

### Add Digital Receiver on Your SoC - Fast and Easy

ClearSignal-SoC™ is a package of silicon and software IP, which add multi-standard Digital Broadcasting (DAB, DAB+, T-DMB, DRM and HD Radio) receiving capability to the customer's SoC. Specifically designed to be integrated with the customer's architecture, it uses existing SoC blocks with minimal additions.

ClearSignal SoC innovative solution addresses designers of SoC for the consumer electronics industry, who wish to add Digital Radio capability to their chips.

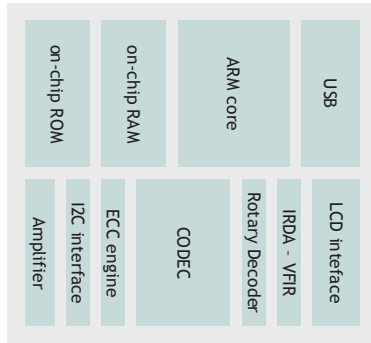


Figure 1 - Example of a Customer's original SoC

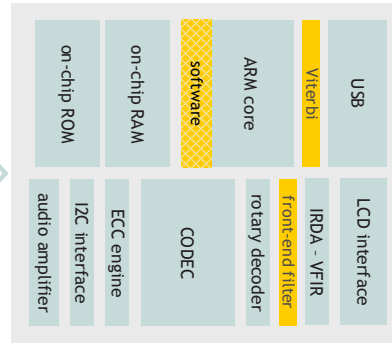


Figure 2 - Customer's SoC with added Digital Receiver capability

### An Innovative Approach

Built upon ClearSignal's proven pure-software based technology, ClearSignal-SoC adds this innovative IMSiS™ technology to an intelligent mix of software and silicon blocks. Both the software and the silicon have been designed to be highly customizable to a large variety of SoC architectures. The software is core-agnostic and the IP silicon blocks are standard based. The balance between the silicon and software is matched to the scope of the end product, for the required trade-off between low power consumption, small size, multi-feature, and low cost.

ClearSignal-SoC's Silicon and Software design are demonstrated on an FPGA evaluation platform. The deliverables include the following:

Software, control stack and silicon blocks designs, standard API, documentation, test/verification files, acceptance test procedures, test data and the design of a hardware evaluation platform enabling rapid device performance verification and IC implementation.

Interface is provided for a variety of front end RF tuner architectures - both IF and ZIF (zero-IF), as well as various ADC sample rates, thus providing a maximum flexibility.

### True Multi-Standard

The standards currently supported by ClearSignal SoC or in development are:

- DAB (Europe, Australia, etc. - ETSI EN 300 401) and DAB+(ETSI TS 102 563)
- T-DMB (Korea TTAS.KO-07.0026 and Europe ETSI TS 102 427 / 428)
- DRM
- HD Radio

- ISDB-T (Japan)
- DVB-H

### Product Benefits

The main benefits of using ClearSignal SoC are:

- Stand-alone solution- Special processors and IP applications are not required
- Multi-standard solution for Multimedia Broadcasting and Digital Radio
- Based on ClearSignal's proven pure-software solution that is implemented in high-end digital radios
- Intelligent mix of software and silicon enables freedom of choice
- Maximum usage of existing component blocks
- Reduced receiver power consumption
- Supported by extensive training, R&D, testing and verification services and data

### Product Features

The key features of ClearSignal SoC are:

- Core-agnostic software
- Silicon IP with industry standard interface
- Compatible to most standard RF tuners
- Compatible to all de-facto multimedia and Digital Radio Broadcasting standards
- Extendable to future COFDM based Digital Broadcasting standards
- Strong fading channel algorithms for mobile and automotive applications