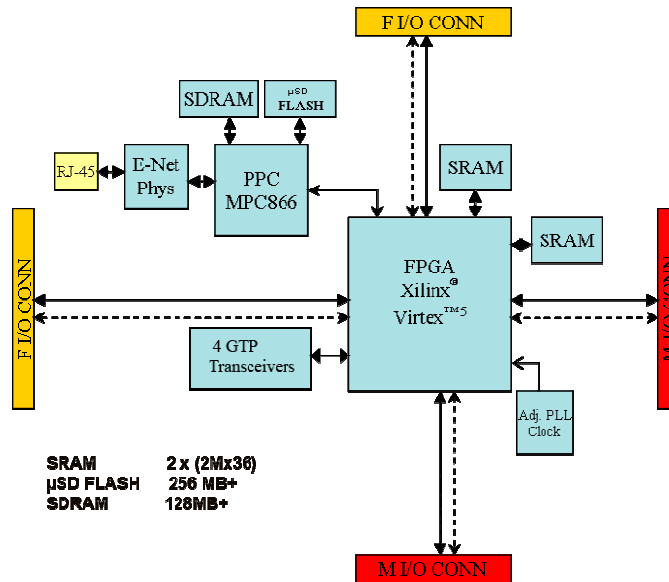


The DB1051 DSPBrik
is a NEW Xilinx®
Virtex-5 based FPGA
Processing Module
Compatible with First
Generation DSPBriks



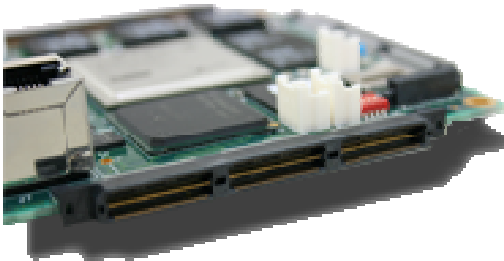
Features

- Powerful Xilinx® Virtex™ -5 FPGA for complex real-time data processing problems and ASIC development
- Four reconfigurable 88-pin I/O ports connected directly to FPGA with four differential clock pairs per port
- Four high speed matched impedance edge connectors
- Four GTP I/O ports accessible via one high-speed Mictor-style connector
- Two 72 Mb (2Mx36) zero-bus turnaround (ZBT) SRAM interfaces
- Power QUICC 866 PowerPC with Brikhouse Linux OS for command, control, and configuration
- 10/100 Base-T network interface for command, control, and reprogrammability by a remote Linux, Unix®, or Windows® PC host
- Up to 15 processing and I/O modules can be placed in a single 3U chassis
- 4-1/4" square form factor (connector edge to connector edge)
- Connectivity with existing DSPBrik family products

Description

Rincon Research Corporation's Model DB1051 is the next FPGA Processing module of the DSPBrik family. Based on the latest FPGA from Xilinx, the Virtex-5, the DB1051 is capable of edge connector clock rates of 500+MHz.

The new DB1051 DSPBrik provides the functionality of the original DB1000 with the enhancements of the Xilinx Virtex-5 family and increased data rates to the FPGA SRAMs.



Specifications

General

FPGA	Xilinx® Virtex™ -5
FPGA Devices	LX110T / LX155T / SX95T / FX70T / FX100T
PowerPC	MPC866 133MHz
Ethernet	10/100Base-T, RJ45
Serial Port	RS-232, 3 wire

Memory

FPGA	2 independent ZBT SRAM interfaces, 72 Mbits (2Mx36) each
PowerPC	1GB uSD card (support to 2GB) user/field replaceable 128MB SDRAM

High-Speed Input/Output

Edge Connectors	4
Number of Ports	4 per edge connector
Speed	500+ MHz
Width	4 x 22 pins (single ended) + 4 x 1 Differential Pair
Style	(2) QTH-090 (North/West) (2) QSH-090 (South/East)
GTP Access	(1) QTH Connector, 3.125Gb/Sec / GTP Port (4 ports/connector)

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