S1V30120



Text-to-Speech LSI

DESCRIPTIONS

The S1V30120 is a highly-integrated solution for speech-enabled devices, featuring TTS(Text-to-Speech), ADCPM decode integrated low power high quality DAC. The chip can be easily integrated with a wide range of host devices and microcontrollers using a message protocol that runs over an SPI link, the S1V30120 makes it possible to create guidance that is easy on the ears.

FEATURES

• TTS (Text-to-Speech)

- US English, Castilian/Latin American Spanish.
- Unconstrained TTS(fs=11.025kHz).
- Pitch, speaking rate changeable.(online command support)
- 4 pre-defined voices.
- No TTS license required.
- Fonix DECtalk[®] Version 5.

Voice Playback

- ADPCM decode.
- Support bitrate : 16kHz(80kbps, 64kbps, 48kbps), 8kHz(40kbps, 32kbps, 24kbps).

Host Interface

- Synchronous Serial Interface(slave).
- Command control.

High Quality 16-bit monaural DAC

Sampling Rate(f_s): 8, 11.025, 16 kHz.

- Clock
 - 32.768KHz.
 - Power Supply
 - 3.3V (I/O power supply).
 - 1.8V (Core power supply).

Package

- TQFP13-64pin (10mm x 10mm) 0.5mm Pin Pitch.



Typical Application System

S1V30120 typical application system is described on following figure, host can control S1V30120 using a message protocol over a SPI.

After download a program data and receiving the text data, S1V30120 start output voice from integrated DAC.



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SEIKO EPSON CORPORATION

MICRODEVICES OPERATIONS DIVISION

Device Sales & Marketing Department 421-8 Hino, Hino-shi, Tokyo 191-8501, JAPAN Phone: +81-42-587-5814 FAX: +81-42-587-5117 EPSON semiconductor website

http://global.epson.com/products/semicon/

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