

Nordic Semiconductor PFAS Statement

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Per- and polyfluoroalkyl substances (PFAS) are a large group of synthetic chemicals. They are increasingly identified as environmental pollutants, and some are linked to negative effects on human health.

All PFAS contain carbon-fluorine bonds, which are one of the strongest chemical bonds in organic chemistry resulting in no or very slow degradation. Most PFAS are also easily transported in the environment covering long distances from the source of their release.

PFAS have been frequently observed to contaminate groundwater, surface water and soil.

Further information on PFAS: <https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas>

Scope

This declaration is applicable to integrated circuits and modules supplied by Nordic Semiconductor.

PFAS Declaration

Nordic Semiconductor hereby declares that some products contain PFAS. Some wafer foundries use PFAS in manufacturing process, but they don't end up in finished wafers.

Nordic Semiconductor is currently qualifying non-PFAS alternatives of existing products, to be able to comply with upcoming regulation and customer requirements. Those products will be made available through the standard PCN process. New products are qualified directly with non-PFAS materials.

Nordic Semiconductor has taken reasonable actions and will continue its efforts to provide representative and accurate information concerning the PFAS restriction on its products. Nordic Semiconductor relies on information from third parties, including suppliers. Nordic Semiconductor's standard warranty and standard terms and conditions apply to the representations herein unless otherwise provided by a written contract or other agreement signed by the parties.

Authorized signatory for Nordic Semiconductor:



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Date: December 12, 2024

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Appendix 1 – Wafer Level Chip Scale Package (WLCSP)

Part Number	Where in the product is PFAS contained?	Material Name
nRF52840-CKAA	Repassivation material (PBO)	HD-8820
nRF52840-CKAA	Repassivation material (PBO)	HD-8820
nRF52840-CKAA-F	Repassivation material (PBO)	HD-8820
nRF52833-CJAA	Repassivation material (PBO)	HD-8820
nRF52833-CJAA-B	Repassivation material (PBO)	HD-8820
nRF52832-CIAA	Repassivation material (PBO)	HD-8820
nRF52832-CIAA-E	Repassivation material (PBO)	HD-8820
nRF52832-CIAA-G	Repassivation material (PBO)	HD-8820
nRF52820-CFAA-D	Repassivation material (PBO)	HD-8820
nRF52805-CAAA	Repassivation material (PBO)	HD-8820
nRF52805-CAAA-B	Repassivation material (PBO)	HD-8820
nRF52810-CAAA	Repassivation material (PBO)	HD-8820
nRF52810-CAAA-E	Repassivation material (PBO)	HD-8820
nRF52811-CAAA	Repassivation material (PBO)	HD-8820
nRF52811-CAAA-B	Repassivation material (PBO)	HD-8820
nRF9120-CEAA	Repassivation material (PBO)	HD-8820
nRF9120-CCAA	Repassivation material (PBO)	HD-8820
nPM6000-CAAA-F	Repassivation material (PBO)	HD-8820
nPM6000-CBAA	Repassivation material (PBO)	HD-8820
nPM6001-CAAA	Repassivation material (PBO)	HD-8820
nPM1100-CAAA-E	Repassivation material (PBO)	HD-8820
nPM1100-CAAA-F	Repassivation material (PBO)	HD-8820
nPM1100-CAAB	Repassivation material (PBO)	HD-8820
nPM1300-CAAA	Repassivation material (PBO)	HD-8820
nRF5340-CLAA	Repassivation material (PBO)	HD-8820
nRF7002-CEAA	Repassivation material (PBO)	HD-8820
nRF51822-CEAA	Repassivation material (PBO)	HD-8820

Note: Nordic Semiconductor's PBO material (HD-8820) used in wafer level chip scale package (WLCSP) contains PFAS. Exact chemical substance name, CAS number and composition are currently restricted information, but the PFAS substance is not in the following chemical substance or group – PFOS, PFOA, PFHxS, PFHxA, PFBS, PFBA, C9-C21 PFCA, their salts and related compounds. In addition, it is also not listed in Comprehensive Global Database of PFAS published Organisation for Economic Co-operation and Development (OECD), nor in PFAS masterlist of PFAS substances published by Environmental Protection Agency (EPA).

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Appendix 2 – System in Package (SiP)

Part Number	Component	Where in the component is PFAS contained?
nRF9160-SIAA	Integrated Circuits	Repassivation material (PBO)
nRF9160-SICA	Integrated Circuits	Repassivation material (PBO)
nRF9131-LACA	Integrated Circuits	Repassivation material (PBO)
nRF9161-LACA	Integrated Circuits	Repassivation material (PBO)
nRF9151-LACA	Integrated Circuits, Resistor	Repassivation material (PBO)

Note: Nordic Semiconductor's System in Package (SiP) products contain WLCSP ICs, which contains the PBO material mentioned above.