Advanced packaging for photonics, optics and electronics for low cost manufacturing in Europe

Fact Sheet

Project Information

APPLAUSE
Grant agreement ID: 826588

Funded under
H2020-EU.2.1.1.7.

Project website

Overall budget
€ 34 487 312,52

EU contribution
€ 8 561 598,71

Status
Ongoing project

Coordinated by
ICOS VISION SYSTEMS NV
Belgium

Start date
1 May 2019

End date
30 April 2022

Project description

Advanced packaging for mass produced optical, photonics and electrical parts

Europe’s semiconductor packaging industry needs to maintain its competitive advantage. To achieve this goal, a decisive turn to advanced and more complex processes is necessary. The EU-funded APPLAUSE project will develop new processes, methods and tools for packaging mass produced optical and electrical parts. The project will conduct pilot tests in six manufacturing use cases. Backed by a consortium of leading experts from European electronics packaging companies and research organisations, the overall aim of the project is to offer advanced
technologies and contribute to the competitiveness of the European packaging industry.

**Objective**

The strong drive for more complex systems and more advanced packaging, including optics and photonics, creates a chance to retain the manufacturing and packaging value chain to Europe - or even start to bring it back. APPLAUSE supports this by building on the European expertise in advanced packaging and assembly to develop new tools, methods and processes for high volume mass manufacturing of electrical and optical components. The technologies will be piloted in 5 industrial Use Cases, related to 1. Substantially smaller 3D integrated ambient light sensor for mobile and wearable applications (AMS) 2. High performance, low cost, uncooled thermal IR sensor for automotive and surveillance applications (IDEAS) 3. High speed Datacom transceivers with reduced manufacturing costs (DustPhotonics) 4. Flexible cardiac monitoring patch and miniaturized cardiac implants with advanced monitoring capabilities (GE Healthcare and Cardiacs) 6. Optical water measurement modules with cost-effective packaging of components (Vaisala) The APPLAUSE consortium is built of a number of leading experts from European electronics packaging companies representing different value chain levels related to advanced packaging and smart system integration. The parties have complementary expertise in conception, design, packaging, testing and manufacturing of electronic components, as well as a wide range of expertise from several different end use areas. The unique European ecosystem established within the consortium represents the competitive, leading edge of the technologies available.

**Field of science**

/natural sciences/physical sciences/optics
/engineering and technology/electrical engineering, electronic engineering, information engineering/electronic engineering/sensors

**Programme(s)**

**Topic(s)**

**Call for proposal**

H2020-ECSEL-2018-1-IA-two-stage
Funding Scheme

ECSEL-IA - ECSEL Innovation Action

Coordinator

<table>
<thead>
<tr>
<th>ICOS VISION SYSTEMS NV</th>
<th>Activity type</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esperantolaan 8C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3001 Heverlee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private for-profit</td>
<td></td>
<td>€ 511 750</td>
</tr>
<tr>
<td>entities (excluding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher or Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Establishments)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Website [ ]
Contact the organisation [ ]

Participants (30)

<table>
<thead>
<tr>
<th>ROODMICROTEC GMBH</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>EU contribution</td>
<td></td>
</tr>
<tr>
<td>€ 377 394,38</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Oettinger Strasse 6</td>
<td></td>
</tr>
<tr>
<td>86720 Nordlingen</td>
<td></td>
</tr>
<tr>
<td>Activity type</td>
<td></td>
</tr>
<tr>
<td>Private for-profit entities</td>
<td></td>
</tr>
<tr>
<td>(excluding Higher or Secondary Education Establishments)</td>
<td></td>
</tr>
</tbody>
</table>

Contact the organisation [ ]

<table>
<thead>
<tr>
<th>NUROMEDIA GMBH</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>EU contribution</td>
<td></td>
</tr>
<tr>
<td>€ 178 375</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Schaafenstrasse 25</td>
<td></td>
</tr>
<tr>
<td>50676 Koln</td>
<td></td>
</tr>
<tr>
<td>Activity type</td>
<td></td>
</tr>
<tr>
<td>Private for-profit entities</td>
<td></td>
</tr>
<tr>
<td>(excluding Higher or Secondary Education Establishments)</td>
<td></td>
</tr>
</tbody>
</table>

Website [ ]
Contact the organisation [ ]

<table>
<thead>
<tr>
<th>Pac Tech - Packaging Technologies GmbH</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Germany
EU contribution
€ 128,250
Address
Am Schlangenhorst 7-9
14641 Nauen
Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
Website Contact the organisation

DISCO HI-TEC EUROPE GMBH
Germany
EU contribution
€ 105,350
Address
Liebigstrasse 8
85551 Kirchheim
Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
Contact the organisation

OSYPKA AG
Germany
EU contribution
€ 187,375
Address
Earl H Wood Strasse 1
79618 Rheinfelden Baden
Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
Website Contact the organisation

