Product Overview

NCN8024R: Smart Card Interface

For complete documentation, see the data sheet

Product Description

The NCN8024R is a single smart card interface IC. It is dedicated for 3.0V/5.0V smart card reader/writer applications. The card VCC supply is provided by a very low drop-out and low noise regulator (LDO). The device is fully compatible with the ISO7816-3 and EMV standards as well as with standards specifying conditional access in Set-Top-Box (STB) including NDS. The smart card interface IC is available in an SOIC-28 package providing the industry-standard features required by STB smart card interfaces.

Features

- Fully Compatible with ISO7816-3, EMV and Related STB standards including NDS
- Three bidirectional buffered I/O level shifters (C4, C7 and C8 card pins)
- 3.0 V or 5.0 V ±5% Regulated Card Power Supply such as ICC ? 70 mA with 3.0 V ? VDDP ? 5.5V at 3.0 V (Class B) and 4.85 V ? VDDP ? 5.5V at 5.0 V (Class A)
- Independent Power Supply on Controller Interface (2.7 V ? VDD ? 5.5 V)
- Handles 5.0 V and 3.0 V Smart Cards (Class A and B)
- Support up to 27 MHz Clock with Internal Division Ratio 1/1, 1/2, 1/4 and 1/8 through CLKDIV1 and CLKDIV2 Pins
- ESD Protection up to ± 8 kV HBM
- Activation / Deactivation Sequences (ISO7816)
- Fault Protection Mechanisms Enabling Automatic Device Deactivation in Case of Overload, Overheating, Card Take-off or Power Supply Drop-Out (OCP, OTP, UVP)
- Interrupt Signal INTb for Card Presence and Faults

Applications

- Conditional Access Modules (CAM)
- Access Control, Identification

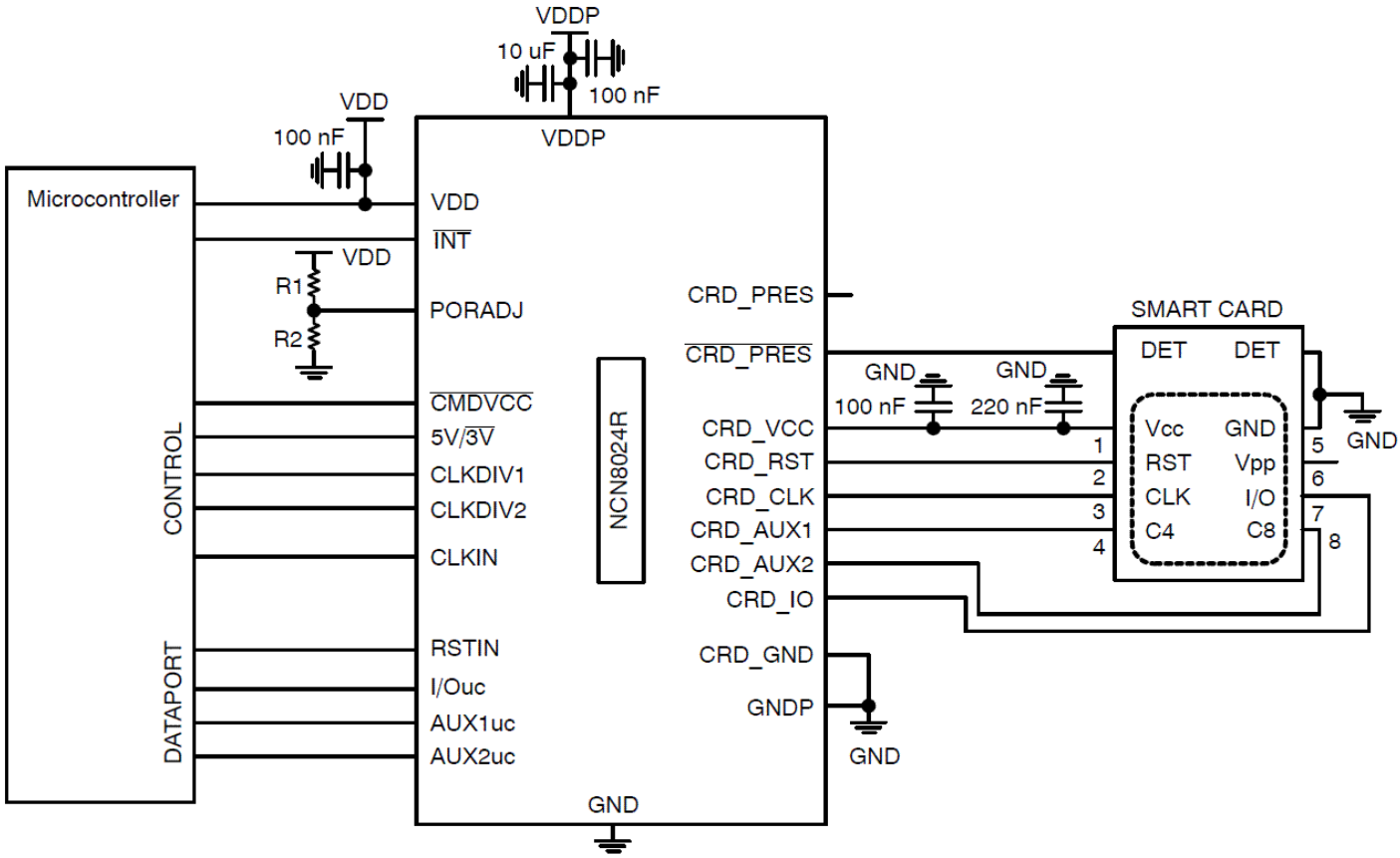
End Products

- Pay TV, Set Top Box
- POS / ATM

Part Electrical Specifications

Product	Compliance	Status	V_{CC} Min (V)	V_{CC} Max (V)	I_T Typ (mA)	$I_{I(standby)}$ Max (µA)	f_{Clock} Max (MHz)	Package Type
NCN8024RDWR2G	Pb-free Halide free	Active	2.7	5.5	4	61	27	SOIC-28W

Application Diagram



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