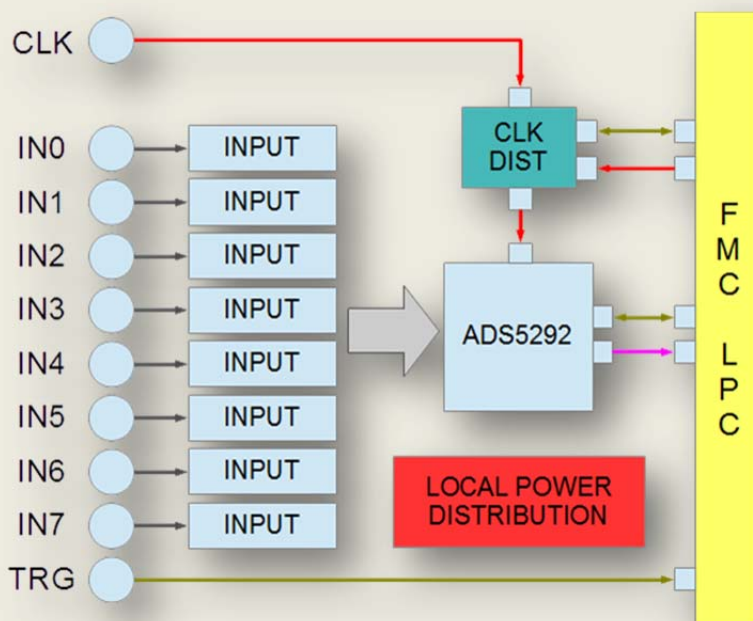
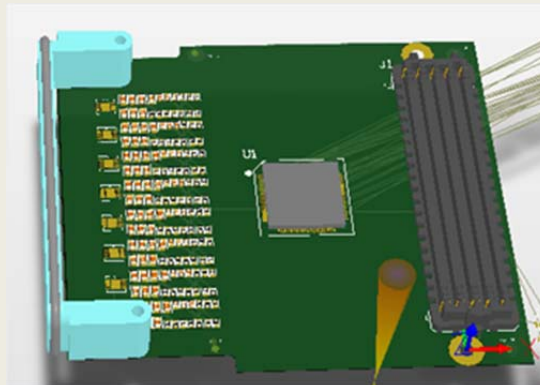


EFMC-D081 eight channel, 80MHz digitizer

General Description:

The EFMC-D081 is an octal channel A/D FMC daughter card. The card is equipped with eight 12 bit A/D channels, which can be clocked either by an externally supplied sample clock or FMC clock. In addition there is one trigger input for customized sampling control. The EFMC-D081 daughter card is mechanically and electrically compliant to FMC standard (ANSI/VITA 57.1). It has a low-pin-count (LPC) connector and front panel I/Os. The design is based on Texas Instruments' ADS5292 - octal channel 12bit 80MSPS ADC. The analog signals are DC coupled connecting to MMCX (SSMC is an option) coax connectors on the front panel. The EFMC-D081 allows flexible control over clock source, analog input gain, and offset correction through serial communication interface. Furthermore the card is equipped with power supply and temperature monitoring.

Block Diagram:



Specification is subject to change without further notice

Description		
Architecture		
Physical	Dimensions	69 x 76.5 mm
Standards	FMC – VITA57.1	
Combatibility	FMC Carrier Boards	EAMC-FMC500 ERTM-D102 EAMC-FMC270
Configuration		
Electrical properties	Power consumption	< 50 Watt
Data converter	Texas Instruments, ADS5292 analog to digital converter: Maximum Sample Rate: 80 MSPS Resolution: 12Bit	
Connectivity		
Frontpanel	Front panel inputs – MMCX (SSMC special option): <ul style="list-style-type: none"> ➤ 8 x analog channel ➤ 1 x clock ➤ 1 x trigger 	
Clock Distribution	The board is equipped with dedicated clock distribution unit. The reference clock can be sourced from a front panel connector or FMC connector. The clock is distributed to all crucial elements of the system.	
Communication links	Standard connection to HPC FMC connector: <ul style="list-style-type: none"> ➤ LVDS lines for data, ➤ COMC for control signals 	
Others		
Onboard	Voltage and current monitor Clock monitoring	With current monitoring Yes, readout via IPMI IPMI management control
Environmental	Operating temperature Storage temperature Relative humidity Weight	0 – 50°C -40 – 85°C 5% to 90%, non-condensing 0.2 kg
Ordering information	EFMC-D081	

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Developed by:
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Specification is subject to change without further notice

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