

**ELINCLUS: Clusterul și inovarea.  
Accesul firmelor la know-how industrial și  
tehnologii de vârf.**

# 2011!

**ALUMINUM**

**Nivel crescut de integrare – Miniaturizare**

**Frecventa inalta: 30GHz**

**Contactare fara plumb & noi materiale**

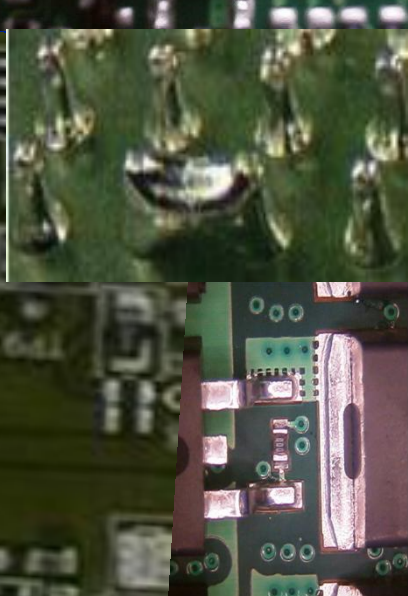
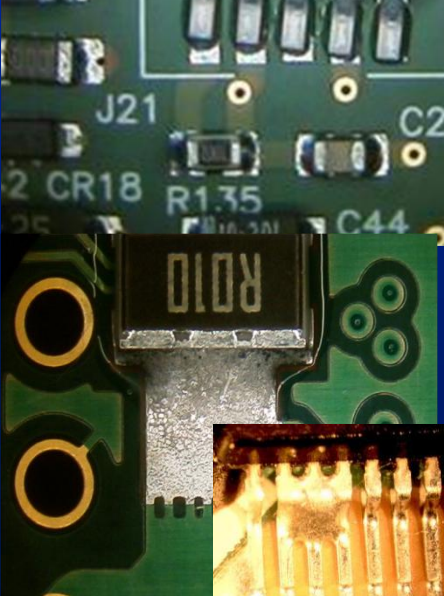
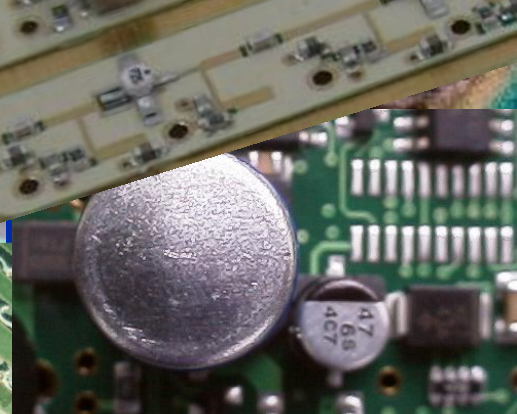
