

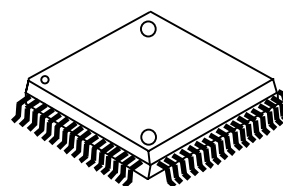
COMMON INTERFACE/POD CONTROLLER CXD2099AR

DESCRIPTION

The CXD2099AR is a Common Interface (CI) controller IC designed for use with DVB compliant Conditional Access Modules (CAM), POD and PCMCIA type memory cards - performs the communication between a Host microcontroller and the Module/Card. The IC communicates to the Host either by a parallel 68K style interface or a serial I²C compatible connection. Communication between the CXD2099AR and the Module/Card is greatly simplified by the inclusion of a fully integrated hardware Physical layer.

Parallel and serial MPEG2 Transport Stream interfaces are fully programmable ensuring compatibility to commonly used Front End demodulators and MPEG2 decoders.

100 pin Plastic LQFP



FEATURES

Card Interface

- Fully integrated single slot PC Card interface.
- Support for dual slot PC Card interfaces.
- Support for generic PC Card interfaces.
- Full Hardware Hot-swap support.
- Independent support for 3V3 and 5V modules.
- Support for current overload detection.
- Integrated Physical layer with 1Kbyte buffer.

Host Interface

- Choice of Parallel (68K style) or serial (Fast I²C compatible) host bus interface.
- Maskable interrupt capability.
- Programmable HACK.
- 3V3 logic levels.

Transport Stream Interfaces

- Accepts MPEG2 compliant TS.
- Parallel TS interfaces to/from Card (up to 9Mbytes/s).
- Parallel/ serial TS interface from tuner (up to 9Mbytes/s). 72MHz in serial mode.
- Serial TS interface to downstream device (up to 72Mbits/s).
- Four serial input and output modes.

Miscellaneous

- 27 MHz operating frequency.
- Integrated PLL for serial TS
- 3V3 process
- 5V compatible I/Os for PC Card interface(s)
- LQFP 100-pin package.

APPLICATIONS

- DTV, iDTV
- Set Top Box
- Personal Video Recorder (PVR)