

Nexperia's Position on PFAS

In February 2023, the European Chemicals Agency (ECHA) published a universal restriction proposal on per- and polyfluoroalkyl substances (PFAS). While the term PFAS covers a theoretically limitless number of substances, the semiconductor industry is expected to rely on an estimated number in the range of hundreds of PFAS, which are crucial in production processes, equipment, and infrastructure. Semiconductors play a vital role in energy-efficient solutions that reduce carbon footprints across various sectors and are key to achieving the EU Green Deal's target of carbon neutrality by 2050.

Nexperia B.V. is vigilant about legal changes concerning PFAS and acknowledges the need to phase them out. Despite this, current technological constraints make it impossible to produce semiconductors without PFAS. Finding and implementing suitable alternatives could take years, with no guarantee that these substitutes will match the performance and reliability of PFAS. Nexperia collaborates with industry groups such as the German Electro and Digital Industry Association (ZVEI) and the European Semiconductor Industry Association (ESIA), which have issued position papers^{1,2} on the topic. Nexperia has identified intentionally added PFAS in its active and end-of-life semiconductor components. An overview is provided in the appendix to this document.

The signature below verifies that the above statements, including any product composition data, are valid and accurate to the best of our knowledge and belief. Nexperia has implemented robust systems to ensure that our products comply with global environmental regulations and laws. In the event of any issues arising from the information in this document, Nexperia's standard terms and conditions of sale shall apply, unless alternate contracts have been agreed upon in writing by both parties.

Dr. Andreas Jantschak
Senior Director EHS & Corporate Social Responsibility
Nexperia B.V.

¹ <https://www.zvei.org/en/press-media/publications/for-a-risk-based-approach-to-pfas-no-blanket-ban>

² https://www.eusemiconductors.eu/sites/default/files/20230713_ESIASummaryPaper-PFAS.pdf

APPENDIX

The tables in this appendix provide information on Nexperia part types that currently contain, or previously contained, intentionally added PFAS. Please note that only non-customer-specific part types produced under Nexperia's responsibility after its establishment on 2017-02-07, are included.

Table A: Active parts that contain PFAS.

Ordering Code	Part Type	Status	PFAS Material
934665900328	GAN7R0-150LBE	active	underfill U8410-302

Table B: Active parts where PFAS has been phased out.

Ordering Code	Part Type	Status	PFAS Material	PFAS Phase-Out Date
935266681125	74LVC1G07GW	active	adhesive 8200T	2024-11-08
935268380125	74LVC1G08GW	active	adhesive 8200T	2024-11-08
935268381125	74LVC1G32GW	active	adhesive 8200T	2024-11-08
935268595125	74LVC1G14GW	active	adhesive 8200T	2024-11-08
935277231125	74LVC1G3157GW	active	adhesive 8200T	2024-11-08

Table C: Discontinued parts (DOD state) that contain PFAS.

Ordering Code	Part Type	Status	PFAS Material	DOD Date
934064671132	IP4254CZ8-4-TTL	active	adhesive 8200T	2024-06-26
934064754132	IP4252CZ8-4-TTL	active	adhesive 8200T	2024-06-26
934064675132	IP4254CZ16-8-TTL	active	adhesive 8200T	2024-06-26
934064753132	IP4252CZ16-8-TTL	active	adhesive 8200T	2024-06-26

Table D: Obsolete parts (OBS state) that contained PFAS.

Ordering Code	Part Type	Status	PFAS Material	OBS Date
934061159118	IP4280CZ10	end-of-life	adhesive 8290	2018-09-08
934063216118	IP4283CZ10-TT	end-of-life	adhesive 8290	2020-10-02
934063575118	IP4284CZ10-TT	end-of-life	adhesive 8290	2018-09-08
934064669132	IP3253CZ8-4-TTL	end-of-life	adhesive 8200T	2019-12-30
934064678132	IP4251CZ16-8-TTL	end-of-life	adhesive 8200T	2024-05-02