

DP-cPCI-4509

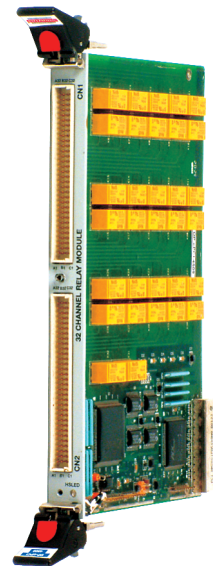
32 Channel, 1 Form C 2A Relay Switch

KEY FEATURES AND BENEFITS

- Contact rating:
 - Max. Switching Voltage of 220V AC_{peak} / 30V DC
 - Max. Switching Current of 2A for both DC and AC
- Software verification of latched data
- Relay status monitoring
- Rugged connectors for field terminations
- Hot Swap compliant
- Single slot 6U form factor
- Windows 2000 drivers provided
- RT Linux drivers provided

APPLICATIONS

- Hardware simulation
- Digital simulation
- High reliability systems
- Automatic test equipment
- Relay outputs for soft PLCs



D

DESCRIPTION

The DP-cPCI-4509 is a 32 channel relay switch module. This module is constructed using 2 Form 'C' (DPDT) relays.

It provides for 250V DC isolation between channels. Out of the two contacts in each relay, one is used to provide the status of the relay through read back and the other is used for switching purpose.

The user can write the command for the selected channels on to the Primary latch of the FPGA section. Readback is available to confirm the selected commands. On command, the data from the primary latch is transferred to the secondary latch. The relay driver section provides the necessary drive to switch ON the relays. The buffers in this section helps to drive the relay coils.

RATINGS

The maximum voltage that can be switched with this module is 30V DC and upto 250V AC(rms). The maximum relay current rating is 2 Amps for both the DC and AC voltages.

HOT SWAPPABLE

DP-cPCI-4509 relay scanner module complies with PICMG 2.1R 1.0 Hot swap specifications.

FIELD TERMINATION

The inputs and outputs are terminated on 96 pins Euro male connector on the front panel.

SOFTWARE SUPPORT

The module is supplied complete with device drivers in Windows 2000 and RT Linux. Please contact factory for support in any other operating system such as VxWorks, QNX, INTime, Lynx etc.

DATA PATTERNS

DP-cPCI-4509

SPECIFICATIONS

SWITCHING CHARACTERISTICS

No. of Channels	32 channels 1 Form C
Maximum Switching Voltage	DC:220V, AC _{peak} : 220V
Maximum Switching Current	DC:2A, AC _{peak} :2A
Maximum Switching Power	60W

DC CHARACTERISTICS

Closed Channel Resistance	<450m / Channel
Insulation Resistance	10 ⁹ at 500VDC

AC CHARACTERISTICS

Relay Life	
At No Load	10 ⁷ Operations
At Rated Load(Resistive 2A 30VDC)	10 ⁵ Operations
Relay Closure Time	12ms (excluding contact bounce time at nominal coil voltage)
Power up - State	All NO contacts are open
Power down - State	All NO contacts are open
Relay Release Time	10ms (excluding contact bounce time at Nominal Voltage)

ISOLATION

250V DC channel to channel

POWER REQUIREMENTS

5V, 2.6A

MECHANICAL

Board	233.35mm (H) x 160mm (D)
Module	6U (H), 4T (W) cPCI-6U

CONNECTOR

96 Pin Euro male connector

ENVIRONMENT

Commercial and rugged versions

ORDERING INFORMATION

DP cPCI 4509 3 0 0

Factory options specified based on applications

3 - Commercial version
6 - Rugged version

BLOCK DIAGRAM OF DP-cPCI-4509

