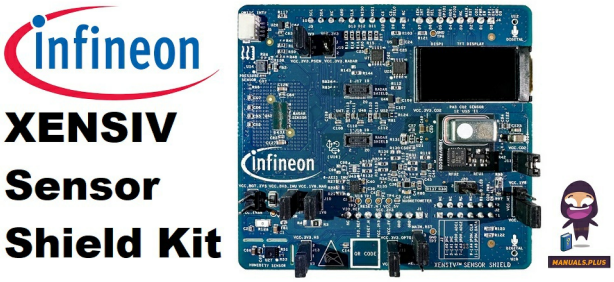
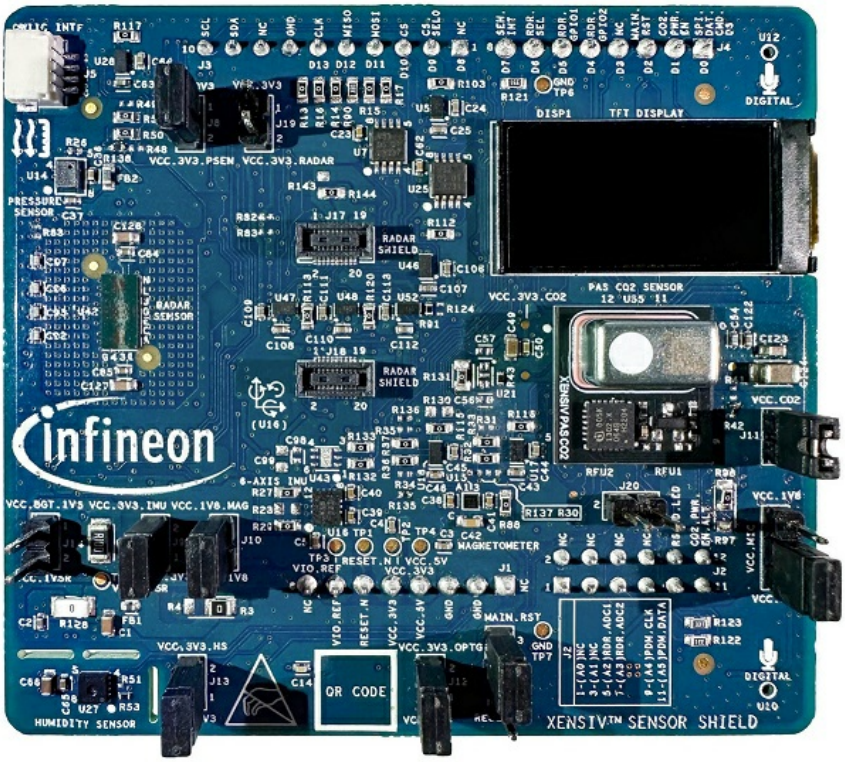


