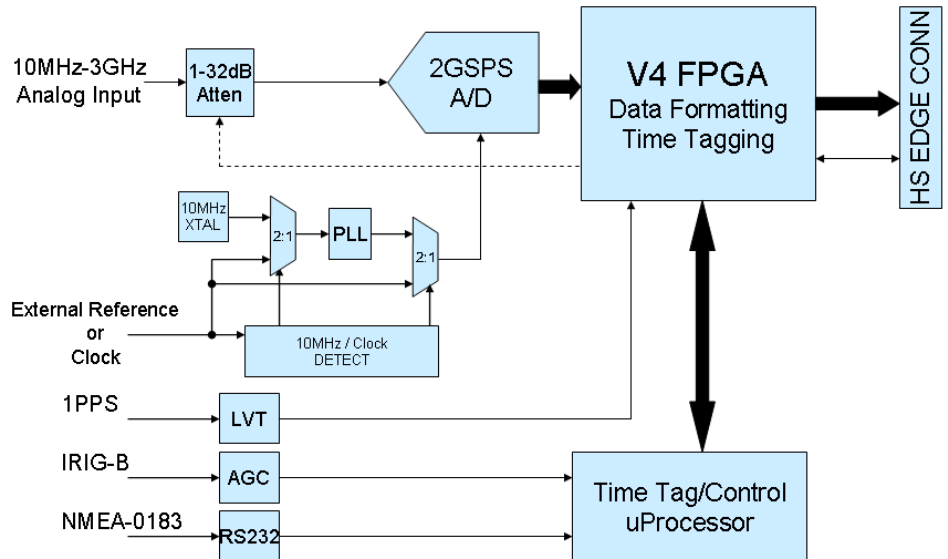


*The DA1200 DSPBrik
is a 2 Giga-Sample-
per-Second, 10 bit A/D
Input Module with a
3GHz analog input
bandwidth*

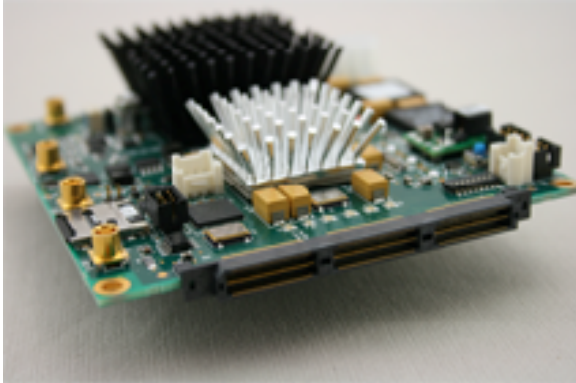


Features

- Wide analog input bandwidth (10MHz–3GHz)
- Powerful Virtex4 FPGA for data formatting and precision time tagging
- Precision time tagging of sampled data via NMEA-0183 or IRIG-B time code and 1-PPS inputs
- Digitize L-Band directly from a downconverter (800MHz B/W)
- One high-speed edge connector
- 4-1/4" square form factor (connector edge to connector edge)
- Connectivity with new and existing DSPBrik™ family products

Description

Rincon Research Corporation's Model DA1200 is the newest WideBand A/D input module of the DSPBrik™ family. The DA1200 is able to digitize analog input signals from 10MHz to 3GHz with proper bandpass filtering and Nyquist sampling techniques, this latest generation of A/D provides the user with extremely wide analog bandwidth coverage. Examples include direct digitization of an L-Band (950-1750MHz) output from a C-to-L or Ku-to-L downconverter with an 1800MHz sampling clock. On-board clock generation of 1800MHz or 2000MHz from a users 10MHz reference provides ease of use.



Specifications

ADC Input

Analog Input Level	+15 dBm full-scale, at 16 dB default attenuation, AC coupled
Analog Input Bandwidth	10MHz–3GHz
Input Impedance	50Ω
Connector Style	MCX
ENOB	7.1 bits

High-Speed Output

Edge Connectors	1
Style	QTH-090
Speed	250MHz 8 Lanes or 500MHz 4 Lanes
Signal Level	3.3V LVCMOS Data, LVDS Clock
Width	40, 64, or 80 data bits, 12 control/status bits, 1 clock (LVDS)

Time Tag

Accuracy	+/- 1 Input Clock Cycle
NMEA-0183	RS-232 input, 9600 Baud, 3 wire, 2mm connector
IRIG-B	0.5–10Vpp input range (AGC controlled), 50Ω/604Ω, MCX
1PPS	LVCMOS Level, 50Ω/10kΩ input termination, Rise/Fall Edge (selectable), MCX
External Reference/Clock	Ref: 10MHz Sinusoidal/Square wave, 750–2000mVp-p Clock: 1200–2000MHz, +8-+20dBm, Sine-wave, DC coupled 50Ω, MCX

Physical Properties

Dimensions	4-1/4"W x 4-1/4"H x 1-1/2"D
Operating Voltage	10-14VDC, 12VDC Nom
Power Connector	Molex 3-pin Mini-Fit JR™
Temperature, Operating	0C to +50C