

Sakrament Speech Box

Sakrament... sounds good

Sakrament SpeechBOX is an application designed for embedding Sakrament TTS (text-to-speech) Engine into a wide range of microprocessor platforms and used as an alternative to text output on display or to replaying prerecorded utterances and audio messages. It is an ideal embedded solution for Automotive, Aerospace, Defense and Factory Automation.

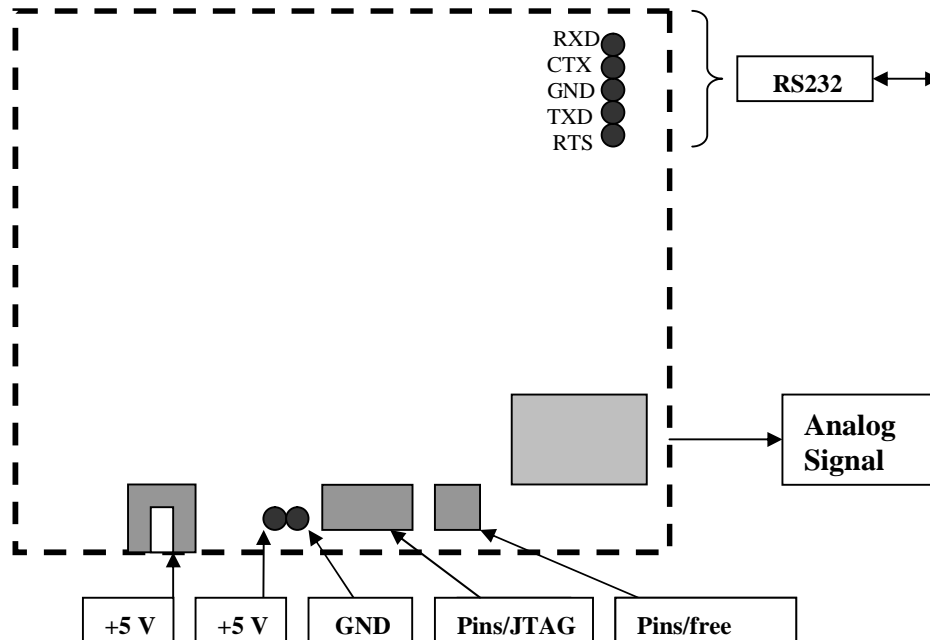
Sakrament Speech Box for embedded TTS highlights:

- High quality TTS output both in male and female voices;
- Real time processing of text information;
- Holding more than 15 hours of updatable text information.

The advantages of Sakrament Speech BOX are:

- e-mail, SMS and fax reading;
- advertising materials, news feeds and real-time traffic information reading;
- Onboard Diagnostic, voice control, onboard alert and navigation aid information – verbal presentation of digital information.

Configuration



On board	
Processor	TMS320VC5402
Codec	TL320AD50
UART	TL16550C
EEPROM	MVM29LV160TE
FPGA	Xilinx Cool Runner CXR 3032XL7VQ44I
Power connector	RS5320/ 5 volt
audio connector	AUB13
RS232 connector	alternate connector - 5 pin

For more information about Sakrament SpeechBox or for information on our customized voice products, give us a call at +375 (17) 284-0650. Please visit Sakrament Speech Technologies web site at <http://www.sakrament-speech.com>

Technical specification

Description:

- Board: size 60x60mm with fastening holes in corners and double-sided SMD assembly;
- Power: +5 V supply via power module or any control device to 2 pins power connector;
- Input: symbols ASCII (coding Windows-1251) transmitted from any device such as personal computer, on-board computer or microprocessor device;
- Output:
 - a) analog signal via audio connector to any acoustic system/headphones;
 - b) PCM-signal (interface RS232: speed 9600, 1 stop bit, without parity);
- RAM chip EEPROM with capacity 2 Mb contains:
 - a) text-to-speech software;
 - b) control software;
 - c) allophones data base for two voices (ability to switch voices in real time via commands);
 - d) Additional 600 Kb reserved for custom data storing or any other customer needs.
- SpeechBOX can use component parts marked as industrial for application in outdoors conditions: temperature - 40 до 75 C, humidity 20 — 90%, vibration according to standard 1.1.

TTS Software:

- Supported operation systems: functioning independently of any operation system (minimal requirements for microprocessor type and memory size);
- Languages: Russian, multilingual support;
- Voices: male and female, multi-voice support;
- Data installation: ROM, flash memory;
- Data compression: can be compressed in 4 and 8 times by real-time ADCPM algorithms;
- Data size: executive module – 20 KB; acoustic database for each supported language 980 KB;
- Personalization: control of voice, intonation; pitch, speed and volume changing, pauses;
- Native sound format: PCM/Wav, 8 kHz, 16 bits;
- Sakrament TTS input: Unlimited vocabulary and text size, raw text input;
- Text normalization: date, time, numbers, addresses, currencies, phones, units, abbreviations and exceptions.

Sakrament services

To help you integrate TTS technology with your specific applications, Sakrament offers development solutions adapted to all your particular needs and to your specific platforms, based on Sakrament experience in porting TTS solutions to a wide range of microprocessor platforms and chips and in designing state-of-the-art technological speech solutions. We can ensure that our TTS will be perfectly adapted to your applications.

About Sakrament

Sakrament company, one of the leading software developer in the sphere of speech recognition and text-to-speech (TTS) technologies for the Russian language. Sakrament products, including Sakrament Text-to-Speech Engine (TTS) and Sakrament Speech Recognition Engine (ASR) provide the most natural communication solutions available for the Russian language. Sakrament technology allows to integrate speech solutions into existing voice processing platforms and develop a various types of speech enabled applications.



For more information:

Sakrament company
Vostochnaja St. 131
220113 Minsk Belarus

Tel: +375 172 840650

Fax: +375 172 840650

E-mail: info@sakrament-speech.com

www.sakrament-speech.com