infineon XENSIV Sensor Shield Kit User Guide

Contents

infineon XENSIV Sensor Shield Kit



Product Usage Instructions

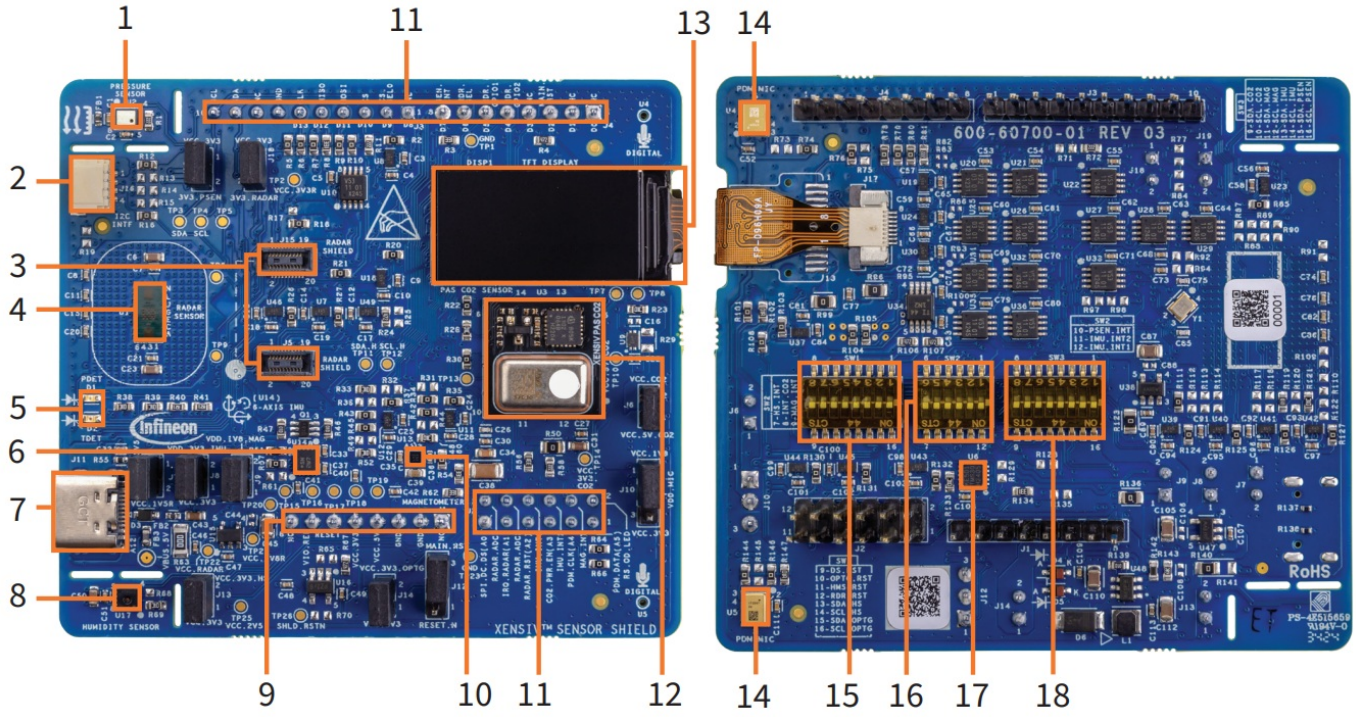
1. **Connecting the Sensor Shield:**
   - Insert the XENSIV sensor shield onto the supported baseboard of your choice following the pinout details provided in the manual.
2. **Powering Up:**
   - Ensure the baseboard is powered on and providing the necessary power supply to the sensor shield.
3. **Interfacing with Sensors:**
   - Utilize the respective pins and interfaces on the sensor shield to interact with the different sensors included in the kit.
4. **Data Processing:**
   - Implement appropriate data processing algorithms to interpret the sensor readings obtained from the various sensors on the shield.

Kit Features

1. XENSIV TM 60GHz Radar sensor (BGT60LTR11AIP)
2. XENSIV TM digital barometric pressure sensor with built-in temperature sensor (DPS368)
3. Two high-performance XENSIV TM MEMS digital microphones (IM72D128)
4. XENSIV TM PAS CO2 sensor based on photo acoustic spectroscopy principle(PAS CO2)
5. OPTIGATM Trust M security controller (SLS32AIA010MK)
6. Digital humidity and temperature sensor
7. Six-axis inertial measurement unit
8. Three-axis magnetometer sensor
9. SPI-based TFT display
10. Headers compatible with Arduino UNO R3

