

HORIZON
2020

Towards EXtreme scale Technologies and Accelerators for euROhpc hw/Sw Supercomputing Applications for exascale

Fact Sheet

Project Information

TEXTAROSSA

Grant agreement ID: 956831

[Project website](#) 

DOI

[10.3030/956831](#) 

Project closed

EC signature date

31 March 2021

Start date

1 April 2021

End date

31 March 2024

Funded under

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

Total cost

€ 6 012 708,75

EU contribution

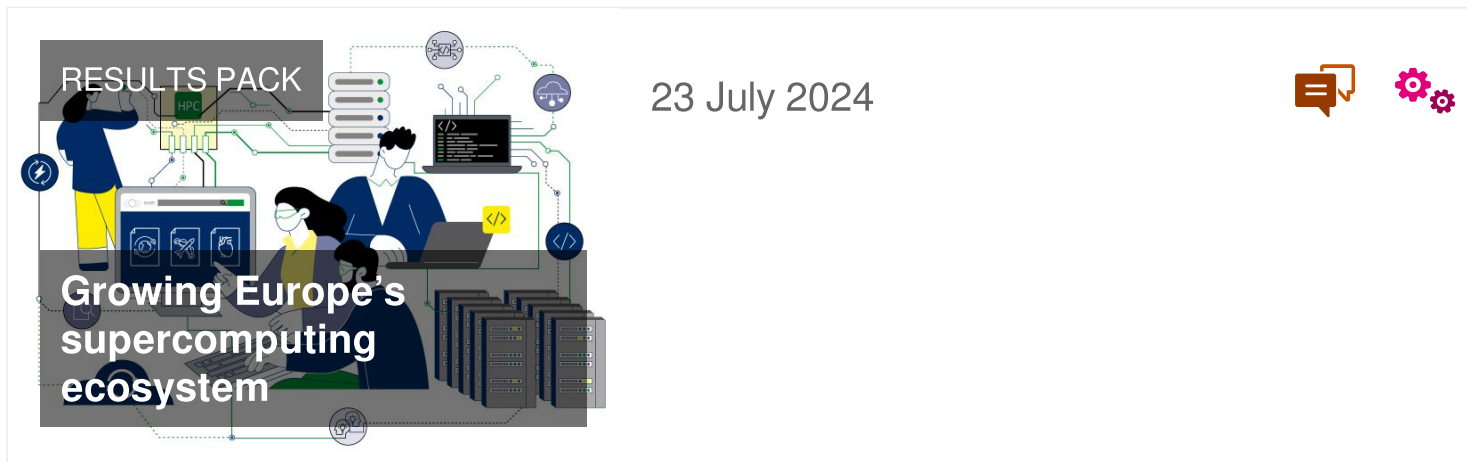
€ 2 051 376,42

Coordinated by

AGENZIA NAZIONALE PER LE
NUOVE TECNOLOGIE,
L'ENERGIA E LO SVILUPPO
ECONOMICO SOSTENIBILE



This project is featured in...



Project description

Performance boost for exascale computing systems

Capable of a billion calculations per second, exascale computing still needs to overcome technology gaps that limit performance and energy efficiency. There is a need to increase computation ability and enable the seamless integration of reconfigurable accelerators in heterogeneous high-performance computing (HPC) multi-node platforms. The EU-funded TEXTAROSSA project aims to tackle these gaps by applying a co-design approach to design and develop an efficient supercomputer system based on new hardware accelerators, innovative two-phase cooling equipment, advanced algorithms, methods and software products for traditional HPC domains as well as for emerging domains in high performance artificial intelligence and high performance data analytics.

Fields of science (EuroSciVoc) i

[natural sciences](#) > [computer and information sciences](#) > [computer security](#) > [cryptography](#)

[natural sciences](#) > [mathematics](#) > [pure mathematics](#) > [arithmetics](#)



Keywords

[energy efficiency](#)

[heterogenous computing](#)

[power and thermal management](#)

[innovative cooling](#)

Programme(s)

[H2020-EU.2.1.1.2. - Next generation computing: Advanced and secure computing systems and technologies, including cloud computing](#)

Topic(s)

[EuroHPC-01-2019 - Extreme scale computing and data driven technologies](#)

Call for proposal

[H2020-JTI-EuroHPC-2019-1](#) 

[See other projects for this call](#)

Funding Scheme

[RIA - Research and Innovation action](#)

