28VDC SOLID STATE POWER CONTROLLER

Overview

Cyient offers an STM 32 based programmable Solid State Power Controller (28VDC) with inbuilt protections which can replace the conventional electro-mechanical circuit breakers and relays for DC network voltages & high current applications. This can be configured for AC applications (115V AC, 28V AC) as well.
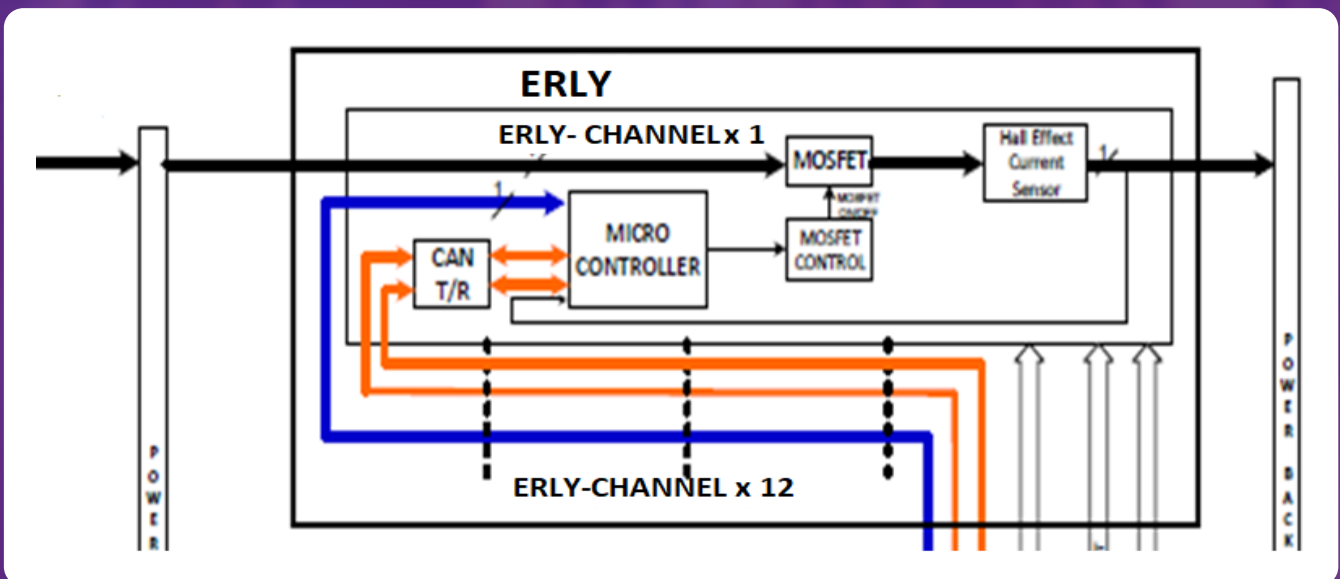
Key Features

- Nominal current 15A
- Programmable I2T curve: Standard and Slow trip
- Programmable base current: % of Nominal current
- Protection: I2T, Overload and short circuit
- Redundant CAN communication based control
- Consists of 12 channels
- Channels can be paralleled to increase the current up to 60A
- Configurable for DC and AC application
- Includes 4nos solid state Auxiliary contacts of 3A ratings
- Status monitoring
  - Open/Close/Tripped, Voltage, Current, Faults
- Control
  - Close, Open, Reset

Technical Specifications

- Input Voltage: 18VDC to 32VDC
  97VAC to 134VAC
  18VAC to 32VAC
- Frequency: 370 Hz to 430Hz (for AC)
- No.of Channels: 12
- Channel Nominal Current: 15ADC/AC 16< Current <150ADC/AC
- I2t profile: 800sec < trip time < 80msec (Standard curve)
- Short Circuit Protection: >155ADC/AC (Hardware based)
- Operating Temperature: -40°C ~ +85°C
- Physical Dimensions: (L X B X H) 231mm X 194mm X 32mm
- Environmental Conditions for Airborne Equipment: RTCA/DO-160G
- Design Assurance Guidance for Airborne Electronic Hardware: RTCA/DO-254
- Software Considerations in Airborne Systems and Equipment Certification: RTCA/DO-178C

Block Diagram

Benefits

Overall "Low cost of ownership" to the customer due to

- Higher Power density
- Lower power loss
- Late point configuration for base rating an type of I2t curve

Our USP

- Common design for wide range of AC and DC application
- Includes 4 nos of Auxiliary contact of 3A rating