



Operational description : OM5577/PN7120S

PN7120 is a full NFC controller solution with integrated firmware and NCI interface designed for contactless communication at 13.56 MHz.

PN7120 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

PN7120 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 together with a ARM Cortex-M0 microcontroller core loaded with the integrated firmware supporting the NCI 1.0 host communication. This new design brings a major performance step-up with a higher sensitivity enabling the support of small antenna form factor.

For contactless card functionality, the PN7120 can act autonomously if previously configured by the host in such a manner.

PN7120 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 PN7120 to notify for card or peer detection and start communicating with them.