TERABOARD

www.teraboard.eu

High bandwidth density and scalable optically interconnected Terabit/s Board

H2020-ICT-2015 n°688510

Press release

Deliverable 7.4

Document information

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Lead beneficiary CNIT

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22/12/2015	0	Initial version
29/12/2015	1	Minor adds

Contributors

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Acknowledgements and Copyright

TERABOARD is an initiative of the Photonics Public Private Partnership, under the grant agreement H2020-ICT-2015 n°688510.

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Abstract

Deliverable 7.4 contains the first Press Release of the project and a collection of links to websites where the Press Release has been published.

Press Release

The initial Press Release of TERABOARD project was realized and disseminated. It is reported below:

On December 1st , 2015, the new H2020 project TERABOARD will start, with total duration of 36 months. TERABOARD will develop ultra low power - high **bandwidth density** data communication for servers and **packet processing** boards of data centers.

Data communication is a fundamental aspect of the societal evolution. The current use of internet and voice in communications will evolve in the future 5G (the fifth wireless communication generation), in which standard datacom and telecom will be merged with the IoT (Internet of Things). As a consequence, in the next five years data traffic will exponentially grow beyond the Zettabyte era. This evolution will require a technological roadmap that guarantees an increase of communication bandwidth by a factor of 1000 by 2020.

TERABOARD targets the needs of intra and inter-board communications in data centers and will deliver prototypes of optical interposers for Multi Chip Module applications. The prototypes will demonstrate Tb/s of aggregate traffic, scalable to hundreds of Tb/s by means of banks of high density optical interfaces in Silicon Photonics, communicating through a new VIAs-based multilayer optical intra-board interconnection platform.

TERABOARD will achieve:

- 50 Tb/s/cm^2 maximum bandwidth density
- Efficient power consumption strategy: front end consumption of 2.5 pJ/bit
- Multiple intra-board interconnections within 40 cm range with target cost of 0.1 $/Gb/s

The European project TERABOARD is an initiative of the Photonics Public Private Partnership, under the grant agreement H2020-ICT-2015 n°688510, with a total budget of 4.25 million EURO.

TERABOARD gathers the following beneficiaries:

- Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy – *Coordinator*
  - INPHOTEC fabrication center at Scuola Superiore Sant'Anna, Italy – *Linked third party*
- Ericsson Telecomunicazioni, Italy
- STMicroelectronics, Italy
- IMEC, Belgium
- Alcatel-Lucent Italia, Italy
- iMinds, Belgium
- Consiglio Nazionale delle Ricerche (CNR), Italy
- Universitat Politecnica De Valencia (UPV), Spain
- European Photonics Industry Consortium (EPIC), France

More information on: www.teraboard.eu

Published news on TERABOARD

Several media actors and institutional websites reported the kick-off of TERABOARD:

Sant'Anna Magazine

Il Sole 24 Ore

Cor.Com

Gonews

Controcampus

Agenparl

CNIT

Pisainforma

Novus Light Technologies Today

EPIC

IMEC

Metamateriales

UGent

CNR

Conclusions

In fulfillment of communication requirements, at the start of TERABOARD project a Press Release has been redacted and disseminated, thus ensuring a first step toward the achievement of an effective impact on the telecommunication sector.