

FPGA BASED REMOTE DATA CONCENTRATOR TO REPLACE OBSOLETE ELECTRO-MECHANICAL RELAYS

Overview

Cyient's FPGA based module acts as Remote Data Concentrator which uses programmable digital logic to replace electromechanical relays in the power distribution system.

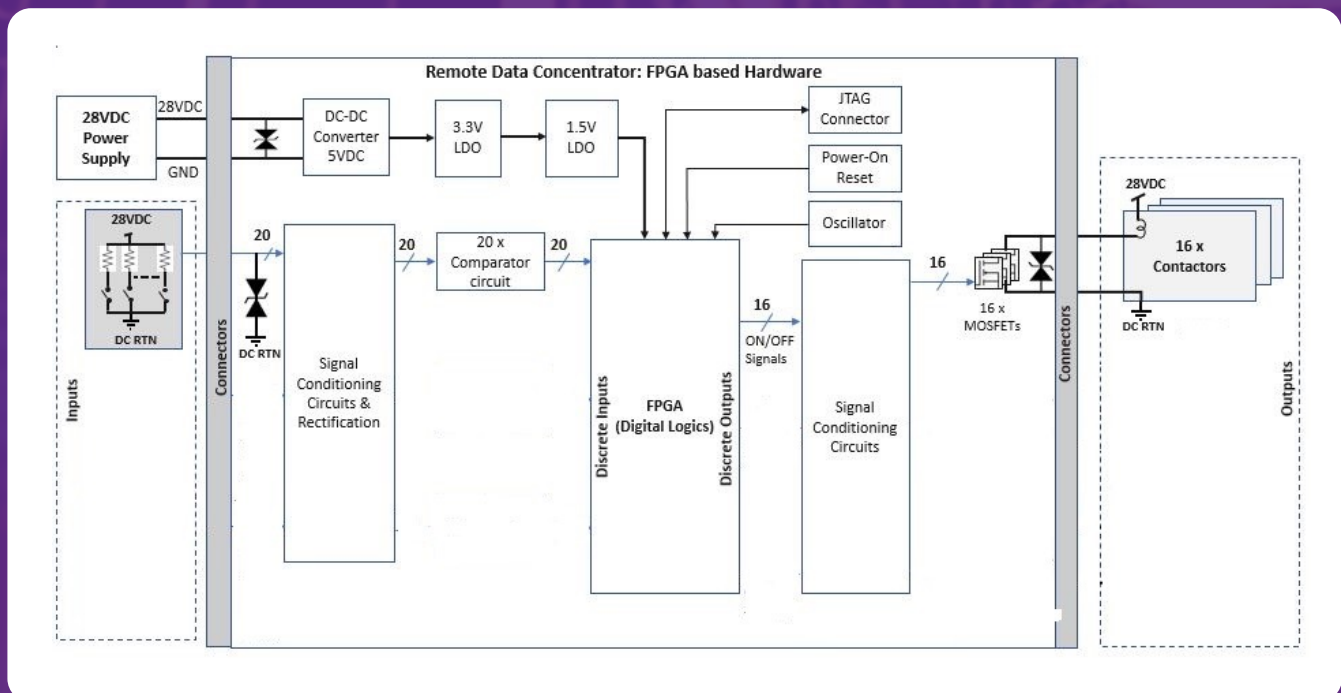
Key Features

- Design based on FPGA SmartFusion2
- Replaces multiple low current electromagnetic relays used in relay logic applications
- Support manual testing and HIL based Automatic testing with LABVIEW
- Manual testing include the simulating switches and indications
- Configurable for inputs and outputs
- Outputs through MOSFET switches can drive heavy duty contactors

Technical Specifications

- Operating Voltage: 18 to 32 VDC
- Dimension: 345 mm X 350 mm
- Power consumption: Less than 10W
- Input channels: 20 Nos
- Output channels: 16 Nos (Each channel drive output 28VDC, 300 mA)

Block Diagram



Benefits

- Programmable logic implementation
- Support HIL based Automatic testing with LABVIEW
- Operation Flexibility

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