

Mezzanine Card Design for Queen's University of Belfast

This project, carried out for the Queen's University of Belfast, consisted of investigating the functionality of the Pamette board, a PCI card from DEC containing 5 Xilinx XC4000 FPGAs, and the provision of consultancy and the design and layout of an 8-layer PCB adhering to the CMC (Common Mezzanine Card - IEEE1386) format, to carry a further 2 Xilinx FPGAs, DRAM, Flash ROM and a microprocessor.

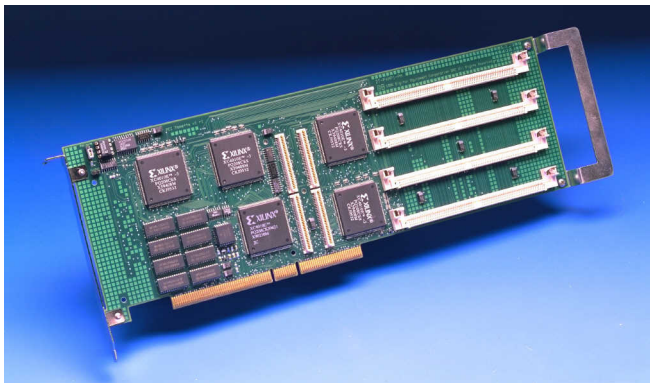


Figure 1: PCI Pamette card

The mezzanine card can connect onto and interface with the Pamette board to extend its capabilities, or operate completely independently as a standalone processing unit.

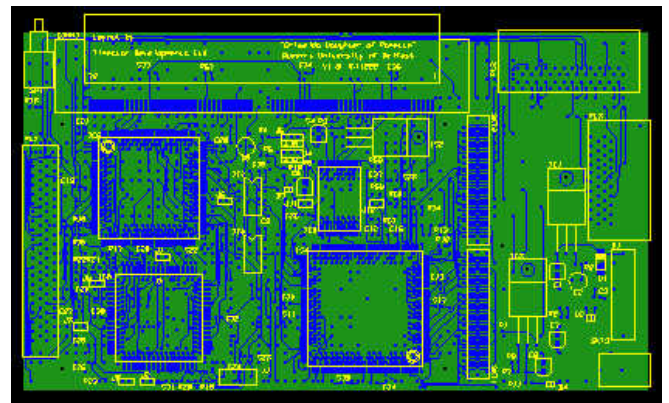


Figure 2: Mezzanine card layout

The purpose of this the project was to develop a powerful and flexible hardware platform as part of a multidisciplinary research project into the future applications of broadband communications networks, including robotics and telepathology