

Product Overview

NCN8024: Smart Card Interface

For complete documentation, see the data sheet

Product Description

The NCN8024 is a single smart card interface. It is dedicated for 3.0 V/5.0 V smart card reader/writer applications. The device is fully compatible with the ISO 7816-3 and EMV standards as well as with standards specifying conditional access in Set-Top-Box (STB) including NDS. An application note detailing how to use and implement the NCN8024 is available under request - reference is AND8452.

Features

- Single Card Interface
- Fully Compatible with ISO 78163, EMV and Related Standards Including NDS
- Three Bidirectional Buffered I/O Level Shifters (C4, C7 and C8 Card Pins)
- 3.0 V or 5.0 V \pm 5% Regulated Card Power Supply such as ICC ? 75 mA at 3.3 V ? VDDP ? 5.5 V
- Independent Power Supply on Controller Interface(2.7 V < VDD < 5.5 V)
- Handles 3.0 V and 5.0 V Smart Cards
- Thermal and Short Circuit Protection on all Card Pins
- Support up to 18 MHz Clock with Internal Division Ratio 1/1, 1/2, 1/4 and 1/8 through CLKDIV1 and CLKDIV2 Pins
- ESD Protection on Card Pins up to 8 kV+ (Human Body Model)
- Activation/Deactivation Sequences (ISO7816)

Applications

- SetTop Boxes Conditional Access & PayTV
- Conditional Access Modules (CAM)
- Access Control, Identification

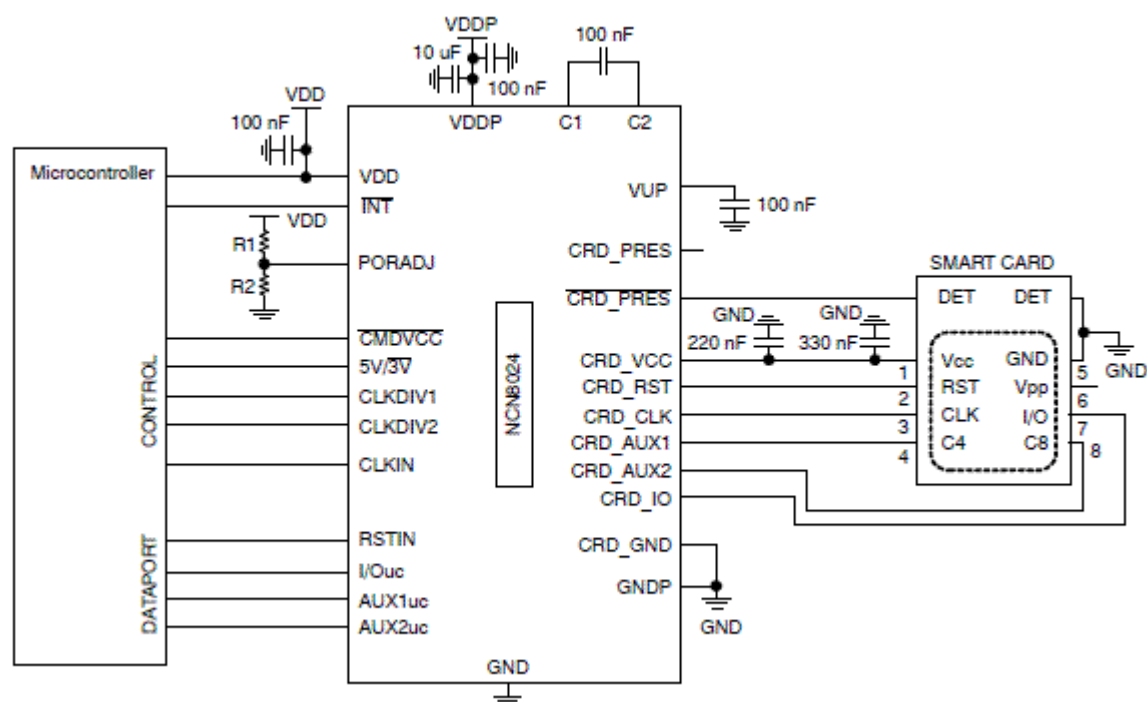
End Products

- POS / ATM
- Pay TV / Set Top Box

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 |
|---------------|-------------|--------|-------------------------|-------------------------|-------------------------|----------------------------------|------------------------------|--------------|
| NCN8024DTBR2G | Pb-free | Active | 4.5 | 5.5 | 6 | 1000 | 18 | TSSOP-28 |
| | Halide free | | | | | | | |
| NCN8024DWR2G | Pb-free | Active | 4.5 | 5.5 | 6 | 1000 | 18 | SOIC-28W |
| | Halide free | | | | | | | |

Application Diagram



For more information please contact your local sales support at www.onsemi.com

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