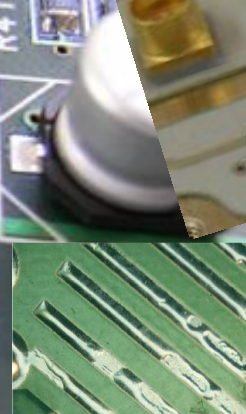
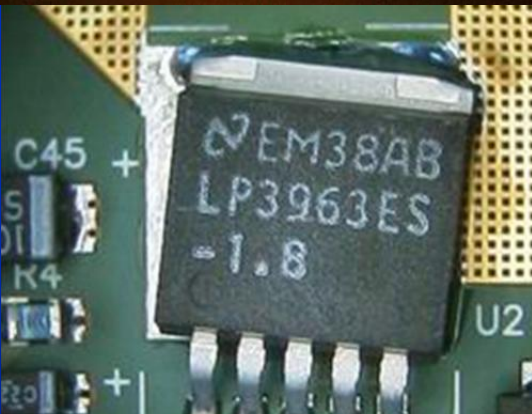
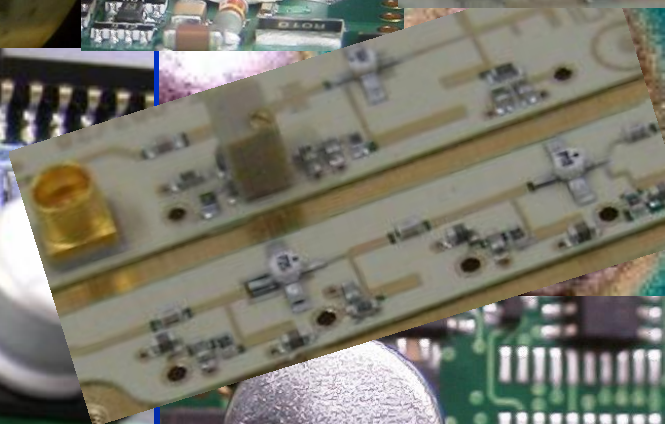
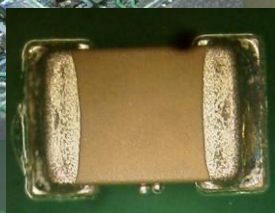
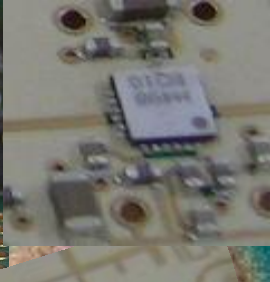
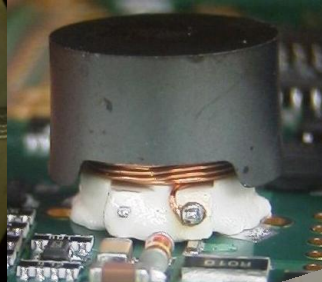
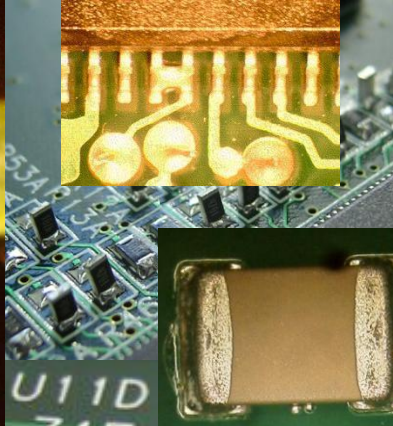
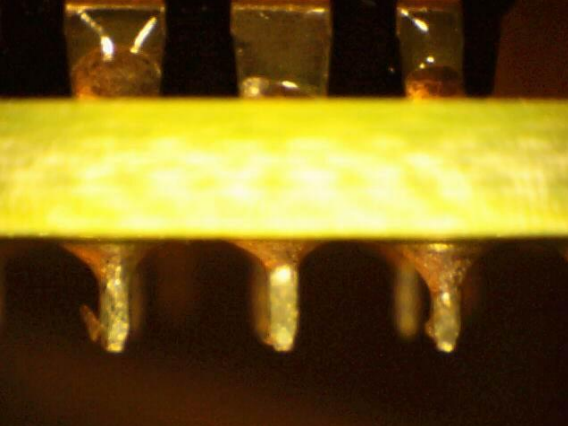
**Conditii de lucru extinse – FIABILITATE**

