NEWS in brief

Increasing links between all phases of electronics manufacturing are the driving force behind the new format that will be seen in EP&P's news section. Packaging, production and test news are unified, without separate categories for each.

A recent visit to Ford Motor Co.'s operation in Markham, Ontario, reveals the integral role of SMT in automotive electronic applications. Page 12.

The demand for electronic chemicals and materials is expected to reach $15 billion by 1989 up from $7.7 billion in 1984. Substrates will remain the largest single commodity in this consumption. Page 12.

Design problems for SMT are aired and solutions suggested at NEPCON Northwest technical sessions. Page 18.

Over 100 speakers and 65 vendors emphasize an "automated systems" theme at the first ADEE East in Boston. Page 20.

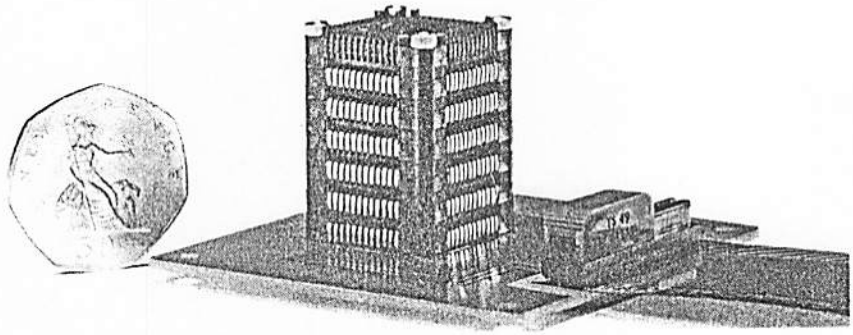
By 1990, half of all PC boards will utilize SMT and 41 percent of all components will be surface-mount devices. Page 22.

A NASA representative tells the Chicago/Milwaukee ISHM chapter that the aerospace agency stands ready to assist industry. Page 22.

High I/O counts present problems in packaging that must be overcome, since the number of interconnections is expected to increase. Page 24.

A new system for stacking and interconnecting VLSI devices packaged in leadless chip carriers wins recognition, along with other innovative inventions at INTERNEPCON/UK. Page 13.

Innovative products cited in U.K.



Dowty Electronic Interconnect was given a product innovation award at INTERNEPCON/UK85 for its Chiprack, an interconnecting system for VLSI chips. Chiprack is shown here next to a British 50-pence coin, about the size of a U.S. quarter.

Brighton, England — Awards were presented to three British companies at INTERNEPCON/UK85 here in recognition of outstanding product innovations.

"Most Innovative Electro-Mechanical Product" was garnered by Dowty Electronic Interconnect, a unit of I.C.D.C.'s Dowty Electronic Components located in High Wycombe, Bucks. Their winner was "Chiprack," a modular, three-dimensional system for interconnecting VLSI devices packaged in leadless chip carriers.

Chiprack is based on the concept of stacking chip carriers in a vertical structure. It eliminates the need for custom-designed multilayer PC boards, the company claims, by incorporating complex interconnection patterns in and between the structure's layers. Double-sided leadless chip carriers are accommodated in the system, enabling connections to be made from

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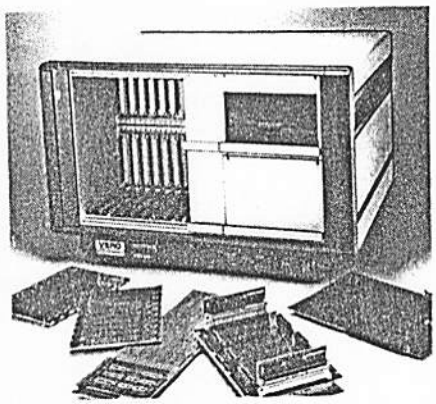

***BICC-Vero Ltd.** received a product innovation award at INTERNEPCON/UK85 for their Microrack.*

Hybrid circuit technolo

Anaheim, Calif. — A licensing agreement between EMCA/Rolm & Haas and the Resistive Products Division of TRW was announced here at the ISHM conference. TRW, over the past ten years, has perfected a patented hybrid circuit technology based on copper, nickel, tantalum and tin. EMCA is a major supplier of cermet materials based on silver, gold, platinum, palladium and ruthenium. The licensing agreement will allow EMCA to adapt and refine TRW's process for introduction into the commerical hybrid market. One of the major refinements will be to modify the copper-based system to be firable at a conventional 850°C to

Innovative products

Continued from page 13.

the top and bottom of a VLSI device.

Semicustom chips are seen by Dowty to complement the Chiprack concept. The order of pin-outs may be planned at the chip-customizing stage to match the vertical stacking requirements of Chiprack without the need for intermediate rerouting layers housing no chips.

A six-layer prototype Chiprack is being evaluated with the Z80 chip set. Dowty indicates the Z80 processor system in a Chiprack takes only 20 percent of the volume that standard DILs take (DIL, dual in-line, is the European term equivalent to DIP). By comparison, a surface-mounted Z80 system takes 54 percent of the volume of a DIL approach.

While the Chiprack is smaller in horizontal dimensions and overall volume, its vertical height for the Z80 system is 2.5 cm, compared to 1.5 cm for DILs and 1.1 cm for surface mount. The Chiprack concept was the subject of an article by Dowty's Mike Anstey in the April 1985 issue of EP&P (page 84).