

S.Module2 HS12-20

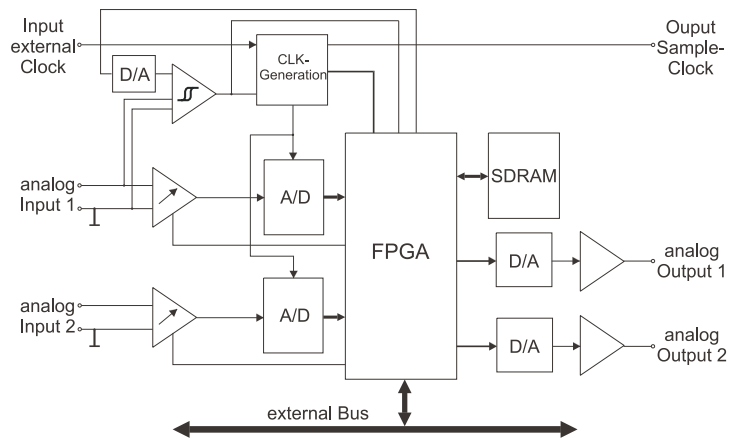
12-bit High Speed Data Acquisition System

2 Complete Analog Inputs

- 12-Bit A/D Sampling
- 20 MHz Sample Rate
- Up to 32 M x 16-Bit FIFO

2 Analog Output Channels

- 12-Bit D/A
- 83 kHz Update Rate



The S.Module2 HS12-20 is a small size data acquisition board, providing up to two complete analog input channels with a large FIFO-memory and two analog output channels.

Analog Inputs

Analog inputs are single ended and DC-coupled. The input voltage range can be set by Software from 0.5 up to 2.0 Vpp in steps of 0.1V. Analog signals digitized to 12 bits at sample rates up to 20 MHz per channel. Both input channels work complete synchron. The clock signal for A/D conversion can be provided by either an internal sample rate generator or by an external clock signal.

On the module are several trigger modes available. Beside an analog trigger with Software-adjustable threshold there are various digital trigger opportunities integrated.

After end of conversion data are stored in the FIFO memory. Using the FIFO allows interrupt generation after a single conversion or at several FIFO limits.

Analog Outputs

The module also includes two analog output channels with maximum update rates of 83 kHz. Output voltage range is fixed to $\pm 2.5V$.

Interface

The simple synchron interface contains a 16/32 bit data and a 6 bit address bus, an I/O enable, a read, a write, a clock and two interrupt lines. This enables simple connection of signal processing boards in

the S.Module2- and D.Module2-Series without additional hardware, as well as simple integration with other processors/controllers. Data can be transferred as single word or in burst mode. The transfer rate can be up to 400 Mbyte per second.

Please contact us for data sheets and detailed information.

Analog Specifications	
Inputs	2 single ended analog inputs
Input Voltage Range	0.5 - 2 Vpp (0.1V steps)
Input band width	0 - 500 MHz
Input Impedance	50 Ohm
Outputs	2 single ended outputs
Output Voltage Range	$\pm 2.5 V$
Power Supply	$\pm 3.3 V$
Digital Specifications	
A/D Converters	2 (one ADC for each channel)
Converter Resolution	12-bit
Sampling Rate	up to 20 MHz per channel
Memory	up to 2x 32M x 16-Bit FIFO
External Signals	external sample clock
D/A Channels	2 x 12-bit
Power Supply	+3.3 V
Mechanical Dimensions	
87 mm x 59 mm	

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