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

Fact Sheet

Project Information

**APPLAUSE**

Grant agreement ID: 826588

DOI
10.3030/826588

Funded under
INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Total cost
€ 33 739 697,16

EU contribution
€ 8 403 154,96

Coordinated by
ICOS VISION SYSTEMS NV
Belgium

Start date
1 May 2019

End date
31 October 2022

Closed project

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). 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.

**Fields of science**

- engineering and technology > electrical engineering, electronic engineering, information engineering
- electronic engineering > sensors
- natural sciences > physical sciences > optics
- natural sciences > biological sciences > ecology > ecosystems
- medical and health sciences > medical biotechnology > implants

**Programme(s)**

H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)  MAIN PROGRAMME

H2020-EU.2.1.1.7 - ECSEL
**Topic(s)**

ECSEL-2018-1-IA - ECSEL-2018-1-IA

**Call for proposal**

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

See other projects for this call

**Funding Scheme**

ECSEL-IA - ECSEL Innovation Action

**Coordinator**

ICOS VISION SYSTEMS NV

Net EU contribution

€ 511 750,00

Address

Esperantolaan 8c
3001 Heverlee
Belgium

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

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

Links

Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network

Other funding

€ 511 750,00

**Participants (32)**
ROODMICROTEC GMBH

Germany

Net EU contribution

€ 276 906,88

Address

Oettinger Strasse 6
86720 Nordlingen

SME

Yes

Region

Bayern > Schwaben > Donau-Ries

Activity type

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

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 276 906,88

---

NUROMEDIA GMBH

Germany

Net EU contribution

€ 178 375,00

Address

Schaafenstrasse 25
50676 Köln

SME

Yes

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

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

Links
Other funding

€ 178 375,00

---

**Pac Tech - Packaging Technologies GmbH**

Germany

Net EU contribution

€ 128 250,00

Address

Am Schlangenhorst 7-9
14641 Nauen

Region

Brandenburg > Brandenburg > Havelland

Activity type

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

Links

Contact the organisation  Website

Participation in EU R&I programmes  HORIZON collaboration network

Other funding

€ 128 250,00

---

**DISCO HI-TEC EUROPE GMBH**

Germany

Net EU contribution

€ 105 350,00

Address

Liebigstrasse 8
85551 Kirchheim

Region

Bayern > Oberbayern > München, Landkreis
<table>
<thead>
<tr>
<th>Activity type</th>
<th>Private for-profit entities (excluding Higher or Secondary Education Establishments)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links</td>
<td>Contact the organisation [🔗] Participation in EU R&amp;I programmes [🔗] HORIZON collaboration network [🔗]</td>
</tr>
<tr>
<td>Other funding</td>
<td>€ 105,350,00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSYPKA AG</th>
<th>Germany</th>
<th>Net EU contribution</th>
<th>€ 187,375,00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Earl H Wood Strasse 1 79618 Rheinfelden Baden [🗺]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SME</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>Baden-Württemberg &gt; Freiburg &gt; Lörrach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity type</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Links</td>
<td>Contact the organisation [🔗] Website [🔗] Participation in EU R&amp;I programmes [🔗] HORIZON collaboration network [🔗]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other funding</td>
<td>€ 187,375,00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV</th>
<th>Germany</th>
<th>Net EU contribution</th>
<th></th>
</tr>
</thead>
</table>
€ 1 264 468,84

Address
Hansastrasse 27c
80686 Munchen

Region
Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type
Research Organisations

Links
Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network

Other funding
€ 1 264 468,84

---

WURTH ELEKTRONIK GMBH & CO KG

Germany
Net EU contribution
€ 193 000,00

Address
Salzstrasse 21
74676 Niedernhall

Region
Baden-Württemberg > Stuttgart > Hohenlohekreis

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

Links
Contact the organisation  
Participation in EU R&I programmes  
HORIZON collaboration network

Other funding
€ 193 000,00
BESI NETHERLANDS BV

Netherlands
Net EU contribution
€ 133 498,75

Address
Ratio 6
6921 RW Duiven

Region
Oost-Nederland > Gelderland > Arnhem/Nijmegen

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

Links
Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 133 498,75

ADVANCED PACKAGING CENTER BV

Netherlands
Net EU contribution
€ 37 921,87

Address
Stenograaf 3
6921 EX Duiven

SME
Yes

Region
Oost-Nederland > Gelderland > Arnhem/Nijmegen

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

Links
Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network
**THIRD-PARTY**

**BOSCHMAN TECHNOLOGIES BV**

Netherlands  
Net EU contribution  
€ 103 140.63  

Address

Stenograaf 3  
6921 EX Duiven  

SME  
Yes  

Region

Oost-Nederland > Gelderland > Arnhem/Nijmegen  

Activity type

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

Links

Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network  

Other funding  
€ 103 140.63

---

**STICHTING IMEC NEDERLAND**

Netherlands  
Net EU contribution  
€ 274 738.94  

Address

High Tech Campus 31  
5656 AE Eindhoven  

Region

Noord-Brabant > Zuidoost-Noord-Brabant  

Activity type

Research Organisations
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 274 738,94

---

JSR MICRO NV

Belgium
Net EU contribution
€ 106 863,75

Address
Technologielaan 8
3001 Leuven

Region
Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

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

Links
Contact the organisation Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 106 863,75

