

## DSPE-592

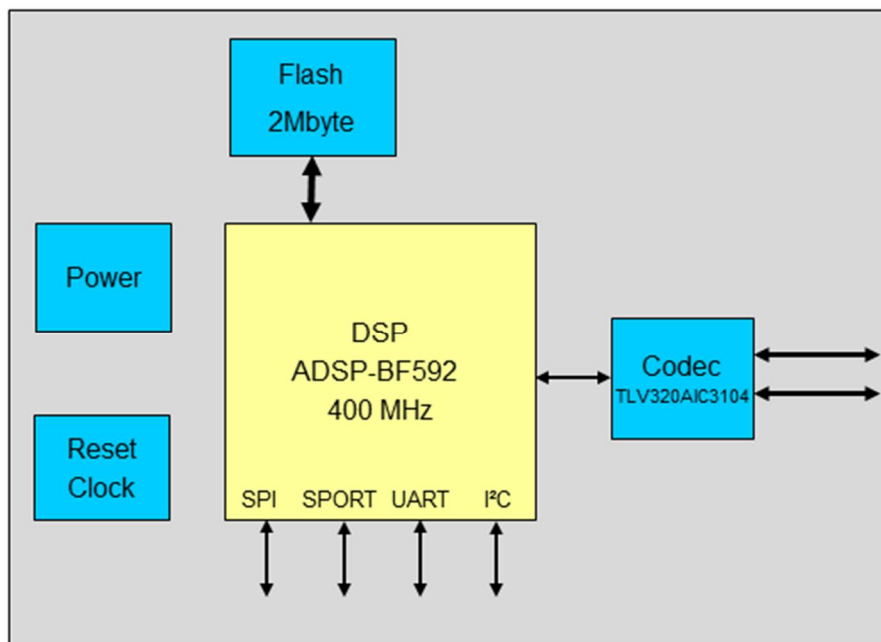
### 2 x 2 Telecom System

#### OVERVIEW

DSPECIALISTS telecom front-end module DSPE 592 is a compact DSP module based on Analog Devices ADSP-BF592. It allows processing of analog audio signals with a sample rate of 8 kHz up to 96 kHz and 24 Bit.

Due to its on-board flash memory DSPE-592 is capable to run as a stand-alone system. It can be easily embedded into any customer-specific environment.

DSPE-592 covers a wide range of embedded telecommunication tasks like noise cancellation, echo cancellation, Voice over IP, and audio transmission. The board is accompanied with hardware drivers and a software framework. Software for echo cancellation and noise cancellation is also available and can be licensed in a bundle with the hardware board.



#### KEY FEATURES

- Stand-alone 16-Bit DSP system
- Stereo analog input and output
- Adaptable to customer-specific hardware
- Echo cancellation algorithm available
- Noise cancellation algorithm available
- Software framework for customer-specific algorithms

## Technical Specification

- Processor: ADSP-BF592 / up to 400 MHz / 16 bit fixed point
- Memory: 68k bytes internal SRAM at core speed  
up to 2 MByte Flash, serial interface, 75 MHz bus speed
- Audio channels: 2 fully differential inputs (line or mic) and 2 fully differential line outputs  
8 to 96 kHz sample rate  
(optional 4 single ended inputs, headphone output)
- Serial interface: UART, I2C, SPI, I2S, GPIOs  
JTAG connector, various boot options
- Power supply: 3.3 V only, typ. 50mA (default)
- Ambient temperature range: 0°C to +70°C (standard) or -40°C to +85°C (extended)
- Outline: 51 mm x 27 mm  
All signals at 2 base-board connectors (2 mm pitch, dual row, 50 pins)

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### ABOUT US

The products of DSPECIALISTS are marked by our use of tried and tested standard components. And they can be tailor-made to meet your individual requirements. The range of products and services provided by DSPECIALISTS includes customer-specific modules as well as complete systems. We use DSPs, PCs, micro controllers and programmable logic in our development Work.

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