Objective

The total EU electronics industry employs ≈20.5 million people, sales exceeding €1 trillion and includes 396,000 SMEs. It is a major contributor to EU GDP and its size continues to grow fueled by demand from consumers to many industries. Despite its many positive impacts, the industry also faces some challenges connected with the enormous quantity of raw materials that it needs for sustainability, the huge quantity of Waste Electrical, Electronics Equipment (WEEE) generated and the threat of competition from Asia. To sustain its growth, to manage the impact of WEEE and to face the competition from Asia, the industry needs innovations in key areas. One such area is the drive for ultra-miniaturisation/ultra-functionality of equipment. The key current road block/limitation to achieving the goal of ultra-miniaturisation/functionality is how to increase the component density on the printed circuit board (PCB). This is currently limited by the availability of hyper fine pitch solder powder pastes. FineSol aims to deliver at first stage an integrated production
line for solder particles with size 1-10 μm and to formulate solder pastes containing these particles. Thus, by proper printing methods (e.g. screen and jet printing) the fabrication of PCBs with more than double component density will be achieved. Consequently, this would effectively enable more than a doubling of the functions available on electronic devices such as cell phones, satellite navigation systems, health devices etc. The successful completion of the FineSol project would lift the ultra-miniaturisation/functionality road block and also enable reduction in raw material usage, reduction in WEEE, reduction in pollution and associated health costs and also a major reduction in EU energy demand with all its indirect benefits for environment and society.

Field of science

/social sciences/social and economic geography/transport/navigation systems/satellite navigation system
/natural sciences/earth and related environmental sciences/environmental sciences/pollution
/engineering and technology/electrical engineering, electronic engineering, information engineering/information engineering/telecommunications/mobile phone
/social sciences/social and economic geography/transport/navigation systems
/social sciences/other social sciences/social sciences interdisciplinary/sustainable development
/natural sciences/physical sciences/theoretical physics/particles

Programme(s)

Topic(s)

Call for proposal

H2020-FoF-2015

Funding Scheme

IA - Innovation action

Coordinator

ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS

Address
Charilaou Thermi Road 6 Km
57001 Thermi Thessaloniki

Activity type
Research Organisations

EU contribution
€ 723 875
### Participants (13)

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
<th>EU contribution</th>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATOMISING SYSTEMS LIMITED</strong></td>
<td>United Kingdom</td>
<td>€ 450,625</td>
<td>371 Coleford Road, S95NF Sheffield</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td><strong>POLMECANIC GROUP SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA</strong></td>
<td>Poland</td>
<td>€ 265,475</td>
<td>Ul. Targowa 10C, 98 346 Skomlin</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td><strong>CREATIVE NANO PC</strong></td>
<td>Greece</td>
<td>€ 196,700</td>
<td>Leventi 4, 12132 Peristeri</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
</tbody>
</table>

Contact the organisation [here](#).
Poland
EU contribution
€ 253 400

Address
Ul. Kamienna 17
30 199 Rzaska

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

INSTITUTO DE SOLDADURA E QUALIDADE
Portugal
EU contribution
€ 443 337,50

Address
Taguspark Avenida Professor Dr Cavaco Silva 33 Talaide
2740 120 Porto Salvo

Activity type
Research Organisations

Website
Contact the organisation

Prisma Electronics ABEE
Greece
EU contribution
€ 242 375

Address
Dimokratias Avenue 87
68100 Alexandroupolis

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

MAT-TECH BV
Netherlands
EU contribution
€ 415 065

Address
Ekkersrijt 4508
5692 DM Son En Breugel

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
**EKTOS TESTING & RELIABILITY SERVICE AS**

- **Denmark**
- **EU contribution**: € 440 410
- **Address**: Ac Meyers Vaenge 15, 2450 Kobenhavn
- **Activity type**: Private for-profit entities (excluding Higher or Secondary Education Establishments)

**CENTER FOR TECHNOLOGY RESEARCH AND INNOVATION (CETRI) LTD**

- **Cyprus**
- **EU contribution**: € 400 750
- **Address**: 77, John Kennedy Avenue, 1077 Nicosia
- **Activity type**: Private for-profit entities (excluding Higher or Secondary Education Establishments)

**RISE RESEARCH INSTITUTES OF SWEDEN AB**

- **Sweden**
- **EU contribution**: € 369 500
- **Address**: Brinellgatan 4, 501 15 Boras
- **Activity type**: Research Organisations

**EUROPEAN FEDERATION FOR WELDING JOINING AND CUTTING**

- **Belgium**
- **EU contribution**: € 207 562,50
- **Address**: Av Antoon Van Oss 1 4
- **Activity type**: Other
APPLIED MATERIALS ITALIA SRL
Italy
EU contribution
€ 217 000
Address
Via Postumia Ovest 244
31048 San Bagio Di Callalta
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Website
Contact the organisation

MICROCHIP TECHNOLOGY CALDICOT LIMITED
United Kingdom
EU contribution
€ 333 375
Address
Phase 2 Castlegate Business Park
NP26 5YW Gwent
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

Last update: 6 February 2020
Record number: 198380
Permalink: https://cordis.europa.eu/project/id/680718/

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