---

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM

Belgium
Net EU contribution
€ 347 053,88

Address
Kapeldreef 75
3001 Leuven

Region

10 of 22
Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 347 053,88

VAISALA OYJ
Finland
Net EU contribution
€ 10 935,57

Address
Vanha Nurmijarventie 21
01670 Vantaa

Region
Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

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

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 10 935,57

AFORE OY
Finland
Net EU contribution
€ 194 093,75

11 of 22
**PRECORDIOR OY**

Finland  
Net EU contribution  
€ 245,313,75  

Address  
**Aurakatu 6**  
20100 Turku  

SME  
Yes  

Region  
Manner-Suomi > Etelä-Suomi > Varsinais-Suomi  

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

Links  
Contact the organisation  
Participation in EU R&I programmes  
HORIZON collaboration network  

Other funding  
€ 245,313,75  

---

**TURUN YLIOPISTO**

Finland  
Net EU contribution  
€ 299,105,63  

Address  
**Yliopistonmaki**  
20014 Turku  

Region  
Manner-Suomi > Etelä-Suomi > Varsinais-Suomi  

Activity type  
Higher or Secondary Education Establishments  

Links  

AALTO KORKEAKOULEUSAATIO SR

Finland

Net EU contribution

€ 160 030,50

Address

Otakaari 1
02150 Espoo

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Higher or Secondary Education Establishments

Links

Other funding

€ 160 030,50

INTEGRATED DETECTOR ELECTRONICS AS

Norway

Net EU contribution

€ 260 325,00

Address

Gjerdrums Vei 19
0484 Oslo

SME

Yes
**CARDIACCS AS**

**Norway**

**Net EU contribution**

€ 14,312.50

**Address**

Maridalsveien 71b
0458 Oslo

**SME**

Yes

**Region**

Norge > Oslo og Viken > Oslo

**Activity type**

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

**Links**

Contact the organisation

Participation in EU R&I programmes

HORIZON collaboration network

**Other funding**

€ 14,312.50

---

**UNIVERSITETET I SOROST-NORGE**

**Norway**

**Net EU contribution**

€ 14,312.50

**Address**

Maridalsveien 71b
0458 Oslo

**SME**

Yes

**Region**

Norge > Oslo og Viken > Oslo

**Activity type**

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

**Links**

Contact the organisation

Participation in EU R&I programmes

HORIZON collaboration network

**Other funding**

€ 14,312.50
Net EU contribution

€ 332,366.68

Address
Raveien 215
3184 Borre

Region
Norge > Agder og Sør-Østlandet > Vestfold og Telemark

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 332,366.68

---

AMS-OSRAM AG

Austria

Net EU contribution
€ 698,450.00

Address
Tobelbaderstrasse 30 Schloss Premstatten
8141 Unterpremstatten

Region
Südöstereich > Steiermark > Graz

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

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 698,450.00
BESI AUSTRIA GMBH

Austria
Net EU contribution
€ 502 078,55

Address
Innstrasse 16
6240 Radfeld
Region
Westösterreich > Tirol > Tiroler Unterland

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

Links
Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 502 078,55

---

EV GROUP E. THALLNER GMBH

Austria
Net EU contribution
€ 276 918,00

Address
Di Erich Thallner Strasse 1
4782 St Florian Am Inn
Region
Westösterreich > Oberösterreich > Innviertel

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

Links
Contact the organisation Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 276 918,00
ALBIS OPTOELECTRONICS AG

Switzerland

Net EU contribution

€ 164 062,50

Address

Moosstrasse 2a
8803 Ruschlikon

SME

Yes

Region

Schweiz/Suisse/Svizzera > Zürich > Zürich

Activity type

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

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 164 062,50

CSEM CENTRE SUISSE D'ELECTRONIQUE ET DE MICROTECHNIQUE SA - RECHERCHE ET DEVELOPPEMENT

Switzerland

Net EU contribution

€ 160 772,50

Address

Rue Jaquet Droz 1
2000 Neuchatel

Region

Schweiz/Suisse/Svizzera > Espace Mittelland > Neuchâtel

Activity type

Research Organisations

18 of 22
Research Organisations

Links
Contact the organisation [Website]
Participation in EU R&I programmes [HORIZON collaboration network]

Other funding
€ 160 772,50

ALMAE TECHNOLOGIES

France
Net EU contribution
€ 503 125,00
Address
Route De Nozay Site Data 4
91460 Marcoussis
Region
Ile-de-France > Ile-de-France > Essonne
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation [Website]
Participation in EU R&I programmes [HORIZON collaboration network]

Other funding
€ 503 125,00

SEMILAB FELVEZETO FIZIKAI LABORATORIUM ZARTKORUEN MUKODO RESZVENYTARSASAG

Hungary
Net EU contribution
€ 200 100,00
Address
Prielle Kornelia Utca 4/a.
1117 Budapest
Region
Közép-Magyarország > Budapest > Budapest

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

Links
Contact the organisation ☝️ Website ☝️ Participation in EU R&I programmes ☝️ HORIZON collaboration network ☝

Other funding
€ 200 100,00

---

**DUSTPHOTONICS LTD**

Israel

Net EU contribution
€ 211 343,75

Address
Berkowitz 4
6423806 Tel Aviv - Jaffa

SME ☞
Yes

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

Links
Contact the organisation ☝️ Participation in EU R&I programmes ☝️ HORIZON collaboration network ☝

Other funding
€ 211 343,75

---

**ELEKTRONIKAS UN DATORZINATNU INSTITUTS**

Latvia

Net EU contribution
€ 113 050,00
€ 113 050,00
Address
Dzerbenes iela 14
1006 Riga

Region
Latvija > Latvija > Riga

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 113 050,00

MELLANOX TECHNOLOGIES LTD - MLNX

Israel

Net EU contribution
€ 130 000,00

Address
Yokneam Ilit Industrial Zone - Hermon Building
20692 Yokneam

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

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 130 000,00

EC signature date: 23 May 2019
Last update: 27 September 2022
Record number: 223648