



NovTech™ RENAN™ Board

Full Imaging RADAR Software Development Platform

Imaging RADAR Development Platform Partner And Engineering Service Provider

NovTech is an Embedded Systems company specializing in complex platform development, rapid prototyping and product production.

NovTech, ISSI, and NXP partnered to develop an Imaging RADAR development platform based on S32R45 and four TEF8232 that will be available during Q4 2023.

The new platform provides 12 Tx and 16 Rx RADAR channels, data recording capabilities and variety of communication interfaces.

NovTech engineering solutions provide support for RENAN™ hardware and software modifications to enable rapid migration from development to production platforms.



NXP Imaging RADAR Chipset



NovTech™ – designed

NXP - commissioned & reviewed
RENAN™ is internally used by NXP



Full enablement package

Board // Schematics // GERBER Files // BSP // User Guides // Direct Support by NovTech, or NXP*



Customizable and Flexible

CPLD signals routing of most S32R45 signals allows rapid software development to support custom design and BSP/Application verification before new hardware is ready.

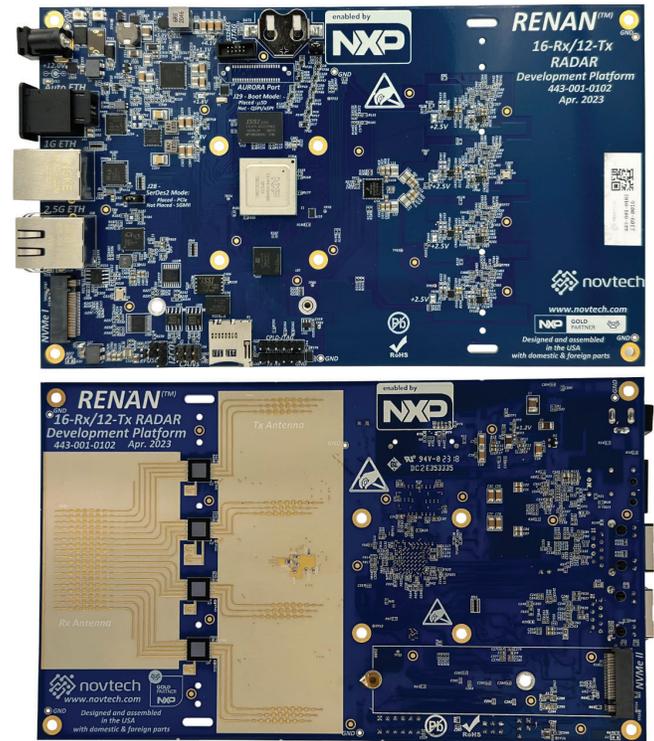


Sold directly through NovTech and Dist

Please contact NovTech via email, bizdev@novtech.com
\$5,900 (US) per RENAN™ kit --- Available Q4.2023

NovTech™ RENAN™

Full NXP Imaging RADAR software bring-up EVB



Long-Term Support
World Class Quality

Memory
by ISSI

HIGHLIGHTS



Full NXP Imaging RADAR Chipset

- 4x TEF8232
- S32R45
- NXP Auto-PMIC



Many Connection Options

- Dedicated 802.3 Ethernet, 1G over RGMII or 2G5 over SGMII
- Automotive Ethernet, 10/100Mb, 1G during 2024
- PCIe 3.0 2L (two M.2 NVMe)



Memory and Storage

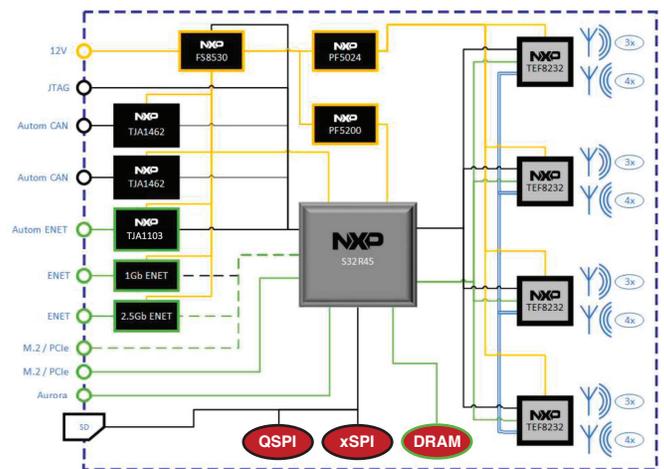
- ISSI LPDDR4, 8Gb
- ISSI QSPI and xSPI NOR Flash, up to 2Gb



