

SSI2140

FATKEYS™ VOLTAGE CONTROLLED FILTER

The SSI2140 is a new-generation voltage controlled filter that provides four high-configurable sections for a wide variety of pole and mode combinations, and adds new features.

Based on an updated core by original SSM2040 designer Dave Rossum, the SSI2140 temperature compensates its gain cells for unprecedented stability. Temperature compensation is also optionally available for the exponential control.

An resonance (“Q”) circuit with linear control has been brought on-chip, and a variable Q VCA - also temperature compensated - allows optional passband gain compensation using linear control.

Virtually any type of filter response can be achieved including low-pass, high-pass, band-pass, all-pass, notch, Sallen & Key, biquad, Cauer, state-variable, multi-mode, and others.

Most importantly, great care was taken to preserve the SSM2040’s sonics including an input stage that can be overdriven for classic analog synthesizer character.

FEATURES

- **Highly Configurable Four-Section Filter**
- **Preserves SSM2040’s Classic Filter Sound**
- **Exponential Frequency Cutoff Control, with Optional Temperature Compensation**
- **On-Chip Resonance Circuit with Linear Control**
- **Optional Q Compensation to Offset Passband Attenuation**
- **10,000:1 Sweep Range**
- **±4V to ±16V Operation**
- **Ultra-Compact 20-Lead SSOP Package**