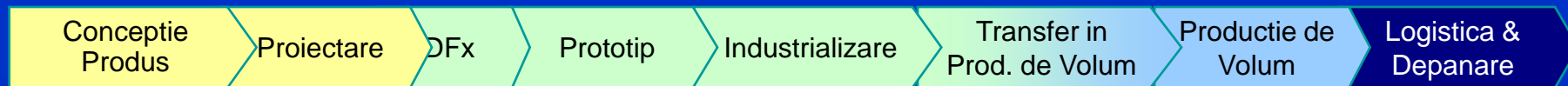
**Conditii de calitate totala – SIX SIGMA**

**Timp redus de lansare pe Piata & Reducere costuri**

**STICLA !**







## Sugestie DFX

- Design pentru Achizitie
- Design pentru Prelucrare
- Design pentru Fabricare
- Design pentru Testare
- Studiu de Fezabilitate
- Analiza RoHS
- Analiza BOM

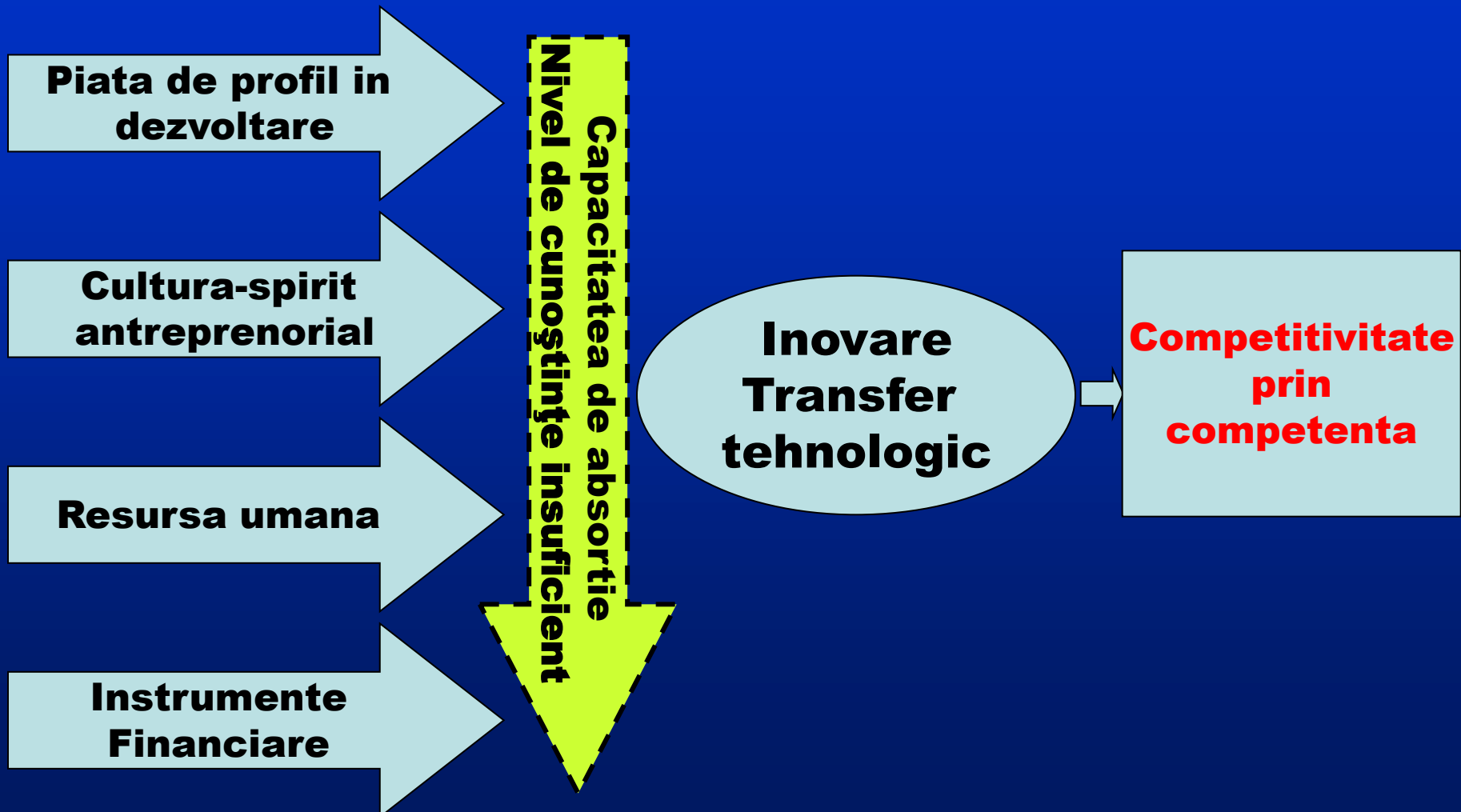
## Realizare Prototip

- Management Date Produs
- Identificare surse & Achizitie Componente
- Dezvoltare Proces si Teste
- Asigurare Instrumente
- Asamblare, Testare si Depanare
- Certificare

## Productia de serie

- Management Date Produs
- Identificare surse si Achizitie Componente
- Dezvoltare Proces si Teste
- Asigurare Echipamente si Instrumentar
- Design Ambalaj
- Analiza de Mediu
- Planificare Calitativa
- Planificare circuit aprovizionare
- Instructiuni Dirijare & Lucru
- Productie Pre-Serie
- Calificare Process
- Calificare Echipamente
- Teste de Fiabilitate
- Raport Pre-Serie
- Identificare
- Proiectare logistica si distributie

