IP CORES

FPGA

1553B

ARINC 429

1553B IP Core

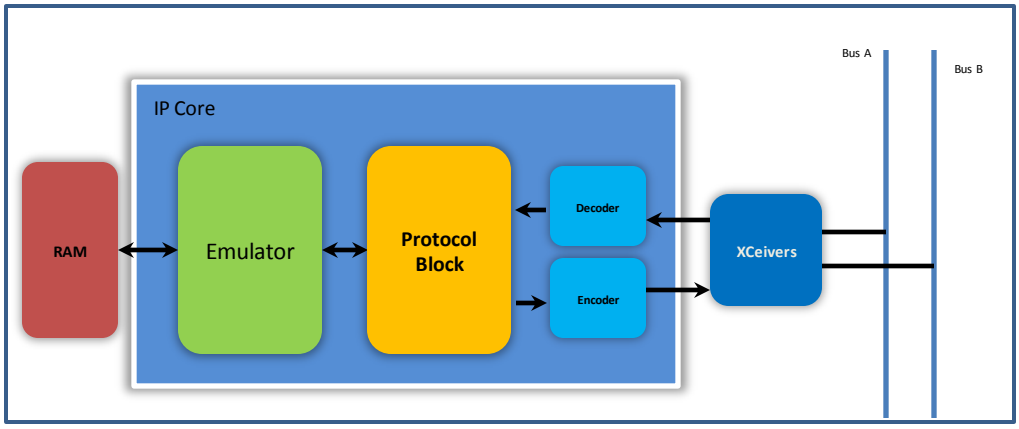
ComAvia Systems Technologies

1553B IP Core

1553B IP cores are FPGA based solutions for the 1553B domain, in the industries like aerospace, avionics and defense. The compact foot print of the IP core will require very less real estate, and the high speed clocks will give a very robust and reliable performance.

The single stream IP cores can be configured either BC,RT or monitor at a time and the multi stream IP core have a power to work all the three (BC,RT,MT) functionalities simultaneously.

The configurable register set allow the IP core to configure for filters, events and the functionalities.



IP Core Features

- Single Stream (BC or RT or Monitor)
- Multi Stream (Bc,RT and Monitor)
- Small Foot Print (887 Luts)
- High Speed Clocks (100 Mhz)
- Configurable Register Set
- Supports up to 1MB Ram
- Supports hardware like Xilinx, Actel, Altera, Lattice
- Suitable for customized boards and ASIC chips
- Emulator concept will replace any vendor specific register set

IP CORES

1553B IP Core

ComAvia Systems Technologies

Remote Terminal (RT) Features

- Multiple RT Selection
- Programmable Error Injection
- Modify data, status word on run
- BC to RT, RT to BC, RT to RT and Modecodes Response Cycle
- Robust IP Core Design as per DOD standards
- Full Error Detection
- Comply with ComAvia's RT Validation build as per the DOD standards.

Connections

- Direct or Transformer coupling
- Triggers for inputs and outputs
- configurable discrete

Power for Two channel

- +5V DC @ 1.5 Amp
- PCI power compatibility for 5V and 3.3V

Foot Print

The RT IP core is designed to use very less gates and it is very compact design . The code can be modified according to the customer requirement. It also support different hardware like Actel, Altera and Latice with minimal changes. Below table give the details about the IP core developed for Xilinx Spartan 3 series

Vendor	Family	Utilization(4 LUTs)
Xilinx	SPARTAN 3/Vertex 5	887
ACTEL	PROASIC 3	Equivalent to Xilinx
ALTERA	CYCLONE 3	Equivalent to Xilinx
LATTICE	XP2	Equivalent to Xilinx