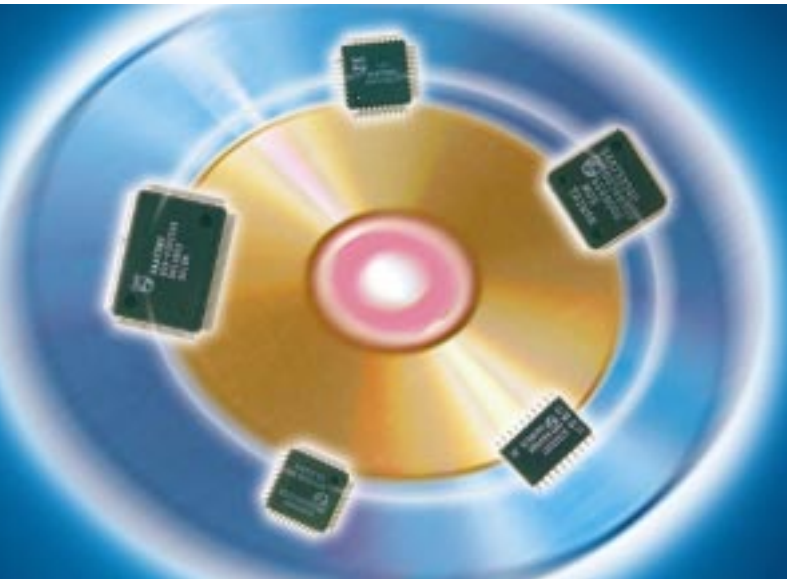


Philips Semiconductors, a pioneer of CD technology, now offers a complete, pre-developed DVD-ROM system solution. A highly integrated chipset, it allows you to reach the market fast with products for today's most exciting mass storage medium.

DVD-ROM

A highly integrated system solution



A pre-developed DVD-ROM system

At the core of Philips' complete DVD-ROM system, which supports both single and dual layer operation, lies a two-chip DSP/block decoder solution developed specifically for DVD-ROM. One of the most tightly integrated solutions on the market, it also includes a new data amplifier and laser supply (DALAS) IC and an 80C51-compatible microcontroller optimized for DVD-ROM applications. Derived from Philips Semiconductors' high-performance, high-speed CD-ROM front-end, it delivers outstanding performance with 2x DVD and 16x CD speeds, and a unique MM feature allows audio playback without the need to change disc speed.

Philips' complete system solution provides the flexibility and functionality you need to hit ever-narrower market windows, with a highly featured and differentiated DVD-ROM solution, in the shortest possible time.

Optimized for DVD-ROM

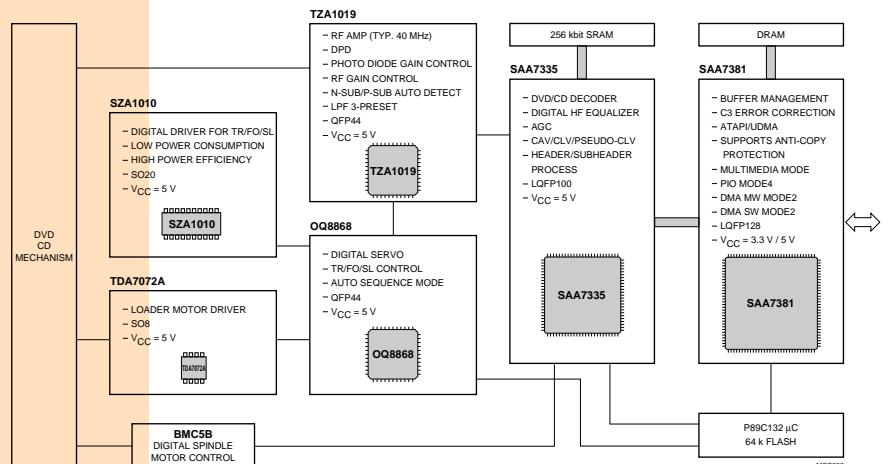
The SAA7335 DVD decoder/DSP and SAA7381 block decoder/host interface provide all the necessary functions and features for the whole DVD data processing section. Both these chips support CAV, pseudo-CLV and standard CLV modes.

SAA7335 DVD/CD decoder/DSP

- Compatible with DVD-ROM, CD-ROM, CD-i, MPEG-video and DVD-video applications
- Matched filtering and dual-pass error correction (C1-C2-C1-C2) for CD-ROM
- Overspeed audio playback function (up to 3 kbyte buffer)
- Parallel or serial control interface

SAA7381 block decoder/host interface

- Supports DVD-ROM, CD-ROM (mode 1), CD-i (form 1 and form 2) and CD-ROM XA formats
- CD-ROM block decoding with full real-time error correction at up to 16x data transfer rates
- ATAPI interface supports packet command reception sequencer and block data transfer sequencer
- Real-time error detection and correction in hardware



Let's make things better.

P89C132 flash controller

This flash microcontroller is suitable for both DVD- and CD-ROM systems, offering reprogrammability via a PC. It has 64k of flash ROM on-chip, with 63k available for user programs and boot code.

- 80C51-compatible MCU with 512 bytes RAM
- Four 16-bit counters/timers
- Four 8-bit bi-directional I/Os and two PWM outputs
- Full duplex UART
- Six-source two level interrupt capability - 40 MHz
- Automatic reboot from programming fail
- Download new code from any pins controlled by boot code
- Internal and external protection by encryption for ROM code

SZA1010 triple digital servo driver (DSD3)

The SZA1010 digital servo driver generates all the signals for radial tracking, focus actuators and the sledge motor. It has very low drive impedances, delivering a true zero power idle mode.

- Three, I-bit class-D actuator drivers for focus, radial and sledge
- Separate power supply pins for all drivers
- Built-in high efficiency digital notch filters
- Differential output for all drivers

TZA1019 DVDALAS

The DVDALAS provides the interface between the high speed DVD-mechanism and both the OQ8868 single-chip digital servo control system and SAA7335 decoder.

- RF amplifier (typ. 40 MHz) for 2x DVD and 16x CD operation
- Differential phase detector with pre-equalization and slicers
- Programmable RF gain and bandwidth
- Radial error signal for fast tracking, selectable between 3-beam and differential phase detection

A complete system

The DVD-ROM system solution also includes the OQ8868 digital servo controller (DSIC-S) which provides all servo functions for two-stage DVD/CD-systems except the spindle motor control, and the TDA7072A power amplifier to drive the disc loader motor.

Philips Semiconductors – a worldwide company

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