# Factorii de influenta in Inovare si Transferul tehnologic



Dezvoltare economică cu largi implicații sociale



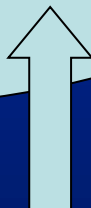
Competivitate prin competență

Catalizatori:  
Mediul

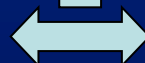
Socio-Economic & Financiar



**MASA CRITICĂ A  
INOVARII**

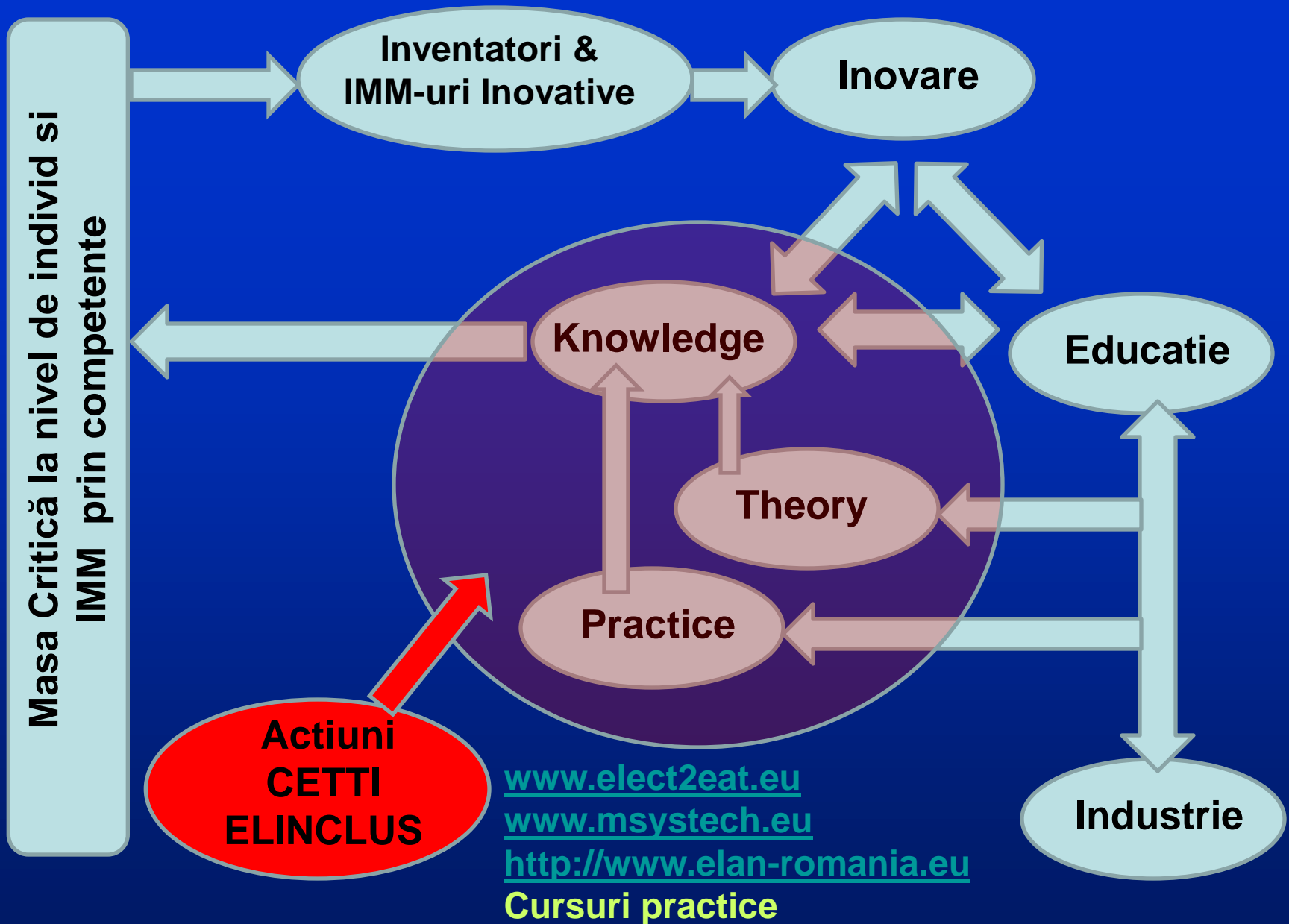


Factorul uman



Cultura tehnică & tehnologică





A photograph of a workshop or classroom with a slanted wooden ceiling. Several wooden desks are arranged in rows, each with a yellow plastic chair. The desks are equipped with various items, including a microscope, a computer monitor, a lamp, and other electronic equipment. The room is brightly lit, and the overall atmosphere is that of a functional, hands-on learning environment.

# Assembling Workshop









# Principalele etape in crearea unui cluster

- **Pregatire**
- **Implementare**
- **Dezvoltare**

## **Etapa de pregatire-factorii cheie:**

- **Analiza SWOT**
- **Stabilirea strategiei si a obiectivelor comune**
- **Identificarea partenerilor**
- **Elaborarea unui plan de afaceri**



# **Ce este un cluster?**

**Exista multe definitii ale clusterului. Prof. Michael Porter defineste clusterul ca o « concentrare geografica de companii interconectate, furnizori specializati, furnizori de servicii, firme din industrii inrudite, universitati, institute de cercetare si asociatii de comert, administratii publice locale din domenii specifice, care se concureaza dar si coopereaza »**

**Istoric: Marshall (1890); Schumpeter (1939); Jane Jacobs(1969); Becattini(1979)**

# Care sunt principalele dimensiuni ale unui cluster?

- **concentrare geografica de firme specializate, abilitati si competente avansate si institutii support care stimuleaza fluxurile de cunostinte ca rezultat al proximitatii**
- scop functional in vederea furnizarii unei game de produse si servicii specializate catre grupuri de clienti; clustererele faciliteaza atat competitia intensiva cat si cooperarea stransa, asa numita « co-opetitie »**
- liant social sau« institutional fix » care aduna impreuna diferiti actori ai inovarii—cum ar fi universitati, mediu de afaceri si autoritati publice**

