FCC ID: OWROM5578-PN7150S

Operational description : OWROM5578-PN7150S

OM5578/PN7150S is full NFC controller solution with integrated firmware and NCI interface designed for contactless communication at 13.56 MHz. It is compatible with NFC forum requirements.
PN7150 is designed based on learnings from previous NXP NFC device generation. It is the ideal solution for rapidly integrating NFC technology in any application, especially those running O/S environment like Linux and Android, reducing Bill of Material (BOM) size and cost, thanks to:
• full NFC forum compliancy with small form factor antenna
• embedded NFC firmware providing all NFC protocols as pre-integrated feature
• direct connection to the main host or microcontroller, by I2C-bus physical and NCI protocol
• ultra-low power consumption in polling loop mode
• Highly efficient integrated power management unit (PMU) allowing direct supply from a battery
PN7150 embeds a new generation RF contactless front-end supporting various transmission modes according to NFCIP-1 and NFCIP-2, ISO/IEC14443, ISO/IEC 15693, ISO/IEC 18000-3, MIFARE and FeliCa specifications. It embeds an ARM Cortex-M0 microcontroller core loaded with the integrated firmware supporting the NCI 1.0 host communication.
The contactless front-end design brings a major performance step-up with on one hand a higher sensitivity and on the other hand the capability to work in active load modulation communication enabling the support of small antenna form factor.
For contactless card functionality, the PN7150 can act autonomously if previously configured by the host in such a manner. PN7150 integrated firmware provides an easy integration and validation cycle as all the NFC real-time constraints, protocols and device discovery (polling loop) are being taken care internally. In few NCI commands, host SW can configure the PN7150 to notify for card or peer detection and start communicating with them.