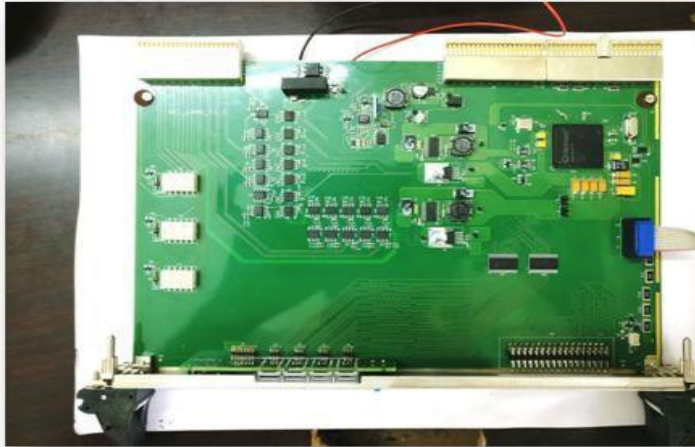




Table 1-cPCI BASED OPTICAL ENCODER INTERFACE CARD



Spartan 6 FPGA based cPCI Interface based Industrial grade 6U, 4HP, 66MHz, 16 Channel Optical Encoder Interface Card.

- **Differential Optical encoder interface input are received using RS485 transceivers using 2.5 KV digital isolators.**
- **Fault-protected RS485 TRANSCEIVERS that feature $\pm 60v$ protection from signal faults on communication bus with error free transmission upto 10Mbps - MAX13443**
- **DIGITAL ISOLATORS with 2.5kvrms isolation rating and support high speed data rate upto 100 Mbps - ADuM1100**
- **Standard cPCI HOT-SWAP CONTROLLER based Design.**
- **Standard 66MHz cPCI INTERFACE between FPGA and cPCI connector.**
- **Additional PCB for accommodating QUAD DISPLAY LCD OUTPUTS having low power CMOS technology on the front panel, operating at 3.3v with a clock frequency is 4Mhz - HCMS-3906**
- **Relay outputs and LED indications**
- **Front panel IO CONNECTORS for monitoring and debugging important signals.**
- **100 ohm differential, 65 ohm and 50 ohm impedance controlled board design**
- **Complicated power supply planning.**
- **PCB SI, PI, Thermal Analysis done.**

THIS HAS BEEN DEVELOPED FOR IGCAR, KALPAKKAM FOR PROCESS INSTRUMENTATION APPLICATION