

## DSPE-64 8 x 8 Audio System

### Overview

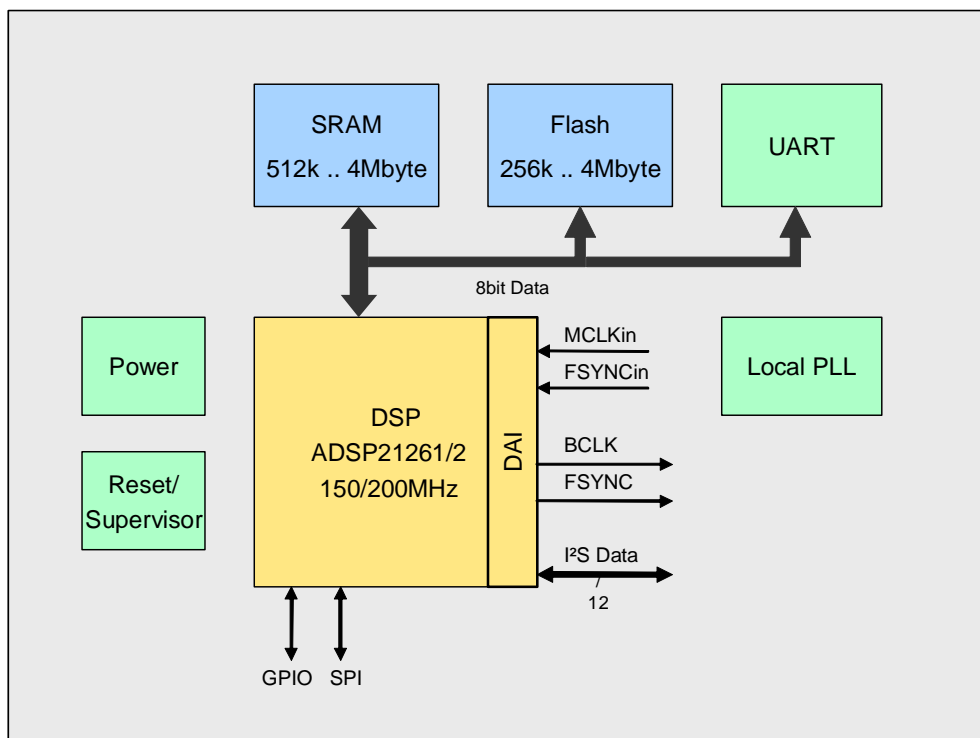
DSPECIALISTS audio system DSPE-64 is a compact DSP module based on the analog devices ADSP21262. It allows processing of up to 8 digital input and 8 digital output channels as TDM or I<sup>2</sup>S.

Due to its on-board flash memory, the DSPE-64 is capable to run as a stand-alone system. It can be easily embedded into any customer-specific environment.

DSPE-64 covers a wide range of embedded multi-channel signal processing tasks like audio matrix, filtering, signal analysis, correlation, feature extraction and measurement.

The board comes with hardware drivers and a software framework. For audio applications there is a wide range of approved standard library functions and a graphical user interface (GUI) available.

### Block Diagram



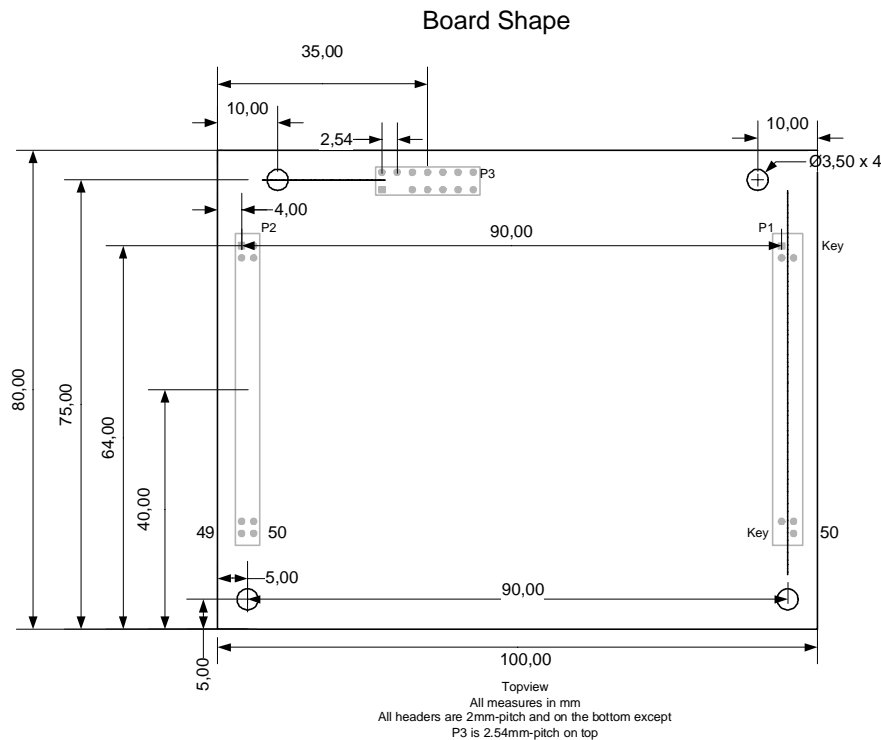
### Key Features

- Stand-alone 32-bit DSP system
- Digital inputs and outputs as TDM or I<sup>2</sup>S
- Adaptable to customer-specific hardware
- Library for standard audio processing
- Software framework for customer-specific algorithms
- Parameter input via PC user interface
- Up to 16 software setups stored in Flash

## Technical Specification

- Processor ADSP21262 / 200 MHz / 32 bit floating point or fixed point, 1.2 GFLOPs
- Memory 2 Mbit internal SRAM at core speed  
up to 4 MByte SRAM, 8 bit interface, 50 MHz clock frequency  
up to 2 MByte Flash, 8 bit interface, speed 70 ns
- Audio channels 12 x I<sup>2</sup>S data lines (24 audio channels), alternatively TDM  
Up to 192 kHz sample rate
- Clock management On-board master clock  
External clock via master clock or word clock
- Serial interface UART, I<sup>2</sup>C (software emulation), SPI, 4 x GPIO, LEDs  
JTAG connector
- Power supply 3.3 V (typ. 300mA, max. 2A)
- Mechanics 100 mm x 80 mm  
All signals at 2 base-board connectors (2 mm pitch, dual row, 50 pins)

## Outline



**mass customization • state-of-the-art DSP technology • OEM delivery**

### CONTACT:

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### ABOUT US

The products of DSPECIALISTS are distinguishable by the use of proven standard components. All products can be adapted to our clients' individual wishes. DSPECIALISTS offers anything from the development of customer-specific modules to complete systems. Aside from DSPs, we also make use of PC's, micro controllers and programmable logic.

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