Maximum GPIO adaptability with CPLD

- Reconfigurable to mimic any custom designs

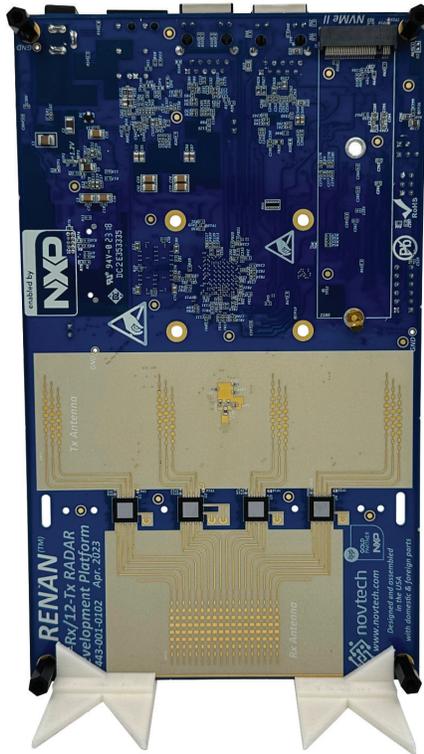
HIGH-LEVEL BLOCK DIAGRAM



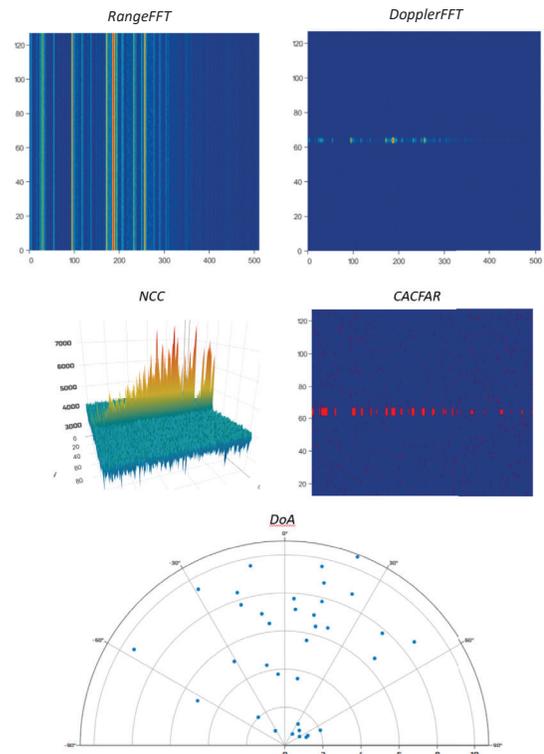
QSPI: IS25WP256D-JLLA3 xSPI: IS25WX256-JHLA3 DRAM: IS46LQ32256A-062BLA2

— Power — Data / control — High speed data — TRX cascading

RENAN™ positioned for RADAR operation



Screenshot of NXP RADAR demo application on RENAN™



NovTech™ RENAN™ SUPPORT AND SERVICES

Firmware/ Middleware

- μSD card loaded with images for ATF, uBOOT, Device-Tree (DT), Linux Kernel, FS & NXP® RADAR Demo Application
- Support for CPLD (FPGA) updates via Linux
- Linux VM setup to support delivered image and future development
- Based on NXP's latest BSP release
- NXP RSDK future releases include support for RENAN™

Support

NovTech provides unlimited support for the RENAN™ platform for any hardware/firmware of NovTech original design. Support will be provided via phone calls, emails, web video conferences (WebEx/TeamViewer) and can be on site as well (on-site requires additional arrangements).

www.novtech.com

Additional Services

- Design review (SCH/PCB) for customer designs
- Custom platform design
- Customization/Modification of CPLD/FPGA HDL code
- Customization/Modification of BSP
- Secure/encrypted boot
- Application development
- Rapid Prototyping/Full production (via NovTech in-house SMT lines)
- Training/Classes/Seminars
 - S32R45/RADAR in depth
 - Linux environment and BSP development
 - Security for RENAN platform and custom solutions

About ISSI

ISSI offers low and medium density DRAM, NOR/NAND Flash, Managed NAND (eMMC/UFS), and a variety of SRAM products to automotive, industrial, medical, and communications/enterprise market segments. We value our customer relationships, and have been a committed, long-term supplier of high-quality memory products, including lower density and smaller volume products, even during periods of tight manufacturing capacity.

www.issi.com

ISSI Long-Term Support
World Class Quality