**Clustererele nu sunt stabile pe o perioada indelungata de timp ci ele se schimba continuu. Succesul clusterelor depinde de capabilitatea lor de a se schimba si adapta.**

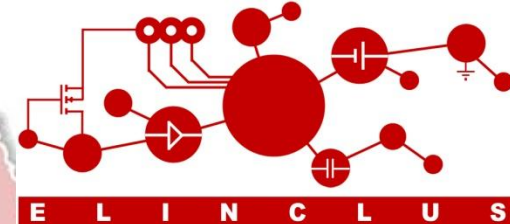
# Care sunt jucatorii intr-un cluster ?

## « Triple helix model »

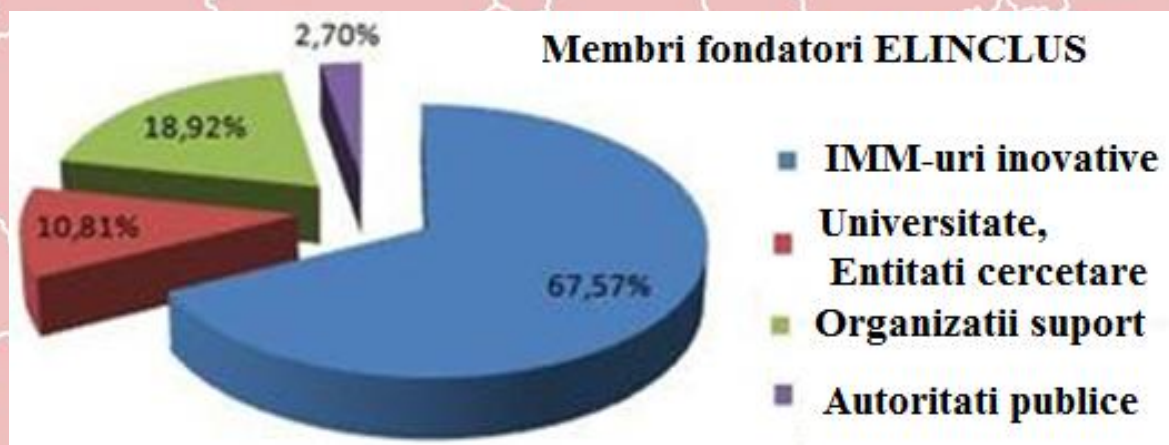
- **Industria in principal IMM(inclusiv start-ups si spin-off) care reprezinta cererea de inovare**
- **Cercetare si inovare(universitati,institute de cercetare-dezvoltare-inovare, centre de training care reprezinta oferta de produse si servicii inovative**
- **Autoritati cu competente in facilitarea proceselor inovative**

**« Four clover model » In Romania cel de al patrulea jucator este o institutie catalizator cum ar fi societati de consultanta, entitati pentru transfer tehnologic etc**





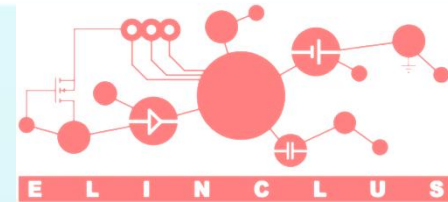
# ELINCLUS Electronic INnovation CLUster



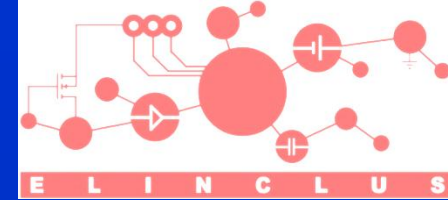
București  
și Ilfov

# Domenii principale de activitate

- **Mecatronică**
- **Electronică auto**
- **Electronică aero-spatiu**
- **Energii regenerabile**
- **Comunicații**
- **Agricultură și industria alimentară**
- **Aplicații de uz general**
- **Mediu**