Coordinator



AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE

Net EU contribution

€ 219 135,00

Total cost

€ 795 125,00

Address

**LUNGOTEVERE GRANDE AMMIRAGLIO THAON DI REVEL 76
00196 Roma**

 **Italy** 

Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

Participants (14)



FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV

 Germany

Net EU contribution

€ 84 997,50

Address

HANSASTRASSE 27C
80686 Munchen 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

Total cost

€ 169 995,00



CONSORZIO INTERUNIVERSITARIO NAZIONALE PER L'INFORMATICA

 Italy

Net EU contribution

€ 0,00

Address

VIA ARIOSTO 25
00185 Roma 

Region

Centro (IT) > Lazio > Roma

Activity type
Higher or Secondary Education Establishments

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

Total cost
€ 1 222 750,00

 **THIRD-PARTY** 

UNIVERSITA DEGLI STUDI DI TORINO

 Italy
Net EU contribution
€ 42 980,00

Address
VIA GIUSEPPE VERDI 8
10124 Torino 

Region
Nord-Ovest > Piemonte > Torino

Activity type
Higher or Secondary Education Establishments

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

Total cost
No data

 **THIRD-PARTY** 

UNIVERSITA DI PISA

 Italy
Net EU contribution
€ 153 475,00

Address
LUNGARNO PACINOTTI 43/44
56126 Pisa 

Region

Centro (IT) > Toscana > Pisa

Activity type

Higher or Secondary Education Establishments

Links

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

Total cost

No data

THIRD-PARTY

POLITECNICO DI MILANO

Italy

Net EU contribution

€ 145 915,00

Address

PIAZZA LEONARDO DA VINCI 32
20133 Milano

Region

Nord-Ovest > Lombardia > Milano

Activity type

Higher or Secondary Education Establishments

Links

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

Total cost

No data



INSTITUT NATIONAL DE RECHERCHE EN INFORMATIQUE ET AUTOMATIQUE

France

Net EU contribution

€ 174 187,50

Address

DOMAINE DE VOLUCEAU ROCQUENCOURT
78153 Le Chesnay Cedex 

Activity type

Research Organisations

Links

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

Total cost

€ 404 625,00

 THIRD-PARTY 

UNIVERSITE DE BORDEAUX

 France

Net EU contribution

€ 28 125,00

Address

PLACE PEY BERLAND 35
33000 Bordeaux 

Region

Nouvelle-Aquitaine > Aquitaine > Gironde

Activity type

Higher or Secondary Education Establishments

Links

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

Total cost

No data



BULL SAS

 France

Net EU contribution

€ 215 561,25

Address

RUE JEAN JAURES 68
78340 Les Clayes Sous Bois 

Region

Ile-de-France > Ile-de-France > Yvelines

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](#) 

Total cost

€ 431 122,50



E 4 COMPUTER ENGINEERING SPA

 Italy

Net EU contribution

€ 279 676,74

Address

VIA MARTIRI DELLA LIBERTA 66
42019 Scandiano 

SME 

Yes

Region

Nord-Est > Emilia-Romagna > Reggio nell'Emilia

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](#) 

Total cost

€ 998 846,25



BARCELONA SUPERCOMPUTING CENTER CENTRO NACIONAL DE SUPERCOMPUTACION

 Spain

Net EU contribution

€ 110 625,00

Address

CALLE JORDI GIRONA 31
08034 Barcelona 

Region

Este > Cataluña > Barcelona

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 221 250,00



INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK

 Poland

Net EU contribution

€ 152 850,00

Address

NOSKOWSKIEGO 12-14
61-704 POZNAN 

Region

Makroregion północno-zachodni > Wielkopolskie > Miasto Poznań

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 509 500,00



ISTITUTO NAZIONALE DI FISICA NUCLEARE

 Italy

Net EU contribution

€ 153 160,00

Address

Via Enrico Fermi 54

00044 Frascati 

Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 547 000,00



CONSIGLIO NAZIONALE DELLE RICERCHE

 Italy

Net EU contribution

€ 83 438,43

Address

PIAZZALE ALDO MORO 7

00185 Roma 

Region

Centro (IT) > Lazio > Roma

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 297 995,00



IN QUATTRO SRL

 Italy

Net EU contribution

€ 207 250,00

Address

PIAZZA DEI RE DI ROMA 47
00183 Roma 

SME 

Yes

Region

Centro (IT) > Lazio > Roma

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](#) 

Total cost

€ 414 500,00

Last update: 5 March 2025

Permalink: <https://cordis.europa.eu/project/id/956831>

European Union, 2025

