

Product Overview

NCN8026: Smart Card Interface, Low Power

For complete documentation, see the data sheet.

The NCN8026A is a compact and cost-effective single SIM and smart card interface IC. It can be used with 1.8 V, 3 V and 5 V IC cards. The card VCC supply is provided by a built-in very low drop-out and low noise Regulator. The NCN8026A offers enhanced performances with low VCC output ripple under load-transient conditions, very low shutdown current and 1.8 V-to-5 V logic compatibility. This device is fully compatible with the ISO 7816-3, EMV 4.2, UICC and related standards including STB standards (Nagravision, Irdeto, Conax...). It satisfies the requirements specifying conditional access into Set-Top-Boxes (STB) or Conditional Access Modules (CAM). This smart card interface IC is available in a QFN-24 package providing all the industry-standard features usually required for STB smart card interface.

Features

- Single IC Card Interface
- Fully Compatible with ISO7816-3, EMV4.3, UICC and Related Standards Including STB Standards (Nagravision, Conax, Irdeto...)
- Three Bidirectional Buffered I/O Level Shifters (C4, C7 and C8)
- 1.8 V, 3 V or 5 V $\pm 5\%$ Regulated Card Power Supply with ICC ≤ 80 mA and Low VCC Ripple
- Regulator Power Supply: VDDP = 2.7 V to 5.5 V (@ 1.8 V), 3 V to 5.5 V (@ 3 V) and 4.85 V to 5.5 V (@ 5 V)
- Independent Power Supply range on Controller Interface such as VDD = 1.6 V to 5.5 V
- Handles Class A, B and C Smart Cards
- Support up to 27 MHz input Clock with Internal Division Ratio 1/1, 1/2, 1/4 and 1/8 through CLKDIV1 and CLKDIV2
- HBM (Human Body Model) ESD Protection on Card Pins up to +8 kV
- Activation / Deactivation Sequences (ISO7816 Sequencer)

For more features, see the data sheet

Applications

- Pay TV, Set Top Box Decoder with Conditional Access and Pay-per-View
- Conditional Access Module (CAM / CAS)
- SIM card interface applications (UICC / USIM)
- Electronic Payment and Identification

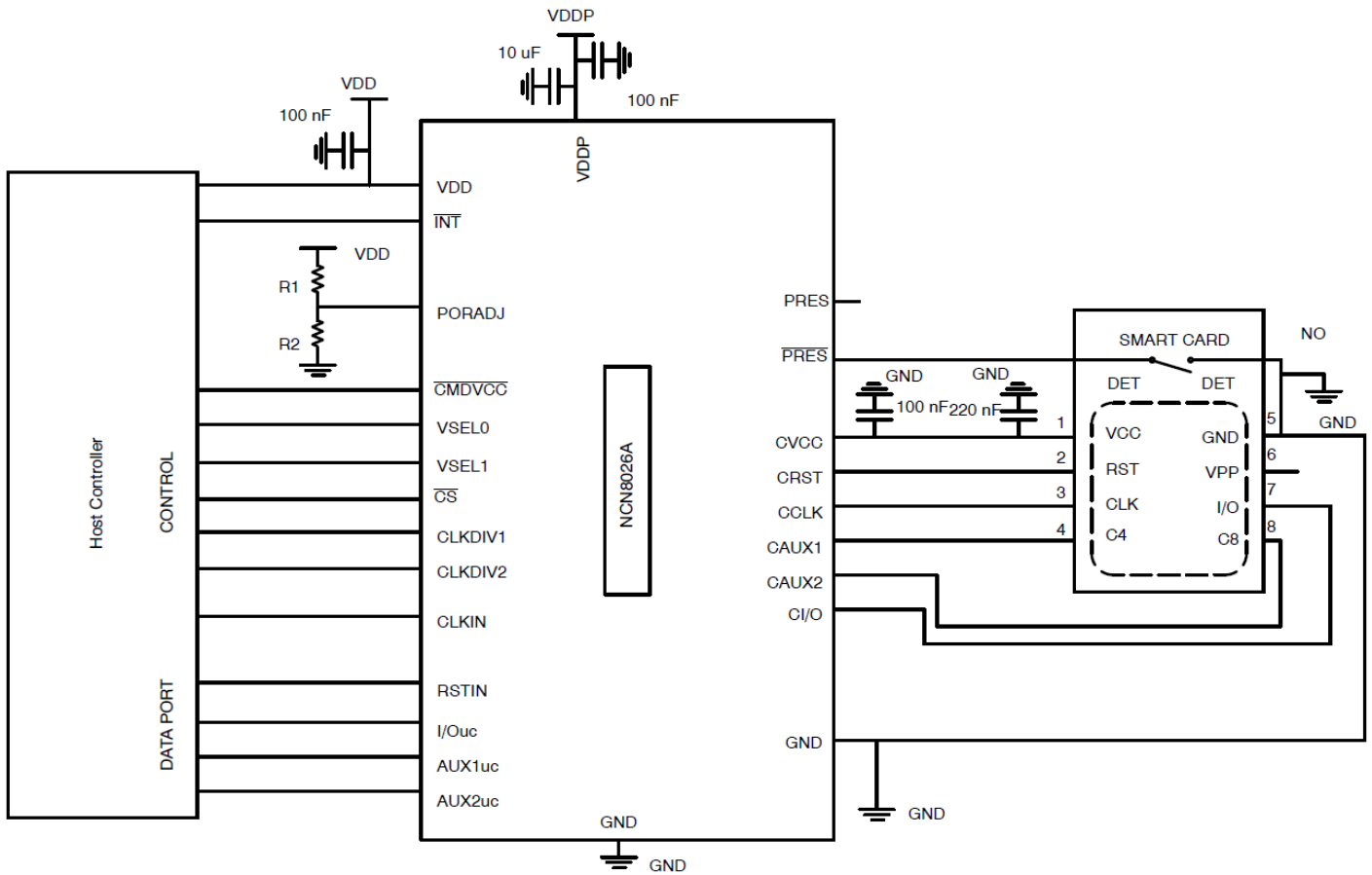
End Products

- Set Top Boxes
- Point Of Sales and Transaction Terminals

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	V _{CC} Min (V)	V _{CC} Max (V)	I _T Typ (mA)	I _{I(standby)} Max (μ A)	f _{clock} Max (MHz)	Package Type
NCN8026AMNTXG	0.2667	Pb-free Halide free	Active	1.6	5.5	1	3	27	QFN-24

Application Diagram



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

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