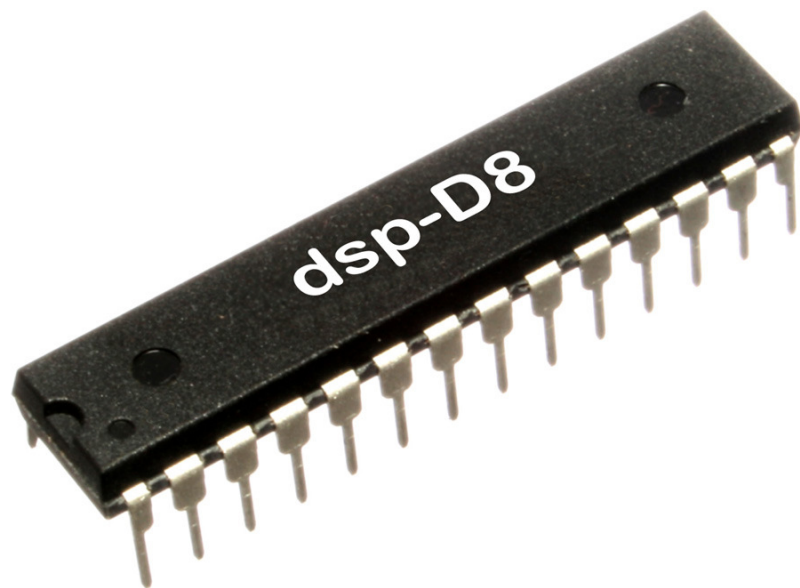


The dsp-D8 Drum-Synthesizer Chip

The smallest PCM Drum Synth
in the world



Application Manual v1.0



The dsp-D8 Drum Synthesizer Chip

The dsp-D8 drum synthesizer is a chip that contains a PCM drumkit in a 28-pin DIP package.

The chip can be used as a voice chip for a drummachine or a drummodule

The chip is 8-voice fully polyphonic with 8 separate trig/gate inputs for each voice.

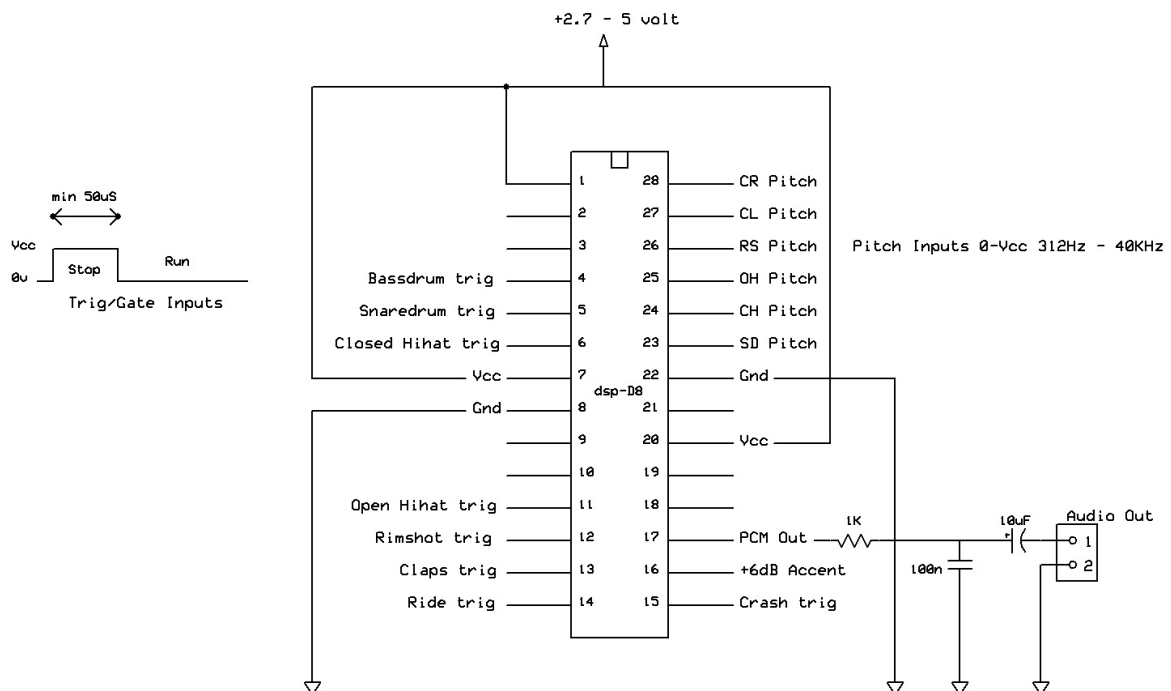
6 of the drums can be separately tuned or modulated by an analog control voltage.

There is an Accent input that boosts all drumsounds by +6dB.

The output is 40KHz 10-bit Sigma-Delta PDM and the chip runs standalone from a 2.7-5 volt power source.

Example application circuit for the dsp-D8 chip

This is the minimum application circuit for the chip. Input levels are allowed between Gnd and Vcc. The output is analog and swings between Gnd and Vcc.



Technical Specifications

DSP platform	AVR ATmega 20 DMIPS
Supply power	2.7 – 5 volt
Supply current	~4.9mA
Input tolerance	2.7 – 5 volt depending on Vcc
Audio output	40 KHz 10-bit sigma-delta PDM, 1 channel mono audio
Synthesis method	PCM Wavetable playback
Control method	8 polyphonic trig/gate inputs, 6 analog polyphonic tune

Contact & Support

For support and questions please use these contact addresses:

Website: <http://www.dspsynth.eu>

Email: contact@dspsynth.eu