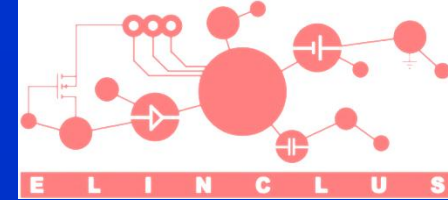
# Profilul membrilor ELINCLUS



- **Cercetare:** ROEL Electronics, Samway Electronics, Seletron Software si Automatizari, Giga Electronic International, Elarom, Pro Optica, CETTI
- **Productie:** Mibatron, ROEL Electronics, CETTI
- **Automatizari:** Antrice, Luca Electric, Seletron Software si Automatizari
- **Integratori de sistem:** Antrice, BEIA Consult International, Electro Optic Components, Electrorom Impex, Radio Consult, Rond Electric, 2NCOMM Design
- **Centre si institute de cercetare:** IPE, CCA-AOS, CEMS, CETTI, CCO, ECOMET, IHP, Pro Optica
- **Training & Educatie:** L&G Advice Serv, UPB
- **Consulting:** Alma Engineering, Elinktron, Magnum CCC
- **Logistica:** ECAS, Elsix

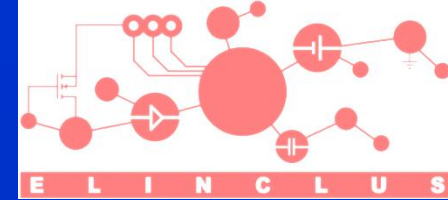


# Competente ELINCLUS



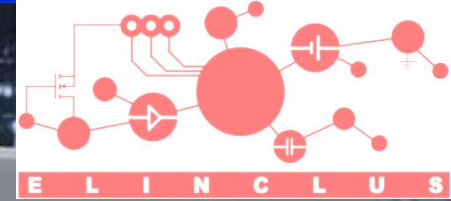
- **Optoelectronics: Electro Optic Components, Pro Optica, CCO**
- **Radiotechnics - Software radio: Radio Consult**
- **Communications: BEIA Consult International, Samway Electronics**
- **Power electronics: Antrice, Rond Electric, Elarom, Seletron**
- **Hydraulics & Pneumatics: IHP**
- **PCB design: Elinktron, Elsix, Magnum CCC, CETTI**
- **IT: SBS – Standard Business Solutions**
- **Electronic packaging: CETTI, Mibatron, ROEL Electronics**
- **Design for Manufacturing (DfM): CETTI**
- **Embedded system design: Samway Electronics, Seletron**

# **ELINCLUS afilieri la asociatii profesionale nationale & internationale**

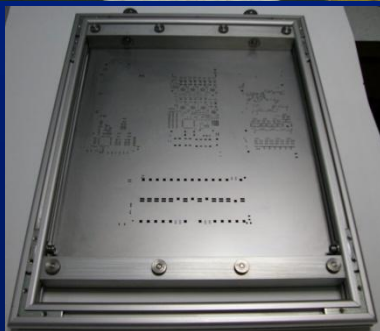
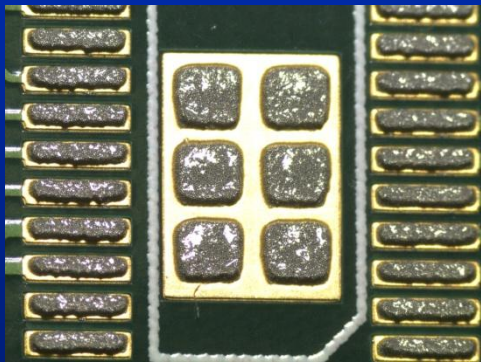
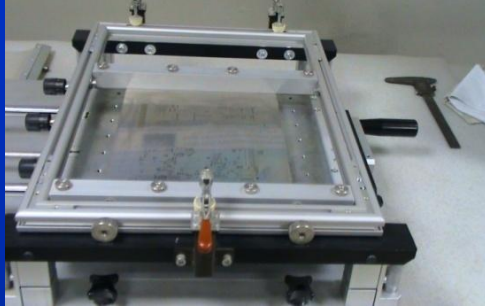
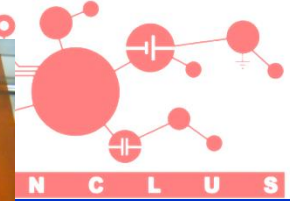
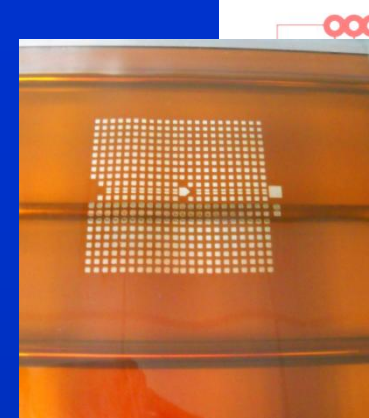
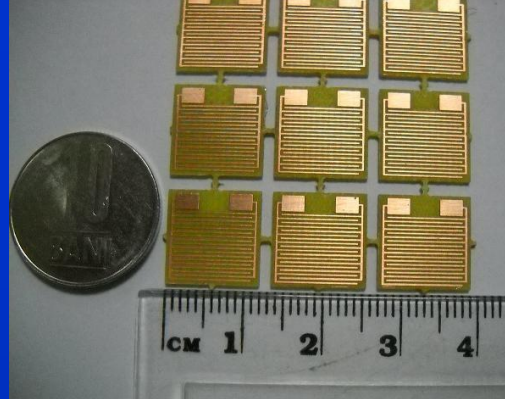
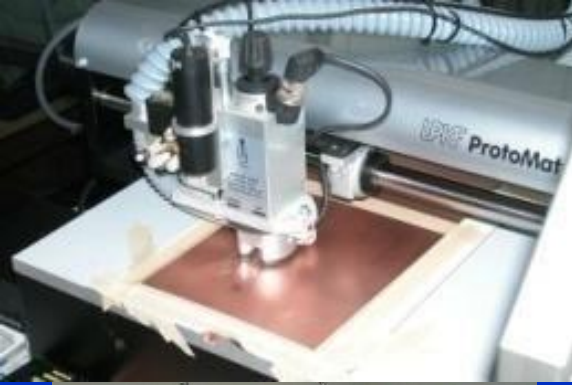


