



# ELSA ERNI System

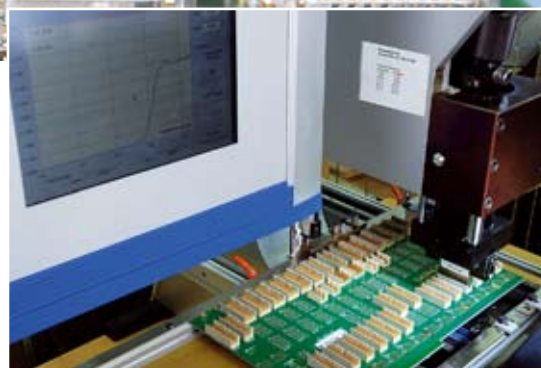


From the beginning, we have been developing key technologies in-house here at ERNI. That is how we control what we supply - from scratch: design, components, tool making, controls, processes, testing technology. This strategy has established ERNI as a global leader in the connector industry.

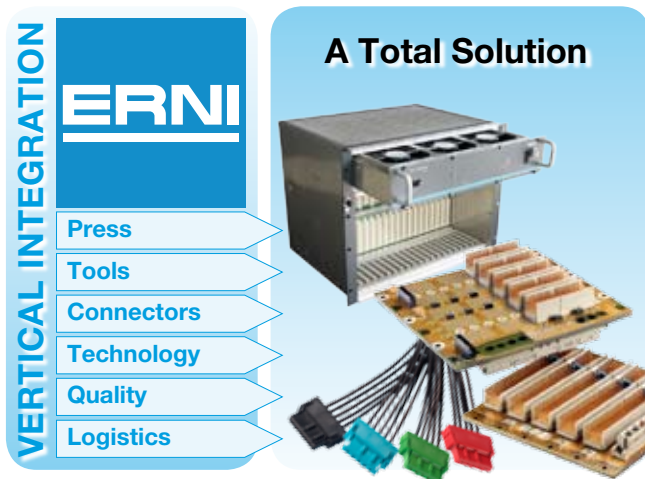
With ERNI, you will have access to all the resources of a specialist in connectors: Expertise gained from the data and telecommunications industry, machinery and plant controls, and many more sectors results in a synergy that will increase your performance, improve safety and reduce your costs.

By engaging ERNI's system assembly service

- Assemble any component from any manufacturer
- Customers reduce costs with ERNI products
  - ☒ Invest in press machine
  - ☒ Purchase tools
  - ☒ Employ skilled technician for PCB assembly
  - ☒ Logistics of components & PCBs
- No tooling charges when ERNI connectors are used
- Customized connector tooling available
- Production localized to customer requirement
- "Red Carpet " service of 48 hour turnaround time
- No Job is too small or too large
- ERNI's know-how in connector and systems technology
- Outstanding ERNI quality
- ERNI's logistics and strategic partners
  - o PCB suppliers
  - o Cable suppliers



ERNI builds our own connectors, tooling and presses which provide you the highest level of experience. Let us combine your ideas, ERNI products and our engineering experience to bring your product to reality.



## ENGINEERING

### Conceptualization

- From customer idea to Statement of Work (SOW)
- Structuring
  - o Connector selection
  - o Form factor
  - o Data architecture

### System Layout

- Signal routing and optimization
- Footprint and component placement
- Power distribution and electrical safety aspects

## PRODUCTION CAPABILITY

### New Product Introduction

- Dedicated resources for prototyping are available

### Flexible Production

- Low-volume high-mix production. No order is too small
- Customized tooling manufactured by ERNI
- Manual soldering is available

### Redundant Volume Cable Production Capabilities

- Production localized to customer requirements
- IDC, discrete wire and hand soldering assemblies

### Integration to Complete Sub-Rack Solutions

- Chassis available with
  - o Backplane
  - o Power supplies
  - o Fans
  - o Cooling fixtures
  - o Cables
- ESD assembly line

## SUPPORT

### Logistics and Strategic Partners

- Supply chain optimization
- Strategic relationship with PCB and cable suppliers

### Testing

- Low NRE charges. Quick test development
- Complete Electrical Net-list testing
  - o Continuity
  - o Isolation
  - o Digital Multi-Meter
- Automated Optical Inspection detects
  - o Rotated or incorrect components
  - o Bent pins
  - o Missing pins
  - o Unseated connectors

### Standards in Quality Support

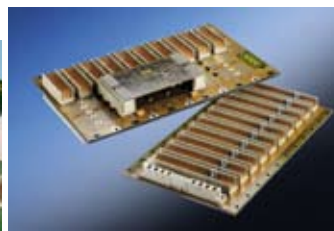
- Connector manufacturing since 1950s
- Pressfit technology since 1970s
- System assembly since 1980s



Cable assembly and enclosure



ATCA /customised backplane



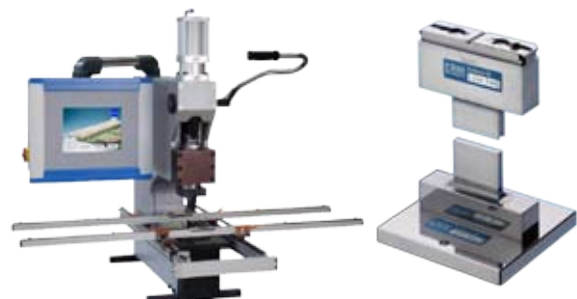
CPCI /customised backplane



Flat ribbon cable assembly

### ERNI EPC3X Hydro-Pneumatic Press-fit Assembly

- Maximum and minimum limit value for press-in force
- High process reliability based on press-in force
- Component specific press-in force
- Press-in force control and visualisation
- Statistics of press-in process for quality tracking
- Lowerable tool base
- Sliding table
- Database for connector and PCB data



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