been set up to provide a range of services to both the military and commercial markets. Initially founded to meet the military requirements for high reliability interconnection systems, the group now offers a wide range of products and services which include:-

#### NAFI Interconnection system

#### Press-Fit Backplane Systems

Printed Circuit Board Assembly

### Module Assembly



## NAFI interconnection system

NAFI (Naval Avionics Facility Indianapolis) was developed in the late 1960's for the US Navy for defence and aerospace applications.

Based on blade and tuning fork interconnection system on a 0.100" x 0.100" grid.

These are designed specifically to meet the requirements of MIL-C-28859 and MIL-C-28754.

## **Backplane Overview**

#### Advantages

- Ensures a high reliability gas-tight connection
- Results in optimum contact retention within the panel

- Minimises panel stress and growth, and distortion of the plated through hole.
- Enables contacts to be easily replaced, with no loss of reliability.

## Connectors

The Albacom series of NAFI daughter board connectors incorporates the blade contact half of the fork and blade interconnection system. Bodies fabricated from lightweight extruded aluminium, provide a cost-effective and versatile combination of design

Manufactured in a range of lengths on a 0.100"(2.54mm) x 0.100"(2.54mm) grid configuration, Albacom connectors meet the requirements of applications while maintaining the design tolerances necessary for optimum mating performance.

The aluminium body also acts as a shield against electromagnetic interference (EMI). Special "First make/Last break" contact arrangements reduce the mating forces. Various keying methods are available to ensure effective polarisation of the daughter card.

To facilitate daughter card testing, Albacom offers a series of fork card extenders. These card extenders, employ the same design technology as the blade connectors and are designed to allow easy access to daughter cards undergoing in-circuit test.

Albacom connectors are compatible with most fork systems; however, highest mating performance and interconnection reliability is obtained in conjunction with Albacom printed circuit backplanes.

Albacom connectors, ideally suited for all military and aerospace fork and blade applications, meet the appropriate standards (MIL-C-28754).



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# **Press-Fit Backplanes**

- Albacom offer a complete line of press-fit technology. We support a multitude of architecture, including VME, VME64, VME64X, CompactPCI, VXI, PXI.
- Backplane testing using Innovate 7030

# Printed Circuit Board Assembly

#### • Conventional through hole

Assembly of conventional throughhole components is carried out to IPC standard at well equipped antistatic workstations by an experienced assembly team.

#### Surface mount

Our surface mount capability has been configured to serve our core business of small to medium volume orders

#### Conformal coating

Conformal coating either acrylic or polyurethane.



## Flexi-Circuit Connectors

The Albacom series of three, four and five-row flex-circuit connectors are specifically designed to meet the packaging needs of high density Military/Avionics applications. A wide variety of board/heat exchanger designs can be accommodated due to the dimensional adaptability of the flexible circuitry.

Representing the male half of the high reliability tuning fork and blade interconnection system, the connectors incorporate blade contacts arranged on 2.54mm centres, while the flexible circuit tracks linking the daughter board to the connector are arranged on 1.27mm, 1.016mm and 0.847mm centres for the four-row, five-row and three-row versions respectively.



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## **Albacom limited**

Albacom Limited is a high technology company based in Dundee, Scotland. Formed as a Management Buy-Out in 1990, Albacom can trace its origins back to the Dundee division of Ferranti which was established in 1953 to manufacture TR-cells for the defence industry. Since then Ferranti Dundee and Albacom, a successor company, have supplied products into almost every major UK weapons platform over the last 30 years. These include surface and submarine naval vessels, aircraft, missiles and land-based systems. Albacom has therefore accumulated decades of experience in the following technology areas.

Microwave amplifiers and TWTs
Power Electronics
Interconnection Systems

More recently, Albacom has diversified into non military markets where high reliability is paramount. Albacom Power Solutions now offers product into areas as diverse as offshore oil and gas, ozone generation, induction heating and renewable energy. In order to meet the demands of a highly discerning customer base Albacom has achieved Quality Assurance accreditation to ISO 9001:2000 (Registration No. FM30980).







The name "Dundee" is thought to have derived form the Celtic Duntaw - the hill on the Tay - or after the Iron Age Fort on top of Dundee Law called Dun Diagh. The city is lively and friendly with plenty to do and is centrally placed only one hour from Aberdeen to the North and Edinburgh to the South. It has direct air connections to London City Airport and has a deepwater port for passenger and cargo vessels. The population is adequately served by many centres of learning. Physics, Mathematics, Chemistry and Electronics are among the degrees offered by the two local Universities and several colleges of Further Education.

To discuss your requirements please contact us at:

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