- **Association Connecting Electronics Industries, IPC  
(*CETTI, L&G Advice Serv*)**
- **PCI Industrial Computer Manufacturers Group,  
PCIMG (*Samway Electronic*)**
- **IEEE/Laser and Electro-Optic Society  
(*Optoelectronics Research Center - CCO*)**
- **Cadence Academic Network (*CETTI*)**
- **Omicron Grup, Italia (*Antrice SA*)**
- **National Professional Association for Hydraulics  
and Pneumatics, FLUIDAS (*IHP*)**
- **Association of Management Consulting of Romania,  
AMCOR (*Standard Business Solutions - SBS*)**
- **Electronic Packaging Education Training and  
Research University Network, EPETRUN (*CETTI*)**

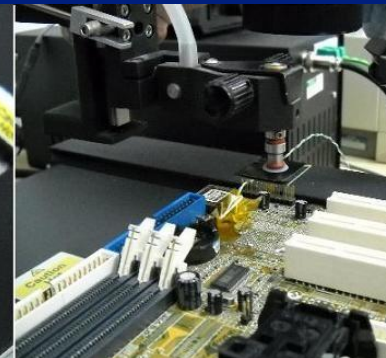
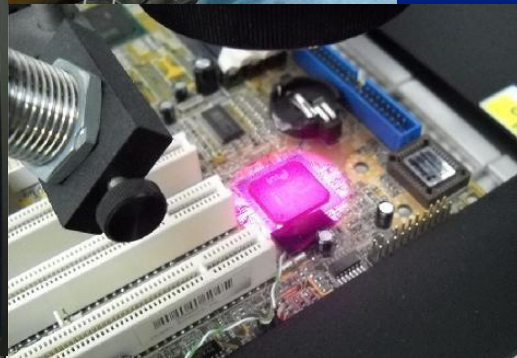
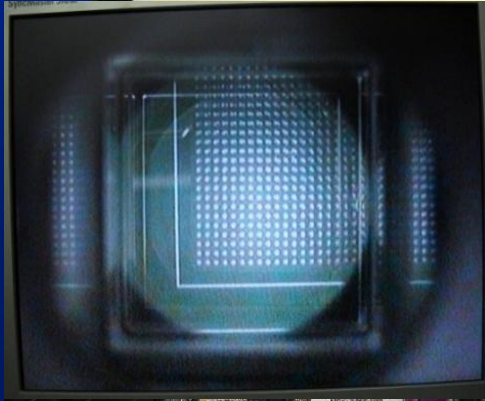
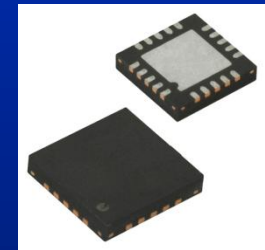
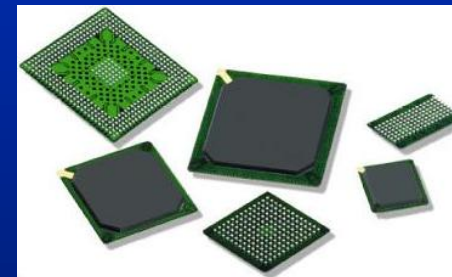
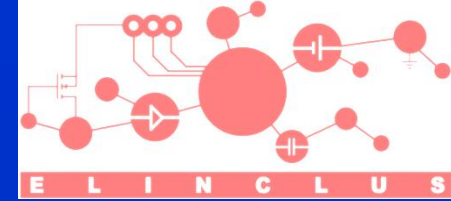
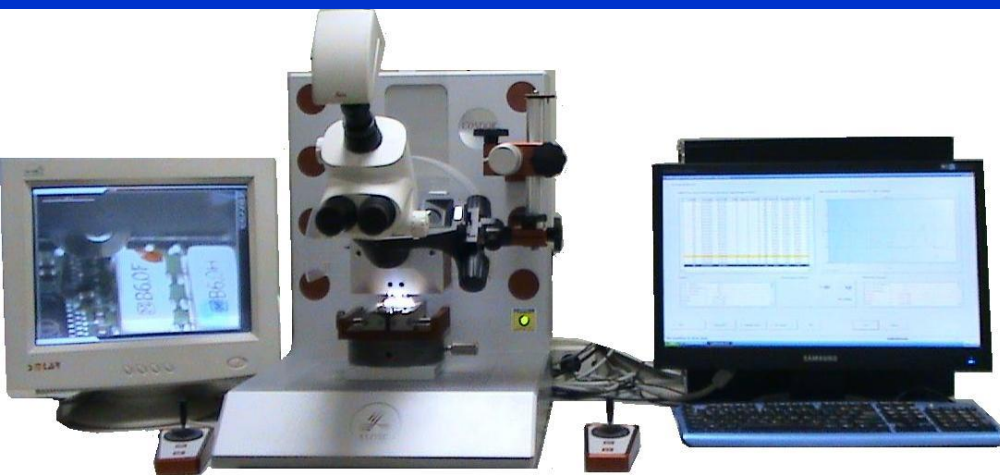
# Contributia CETTI











