

S1V30120

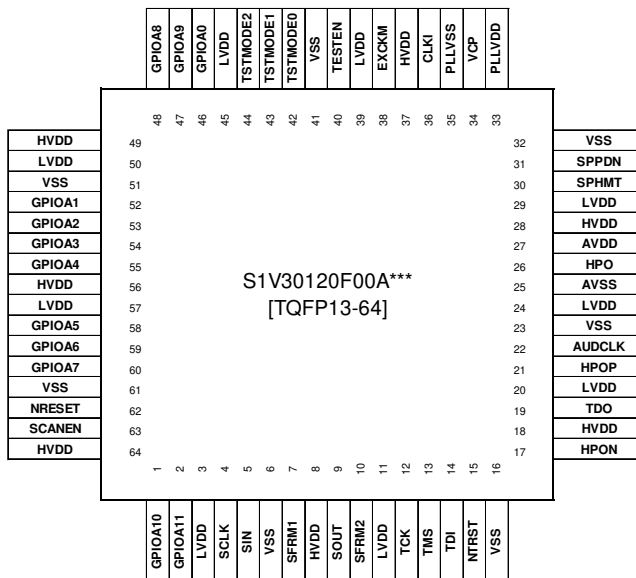
Text-to-Speech LSI

■ 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($f_s=11.025\text{kHz}$).
 - 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.



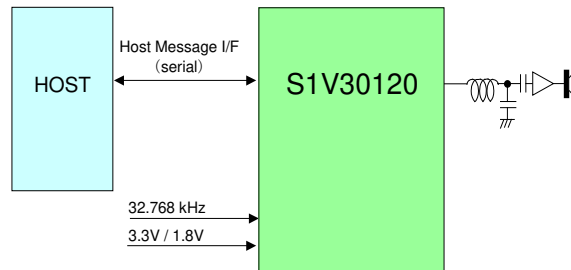
Package Pin Allocation

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■ 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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