Sample Hold Example Project
1.1

Features

- Mode Sample and Hold
- Power High Power
- Vref Internal
- Sample Clock Edge Negative

General Description

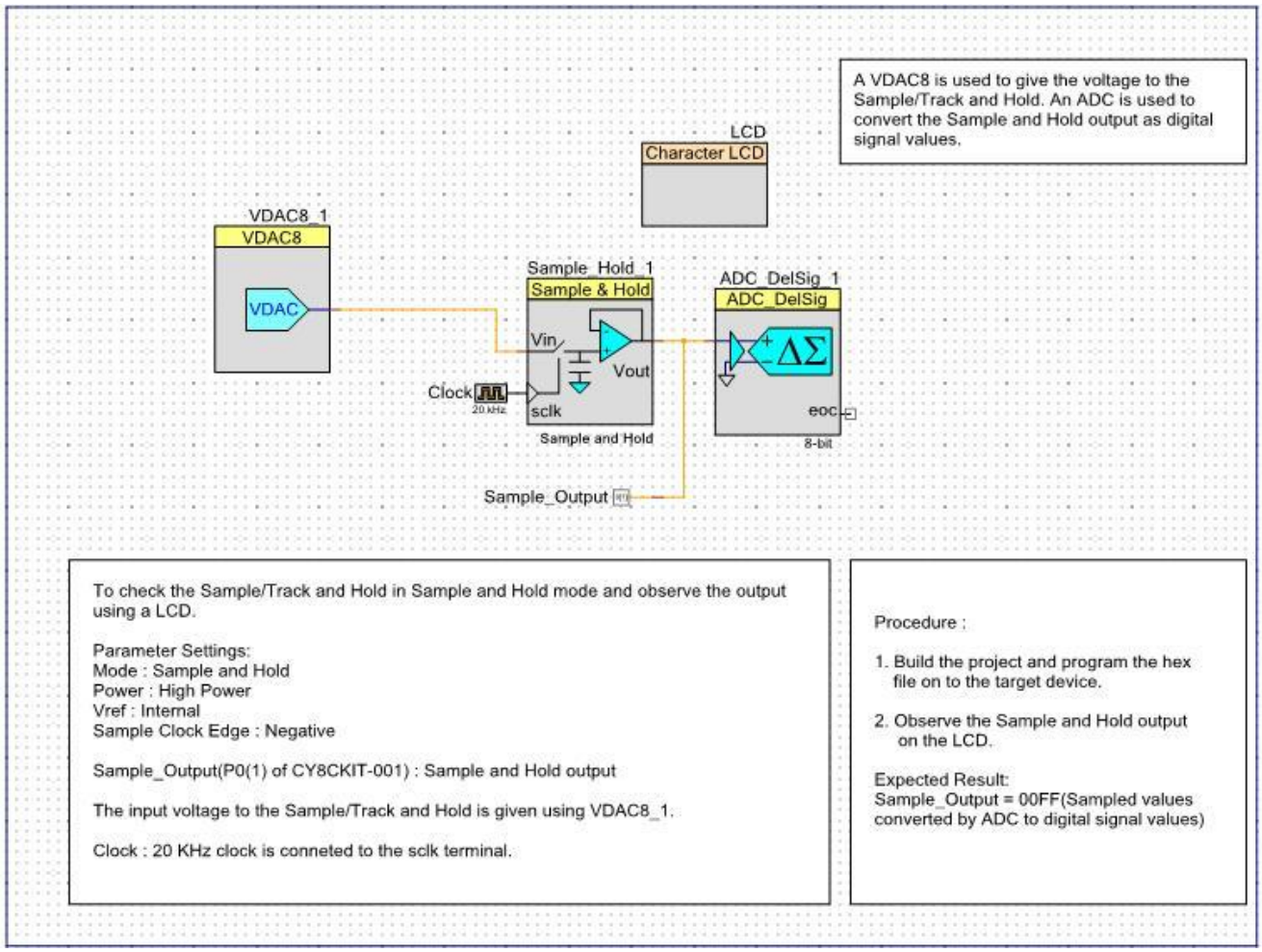
This example project demonstrates the working of Sample/Track and Hold component in Sample and Hold mode.

Development kit configuration

1. This project is written for a 2X16 LCD display as the one available in the Cypress kit CY8CKIT-001.
2. Build the project and program the hex file on to target device using MiniProg3.
3. Connect pins as described below and power cycle the device.
4. Observe the results on the LCD.

Project configuration

This project consists of Sample/Track and Hold component with analog input and output pins. An input pin is used to give the signal to the component. A VDAC8 or any other external signal can be given as the input of the component. A clock of suitable frequency (say 20KHz) is connected to the sclk pin. An ADC is connected to the output terminal of the Sample/Track and Hold component which converts the analog output signal to the digital signal. The converted digital output can be observed using a LCD.



Project description

In the main function all the components are started. VDAC8 component is used to give the analog input to the sample and hold component. Sample and Hold output is given to ADC component which converts the sampled analog voltage to corresponding digital value. ADC_GetResult16() API is used to display the ADC output on LCD.

Expected Results

Char LCD should display the following things:
Sample_Output (Sampled values of VDAC8 input voltage converted by ADC to digital values)
00FF

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