CoR-OpenDays2011, 20 Noiembrie 2011, Bacău, Romania



## PixDro LP50, Desktop Print



**Aplicatii**  
**Organic LED**  
**Organic FET**  
**Organic PV**  
**RFID Tags**



organic photovoltaics



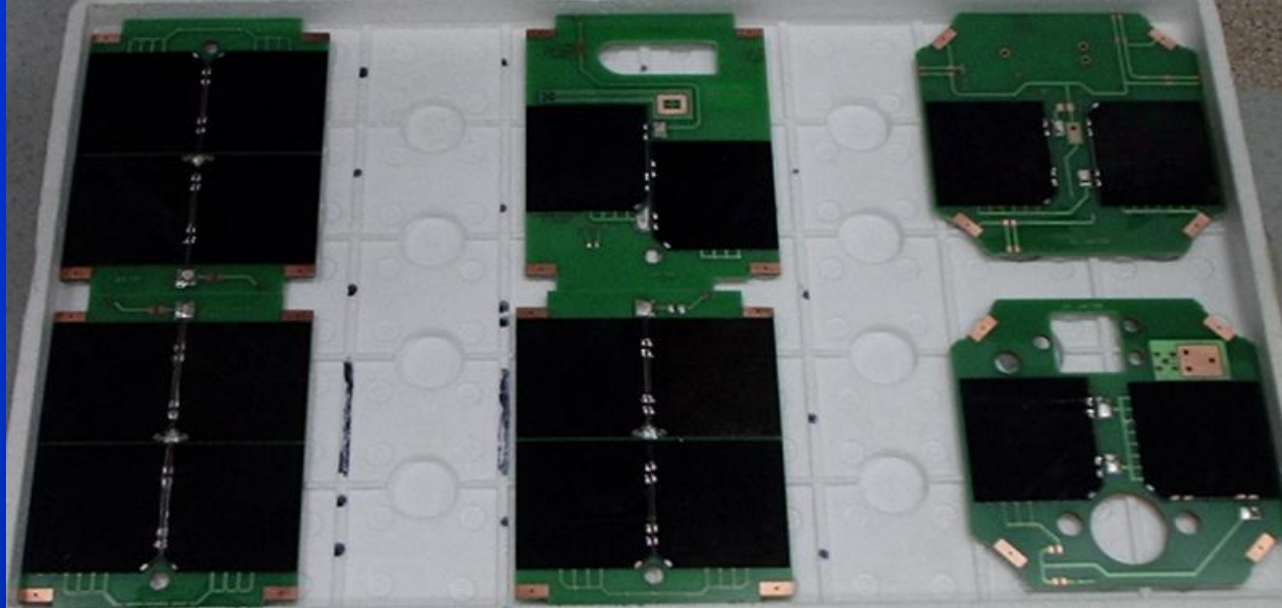
OFET



OLED



RFID labels



**Module din structura panourilor solare nanosatelit asamblate.**



**Mulțumesc pentru atenție!**

**ELINCLUS ELectronic INnovation CLUSter**

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