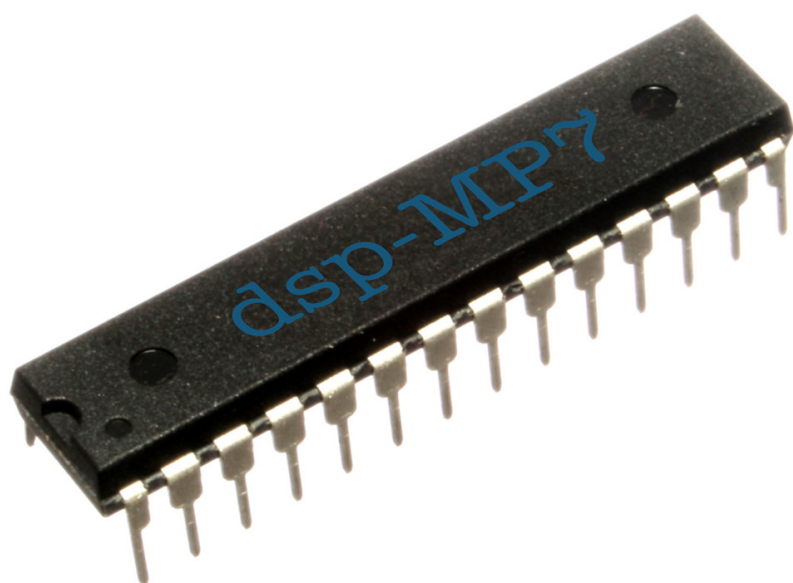


The dsp-MP7 Drum Synthesizer Chip



Application Manual v1.0



The dsp-MP7 Drum Synthesizer Chip

The dsp-MP7 drum synthesizer is a chip that contains a Virtual Analog drumkit in a 28-pin DIP package.

The sounds are analog modelled after the famous Mini Pops 7 rythmbox.

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

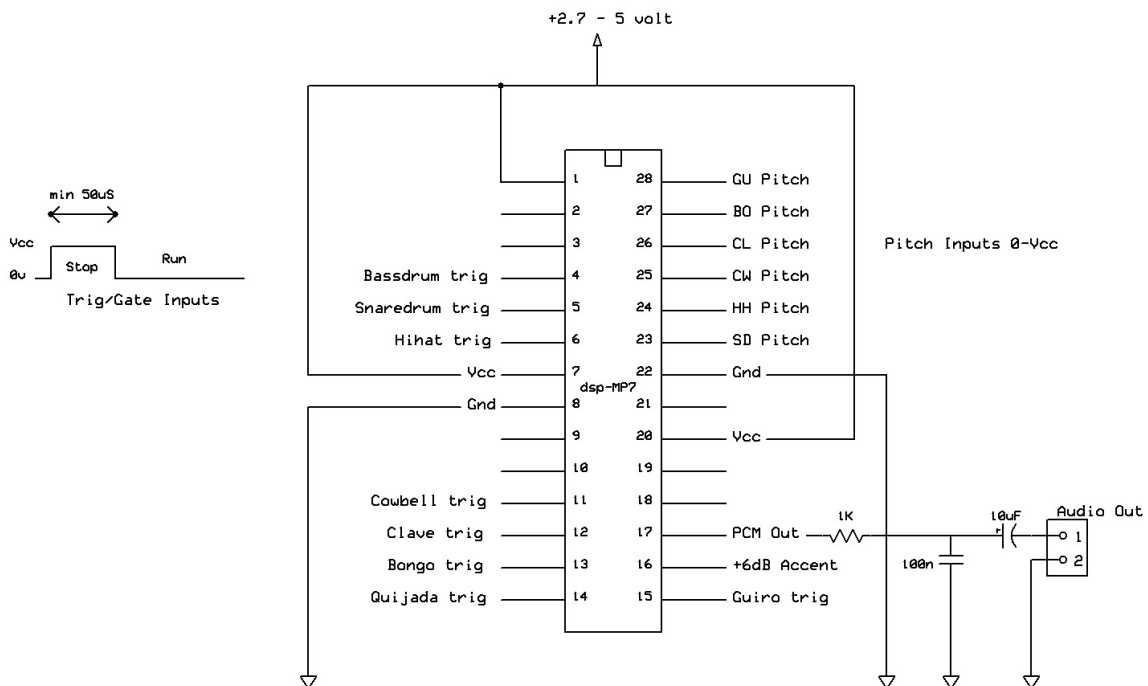
The chip is 8-voice fully polyphonic with 8 separate trig/gate inputs for each voice.

6 CV inputs for engine tuning.

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-MP7 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	Virtual Analog Modelling
Control method	8 polyphonic trig/gate inputs, 6 analog engine tune inputs

Contact & Support

For support and questions please use these contact addresses:

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

Email: contact@dspsynth.eu