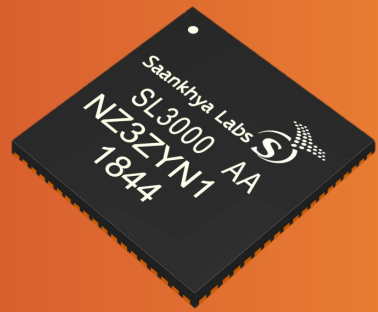


## SL-3000

### Universal Demodulator



Saankhya Labs' SL3000, Universal DTV Demodulator, powered by award-winning patented SDR architecture enables reception of LIVE TV signals on Smart TVs, Set-Top Boxes, and Home Gateways. SL3000 demodulates TV signals compliant to ATSC 1.0, ATSC 3.0, DVB-T/T2/C, ISDB-T/C, DVB-S/S2 standards.

The full-featured front-end SOC performs baseband DTV demodulation and integrates FEC decoder, de-interleaver memory, and Analog to Digital Converter (ADC) in a single chip.

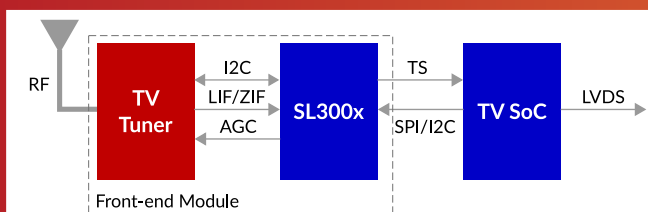
Leveraging Saankhya Labs' proven Software Defined Radio (SDR) architecture SL3000 achieves broadcast-quality reception without the picture/audio breakups while reaching far & remote households or households in dense urban environments.

Additionally, the SOC also supports Advanced Emergency Alert to aid and assist in the deployment of Advanced Warning and Response network infrastructure across the world.

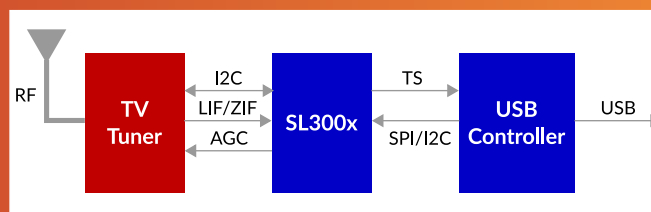
## Features

- ◆ Fully programmable SDR architecture-based Demodulator SoC supports existing & new DTV standards
- ◆ High performance, high data rate, multi-standard Demodulator for terrestrial broadcast, satellite and cable TV reception
- ◆ Integrated high precision ADC & PLLs
- ◆ Low power, high-performance & small footprint device

## Applications



### Televisions



### Home Gateways & Dongles

## Interfaces

- ◆ ZIF/LIF interface to RF Tuner
- ◆ Serial MPEG-TS interface to Gateway processor/TV SoC
- ◆ I2C/SPI master/slave interface to the TV tuner and back-end TV SoC or Gateway processor
- ◆ DISEQ Interface to control Satellite Antennas

## Tech Specs

### Standards Supported

Terrestrial	ATSC 3.0/1.0, DVB-T2/T (DTG, NORDIG), ISDB-T
Cable	QAM, DVB-C, ISDB-C
Satellite	DVB-S/S2

### Supports

Programmable Channel BW	Channel BW 5/6/7/8MHz for Terrestrial Channel BW 5-54MHz for Satellite
FFT Size	2K/4K/8K/16K/32K
Demodulation Schemes	8VSB, QPSK/8PSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM
Decoding	16K/64K LDPC, BCH, Viterbi, RS FEC decoding
Multiplexing Mode	TDM, FDM & LDM
Monitoring Parameters	RSSI, C/N, BER, FER

### Physical Specifications

Power	0.9V and 1.8V
Operating Temperature	0 to 85°C
Package	8 x 8 mm (0.4mm pitch) 68 pin QFN package, Pb-Free/ROHS compliant

## Ordering Information

Part Number	Package	Standards Supported	Description
SL3000	QFN68	ATSC1.0, ATSC3.x, QAM, DVB-T/T2/C, ISDB-T/C, DVB-S/S2	Universal TV Demodulator for Home Gateways/TVs