & RF — Subscribers by State

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SUBSCRIBERS BY STATE STATE BREAKOUT OF MAGAZINE SUBSCRIBERS

State	Total
Alabama	375
Arizona	623
Arkansas	165
California	4,437
Colorado	614
Connecticut	393
D. C.	163
Delaware	71
Florida	1,708
Georgia	676
Idaho	132
Illinois	1,190
Indiana	570
Iowa	308
Kansas	316
Kentucky	282
Louisiana	175
Maine	81
Maryland	889
Massachusetts	1,045
Michigan	864
Minnesota	601
Mississippi	169
Missouri	491
Montana	75
Nebraska	164
Nevada	217
New Hampshire	245

State	Total
New Jersey	958
New Mexico	239
New York	1,626
North Carolina	756
North Dakota	90
Ohio	1,143
Oklahoma	251
Oregon	421
Pennsylvania	1,138
Phode Island	103
South Carolina	307
South Dakota	85
Tennessee	443
Texas	2,000
Utah	248
Vermont	70
Virginia	910
Washington	603
West Virginia	97
Wisconsin	608
Wyoming	37
Total 48 Contiguous States	29,172
Alaska	40
Hawaii	40
Total Alaska & Hawaii	80
Possessions & Other Areas	49
Total U.S. Possessions	49

Circulation Outside the U.S.	Total
Total Canada	1,783
Total Mexico	128
Total Foreign	10,788
Grand Total	42,000

SUBSCRIBERS BY REGION

U.S. REGION BREAKOUT OF MAGAZINE SUBSCRIBERS