OVERVIEW

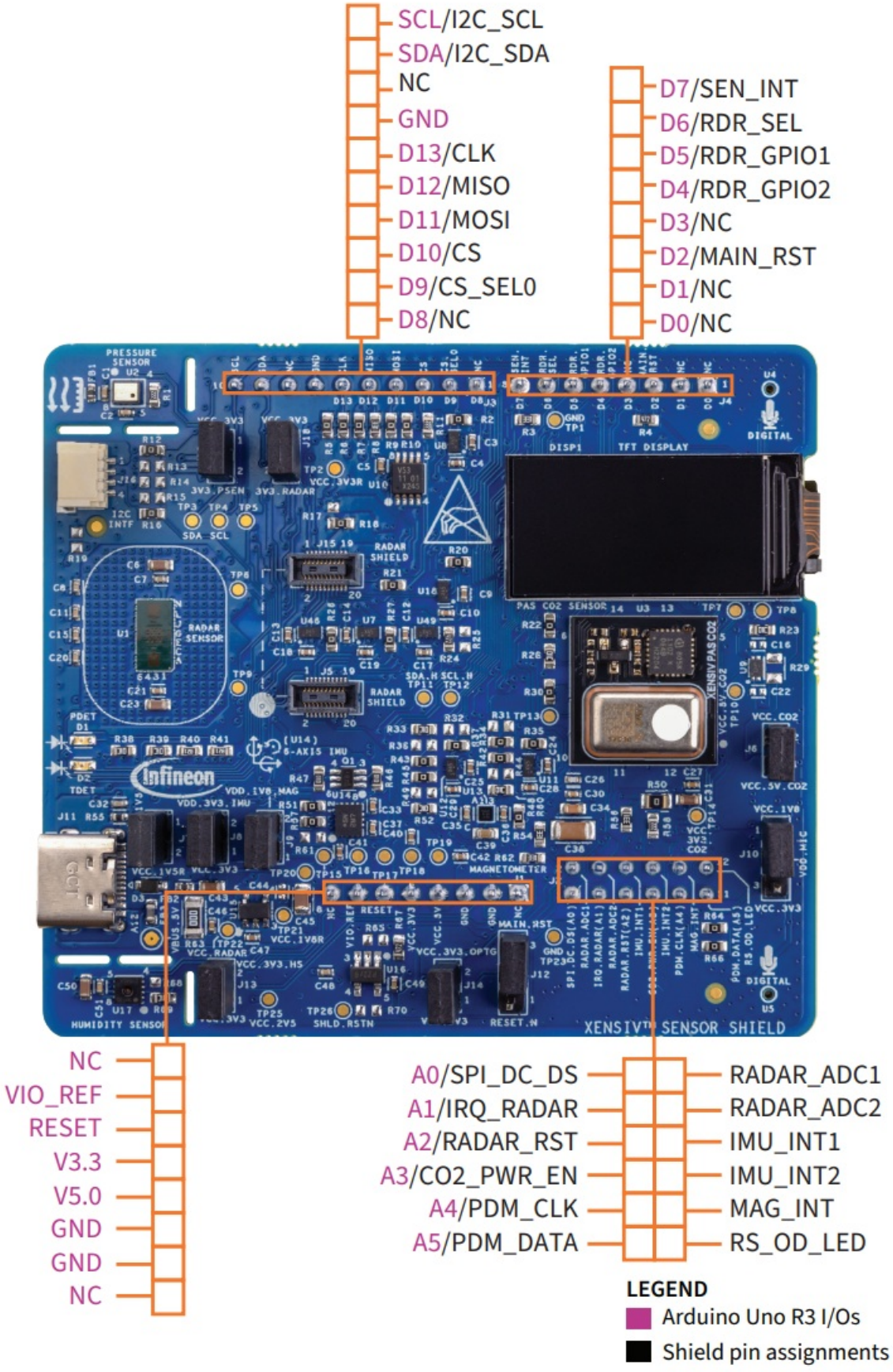
SHIELD_XENSIV_A XENSIV TM sensor shield details



1. XENSIVTM digital barometric air pressure sensor with built-in temperature sensor (U2)
2. I2C interface connector (J16)
3. External Radar shield interface connectors (J5, J15)
4. XENSIVTM 60 GHz Radar sensor (U1)
5. Radar sensor status LEDs (D1, D2)
6. Six-axis inertial measurement unit (U14)
7. USB connector-based auxiliary power supply for Radar subsystem (J11)
8. Digital humidity and temperature sensor (U17)
9. Power header compatible with Arduino UNO R3 (J1)
10. Three-axis magnetometer sensor (U13)
11. I/O headers compatible with Arduino UNO R3 (J2, J3, J4)
12. XENSIV™ PAS CO2 sensor (U3)
13. SPI-based TFT display (DISP1)
14. Two high-performance XENSIVTM MEMS digital microphones (U4, U5)
15. I2C and RESET selection switch (SW1)
16. Interrupt selection switch (SW2)
17. OPTIGATM Trust M security controller (U6)
18. I2C selection switch (SW3)

Sensor shield pinout details

SHIELD_XENSIV_A XENSIV TM sensor shield pinout details



Get started with the XENSIV sensor shield and supported baseboard of your choice. Refer to Kit guide at www.infineon.com/XSS-UG.

MORE INFORMATION

- Published by Infineon Technologies AG
- 81726 Munich, Germany
-
- Infineon Technologies AG
- www.infineon.com/SHIELD_XENSIV_A

FAQs

- **Q: Where can I find more detailed information on using the XENSIV sensor shield?**
  - A: Refer to the Kit guide at www.infineon.com/XSS-UG for comprehensive instructions on utilizing the sensor shield with different baseboards.

Documents / Resources

	infineon XENSIV Sensor Shield Kit [pdf] User Guide XENSIV Sensor Shield Kit, Sensor Shield Kit, Shield Kit

References

- User Manual