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

Fact Sheet

Project Information

APPLAUSE
Grant agreement ID: 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

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)
- 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
€ 2 047 000,00

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
€ 830,720,62

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
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)

Other funding

€ 513 000,00

DISCO HI-TEC EUROPE GMBH

Germany

Net EU contribution

€ 105 350,00

Address

Liebigstrasse 8
85551 Kirchheim

Region

Bayern > Oberbayern > München, Landkreis
OSYPKA AG

Germany

Net EU contribution
€ 187 375,00

Address
Earl H Wood Strasse 1
79618 Rheinfelden Baden

SME
Yes

Region
Baden-Württemberg > Freiburg > Lörrach

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
€ 562 125,00
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

€ 772 000,00
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
€ 533,995.00

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

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

€ 309 421,87

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
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
€ 427,455,00

INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM
Belgium
Net EU contribution
€ 347,053,88
Address
Kapeldreef 75
3001 Leuven
Region
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)

Other funding
€ 43,742.30

AFORE OY

Finland

Net EU contribution
€ 194,093.75
Vakiotie 5  
21420 Lieto  

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  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network  

Other funding  
€ 582 281,25  

OY EVERON AB  

Finland  

Net EU contribution  
€ 78 077,74  

Address  
Teräskatu 8  
20520 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  
€ 234 233,22
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
€ 735 941,25

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

Other funding
€ 297 199,50

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

€ 42 937,50

UNIVERSITETET I SOROST-NORGE

Norway
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
€ 617 252,40

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AMS-OSRAM AG

Austria
Net EU contribution
€ 698 450,00

Address
Tobelbaderstrasse 30 Schloss Premstatten
8141 Unterpremstatten

Region
Südösterreich > 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
€ 2 793 800,00
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
€ 2 008 314,20

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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
€ 1 107 672,00
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
€ 492,187,50

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
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
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 2 012 500,00

SEMILAB FELVEZETO FIZIKAI LABORATORIUM ZARTKORUEN MUKODO
RESZVENYTARSASAG
Hungary
Net EU contribution
€ 200 100,00
Address
Prielle Kornelia Utca 4/a.
1117 Budapest
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)  

Other funding  

€ 634,031,25  

ELEKTRONIKAS UN DATORZINATNU INSTITUTS  

Latvia  

Net EU contribution  

€ 113,050,00  

20 of 22
€ 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
€ 209 950,00


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
€ 520 000,00

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