

Abstract

"Digital Signal Processing Device for Sound Signal Processing"

A plurality of digital signal processors (DSP1-DSP4) are provided in parallel relation to each other, and a series of operations for desired sound signal synthesis or processing is divided into a plurality of operation groups to be allocated to the signal processors. First and second buses (PBUS, DBUS) are connected to each of the signal processors so that parameters necessary for the operations are distributively supplied to the signal processors via the first bus (PBUS) and the operation result of each of the signal processors is transferred to another digital signal processor or an output port via the second bus (DBUS). One digital signal processor receives the output data from another digital signal processor via the second bus so as to perform a predetermined operation using the received data. The desired sound signal processing is thus executed by combinations of the operations performed by such signal processors. Where sound signal processing is executed in a plurality of channels on a time-divisional basis, the time-divisional channel timing of each digital signal processor is set independently of that of other digital signal processors. By setting synchronized tone generation designating data for each channel, synchronized tone generation is controllably performed in selected channels.

(Figure 1)

This Sheet Has Been Replaced

