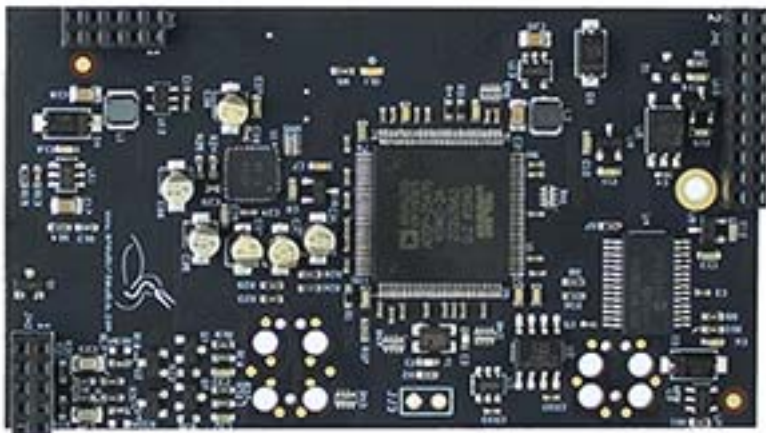




Snowbird Audio

Snowbird™ Audio Module

Programmable DSP Engine



A complete hardware and software platform for Audio Digital Signal Processing

- Single-Board, Small Form Factor Design
- Analog Devices SHARC® DSP
- AKM ADC
- Up to 192 kHz Sample Rate with 108 dBA S/N
- USB Control + MIDI
- Audio Weaver™ Programming Software

A High-Performance Programmable DSP Engine for Your Product

The Snowbird Audio Module is a self-contained audio processing platform that combines a high performance SHARC processor and carefully selected peripheral components with a custom programming environment that allows you to quickly and economically design sophisticated audio DSP features to any product. The programmable Snowbird Audio Module delivers outstanding value by letting you easily create, configure and implement digital audio effects ranging from simple tone controls to sophisticated time-based effects processing.

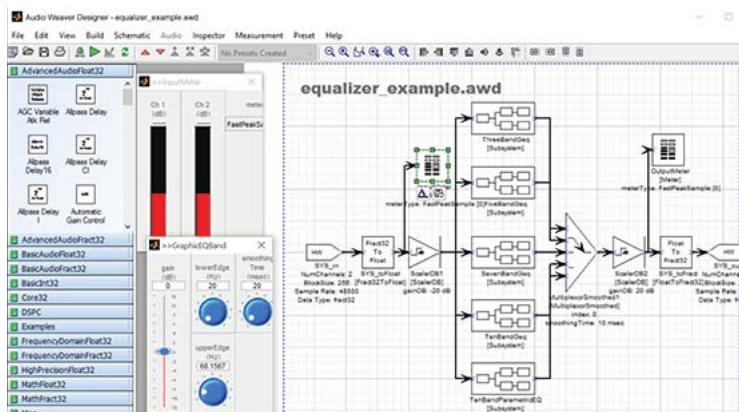
Floating-Point Performance, State-of-the-Art Components and Flexible Connectivity

At the heart of the Snowbird Audio Module is a powerful SHARC processor, the pro audio industry standard choice for audio processing. Surrounding the processor are components designed to deliver audio performance up to 192kHz with 108 dBA S/N. The Snowbird Audio Module includes connectors that let you attach a variety of companion boards. Integrate it into your own circuit design, create a stomp box, Eurorack module, or put DSP inside an amplifier, mixer, or keyboard.

Audio Weaver Programming Software

The Snowbird Audio Module is supported by a custom version of DSP Concepts' Audio Weaver programming software. This is a powerful graphical design package that let you create your own signal processing chain by simply dragging and dropping highly optimized audio processing modules. You can use any of the dozens of pre-built audio functions—EQs, crossovers, mixers etc.—or enhance and combine them with your own custom processing to create the functions you need. Once the design is done, the file can be directly save and run standalone on the Snowbird Audio Module.

- PC-Based Development Environment
- Drag and Drop Signal Processing
- Over 400 Processing Modules
- Real Time Tuning and Profiling



The Snowbird Audio Module combined with Audio Weaver is a high performance, fast time to market, custom audio platform for your audio projects.



Snowbird Audio

Expanding the Snowbird Audio Module

In addition to the Snowbird Audio Module's ability to be incorporated directly into your own products, they are also designed to be mated with a line of connector boards that provide specific I/O and control functions. First in this series is the Snowbird Stomp Connector, designed to give you a complete guitar effects system, ready to be put in a box.

Snowbird Stomp Connector Board (P/N A.09231B)

The Snowbird Stomp module mates to the Snowbird Audio Module and is designed for guitar level input.

- 1/4" Phone Jacks with true bypass footswitch
- Indicator LED
- 5 potentiometers
- USB connector for programming and MIDI
- Powered by a standard 9Volt battery
- 56mm x 84mm, fits in a standard Hammond 1590B box



The Snowbird Audio Module (P/N A.09230A)

DSP:

Analog Devices SHARC ADSP-21479
Clock 245.76 MHz

Codec:

AKM AK4558 Stereo Codec
Multiple Sample Rates Supported from
8 kHz to 192 kHz
S/N 108 dBA

Digital Filters:

Sharp Roll Off; Short Delay, Sharp Roll Off
Slow Roll Off; Short Delay, Slow Roll Off

Power Options:

USB Bus Power or
6 to 12V external, typically 9V battery

Output Level:

Output attenuators - 256 levels in 0.5dB steps

Connectors:

2mm Dual Row Headers

Five DC ADCs for controls

Memory:

16Mbit Flash and 2kbit EE with unique MAC ID

JFET buffers for guitar inputs

Interface:

USB (control & MIDI)
Optical - MIDI In

Size: 43mm x 76.5mm

About Danville Signal Processing

We have significant experience with designing complex, multi-layer processing boards, so all you need to worry about is integration. Founded in 1998, we manufacture and assemble products in our automated factory outside of Minneapolis, MN, USA. We work hard to develop long-term relationships with our customers and appreciate the opportunity to develop a mutually satisfying partnership with you as well. Give us a call, let's start a conversation about how Danville can provide the platform for your next design.

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