



Fully Integrated 77 GHz RFCMOS Automotive Radar Transceiver

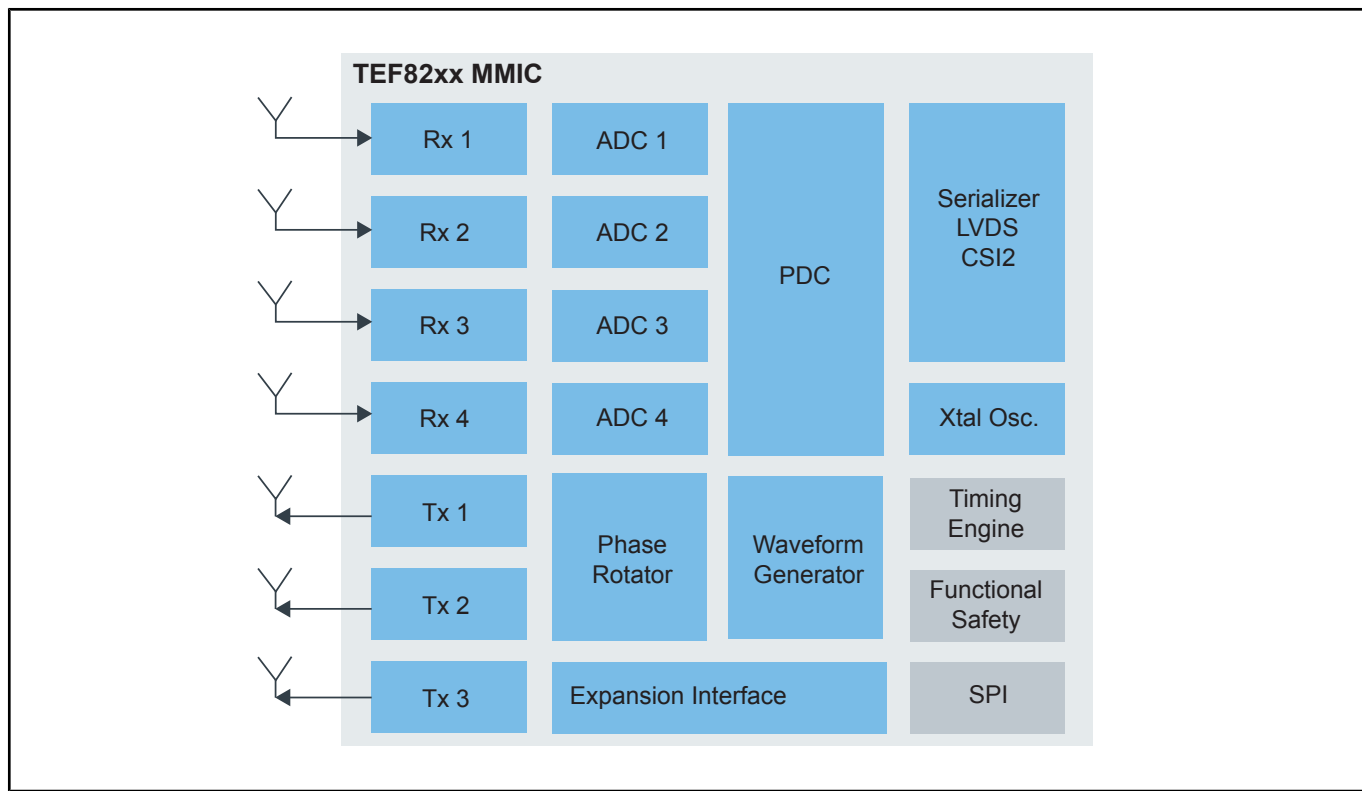
TEF82xx

Last Updated: Aug 31, 2023

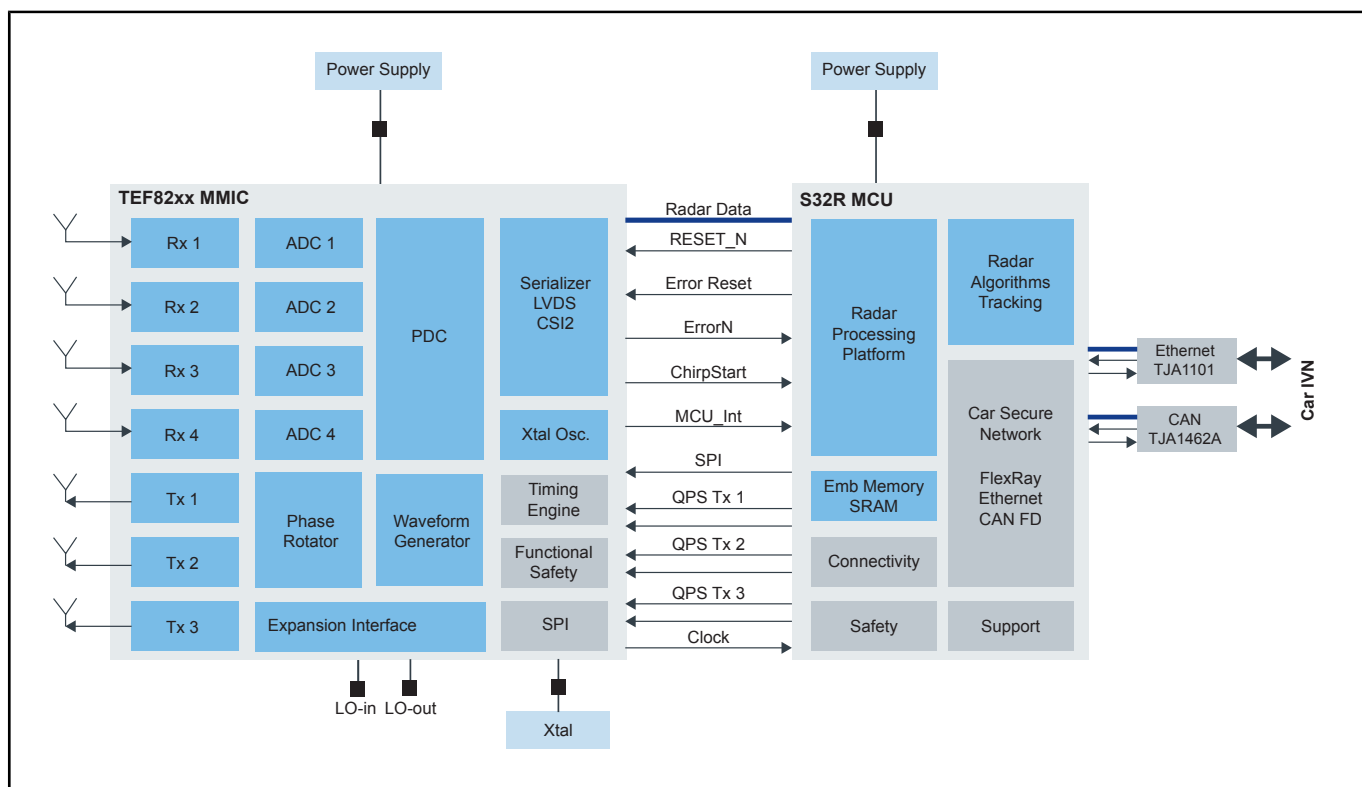
The TEF82xx RFCMOS automotive radar transceiver is a high performance single-chip, low power automotive FMCW radar transceiver covering the full automotive radar frequency band from 76 GHz to 81 GHz. Entry NCAP sensor all the way up to autonomous driving L2+ sensors and beyond are enabled by this 2nd generation scalable transceiver supporting short, medium and long range radar applications including cascaded high resolution imaging radar. This fully integrated RFCMOS chip contains 3 transmitters, 4 receivers, ADC conversion, phase rotator and a low-phase-noise VCO.

TEF82xx is an ISO26262 compliant device targeting ASIL Level B, which is optimized for fast chirp modulation and is fully compatible with NXP S32R29x, S32R41x and S32R45x radar microcontrollers and processors.

TEF82xx Block Diagram



TEF82xx Application Block Diagram



View additional information for [Fully Integrated 77 GHz RFCMOS Automotive Radar Transceiver](#).

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.