



Signal Processing Platform

Development Suite for SPP-01

Description

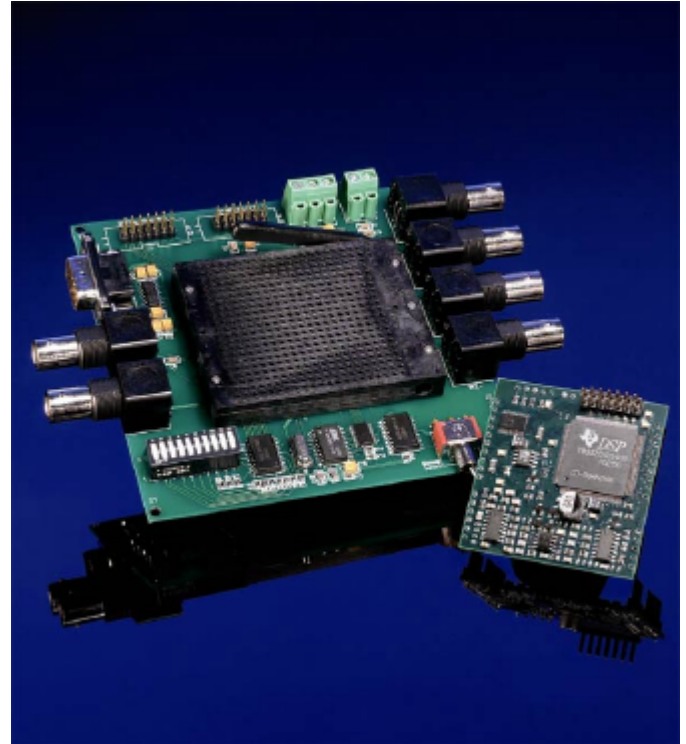
The SPPDS-01 Development Suite for SPP-01 platform products provide a user-friendly design environment for development of Digital Signal Processing (DSP) software solutions in the audio frequency range from 10 Hz to 20 kHz. By combining Texas Instruments, Code Composer Studio for the C54X family of DSP's with the Spectrum Digital Emulator, SPPDS-01's enable the designer to take advantage of a proven hardware platform with a flexible software kernel to quickly and easily develop single- and dual-channel application specific solutions.

In a small 2" x 2" footprint, the versatile dual channel SPP-01, the brains of the SPPDS-01, acts as its own evaluation board. After being programmed in the SPPDB-01 development board, the SPP-01 can be easily removed and inserted directly into a production subassembly. This capability significantly reduces the time it takes to produce finished product solutions. SPP-01's combine 24-bit A/D's and D/A's with a powerful DSP, 4 megabits of flash memory and 256k bits of EEPROM for applications requiring low signal-to-noise ratios of >96 dB, channel-to-channel phase match of 0.01°, and 8- to 10-bits of tuning per channel.

By utilizing the SPPDS-01 suite of products, design engineers have all the hardware and software tools to design, prototype and implement a broad range of standard and custom signal processing solutions in a standard footprint and form factor. This product development approach significantly reduces the time it takes to complete a project (concept to production).

Features/Benefits:

- Significantly reduces product development time by incorporating design and production capabilities into a single subassembly solution.
- Minimizes design time by offering standard and custom solutions in a universal footprint and pin-out.
- Combines small size and precision performance through the integration of real-time analog and DSP technology.
- Provides cost effective design flexibility by allowing engineers to easily revise products through software upgrades without replacing the hardware.



SPPDS-01 DEVELOPMENT SUITE:

- **SPP-01** – Dual Channel Signal Processing Platform
- **SPPDB-01** - Development Board hardware
- **CDDS-01**– Development Software that includes example programs, utilities and a user manual.
- **SPPDF-01** – FIR Filter Design Suite, which utilizes the SPP-01 and SPPDB-01 hardware mentioned above, along with CDDF-01 software.
- **CDDF-01** - Contains a Matlab™ GUI linking the system to SPTool in V5.3 or Filter Design Toolbox in V6.0 FIR filter development object code, burn instructions, a library and user manual.
- **DB9 RS232 Cable**

PROVIDED BY CUSTOMER:

- **Personal Computer**
- **Spectrum Digital Emulator**, XDs510PP plus JTAG Only emulator tested.
- **Code Composer Studio**, Texas Instruments C54x, version 1.20 or later.
- **MatLab 5.3 or 6.0**, for FIR filter design only