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
Germany
EU contribution
€ 1,264,468,84
Address
Hansastrasse 27C
80686 Munich
Activity type
Research Organisations
WURTH ELEKTRONIK GMBH & CO KG

Germany
EU contribution
€ 193 000

Address
Salzstrasse 21
74676 Niedernhall

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

Contact the organisation

BESI NETHERLANDS BV

Netherlands
EU contribution
€ 151 659,25

Address
Ratio 6
6921 RW Duiven

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

Website
Contact the organisation

ADVANCED PACKAGING CENTER BV

Netherlands
EU contribution
€ 141 062,50

Address
Stenograaf 3
6921 EX Duiven

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

Website
Contact the organisation

STICHTING IMEC NEDERLAND

Netherlands
EU contribution
€ 256 578,44
JSR MICRO NV
Belgium
EU contribution
€ 106 863.75
Address
Technologielaan 8
3001 Leuven
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM
Belgium
EU contribution
€ 347 053.88
Address
Kapeldreef 75
3001 Leuven
Activity type
Research Organisations
Website
Contact the organisation

VAISALA OYJ
Finland
EU contribution
€ 10 935.57
Address
Vanha Nurmijärventie 21
01670 Vantaa
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Website
Contact the organisation

AFORE OY
Finland
EU contribution
<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>OY EVERON AB</td>
<td>Finland</td>
<td>€ 78 077,74</td>
<td>Teräskatu 8</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>PRECORDIOR OY</td>
<td>Finland</td>
<td>€ 218 457,50</td>
<td>Itainen Pitkakatu 4</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>TURUN YLIOPISTO</td>
<td>Finland</td>
<td>€ 299 105,63</td>
<td>Yliopistonmaki</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>Organisation</td>
<td>Country</td>
<td>EU contribution</td>
<td>Address</td>
<td>Activity type</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------</td>
<td>-----------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AALTO KORKEAKOULUSAATIO SR</td>
<td>Finland</td>
<td>€ 160 030,50</td>
<td>Otakaari 1 02150 Espoo</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>INTEGRATED DETECTOR ELECTRONICS AS</td>
<td>Norway</td>
<td>€ 260 325</td>
<td>Gjerdrums Vei 19 0484 Oslo</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>CARDIACCS AS</td>
<td>Norway</td>
<td>€ 14 312,50</td>
<td>Maridalsveien 71B 0458 Oslo</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>UNIVERSITETET I SOROST-NORGE</td>
<td>Norway</td>
<td>€ 332 366,68</td>
<td>Kjolnes Ring 56 3918 Porsgrunn</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>Organisation</td>
<td>Country</td>
<td>EU contribution</td>
<td>Address 1</td>
<td>Address 2</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>-----------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>AMS AG</td>
<td>Austria</td>
<td>€ 698 450</td>
<td>Tobelbaderstrasse 30</td>
<td>8141 Unterpremstaetten</td>
</tr>
<tr>
<td>BESI AUSTRIA GMBH</td>
<td>Austria</td>
<td>€ 502 078,55</td>
<td>Innstrasse 16</td>
<td>6240 Radfeld</td>
</tr>
<tr>
<td>EV GROUP E. THALLNER GMBH</td>
<td>Austria</td>
<td>€ 276 918</td>
<td>Di Erich Thallner Strasse 1</td>
<td>4782 St Florian Am Inn</td>
</tr>
<tr>
<td>ALBIS OPTOELECTRONICS AG</td>
<td>Switzerland</td>
<td>€ 164 062,50</td>
<td>Moosstrasse 2A</td>
<td>8032 Bellinzona</td>
</tr>
</tbody>
</table>
CSEM CENTRE SUISSE D'ELECTRONIQUE ET DE MICROTECHNIQUE SA - RECHERCHE ET DEVELOPPEMENT

Switzerland
EU contribution
€ 160 772,50

Address
Rue Jaquet Droz 1
2000 Neuchatel

Activity type
Research Organisations

Website
Contact the organisation

ALMAE TECHNOLOGIES

France
EU contribution
€ 503 125

Address
Route De Nozay Site Data 4
91460 Marcoussis

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

Contact the organisation

SEMILAB FELVEZETO FIZIKAI LABORATORIUM RESZVENYTARSASAG

Hungary
EU contribution
€ 297 600

Address
Prielle Kornelia Utca 4/A.
1117 Budapest

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

Website
Contact the organisation

DUSTPHOTONICS LTD

Israel
EU contribution
<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkowitz 4, 6423806 Tel Aviv - Jaffa</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
</tbody>
</table>

ELEKTRONIKAS UN DATORZINATNU INSTITUTS

Latvia

EU contribution
€ 113 050

<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dzerbenes Iela 14, 1006 Riga</td>
<td>Research Organisations</td>
</tr>
</tbody>
</table>

Website [Contact the organisation](#)

Last update: 31 January 2021
Record number: 223648

Permalink: [https://cordis.europa.eu/project/id/826588](https://cordis.europa.eu/project/id/826588)

© European Union, 2021