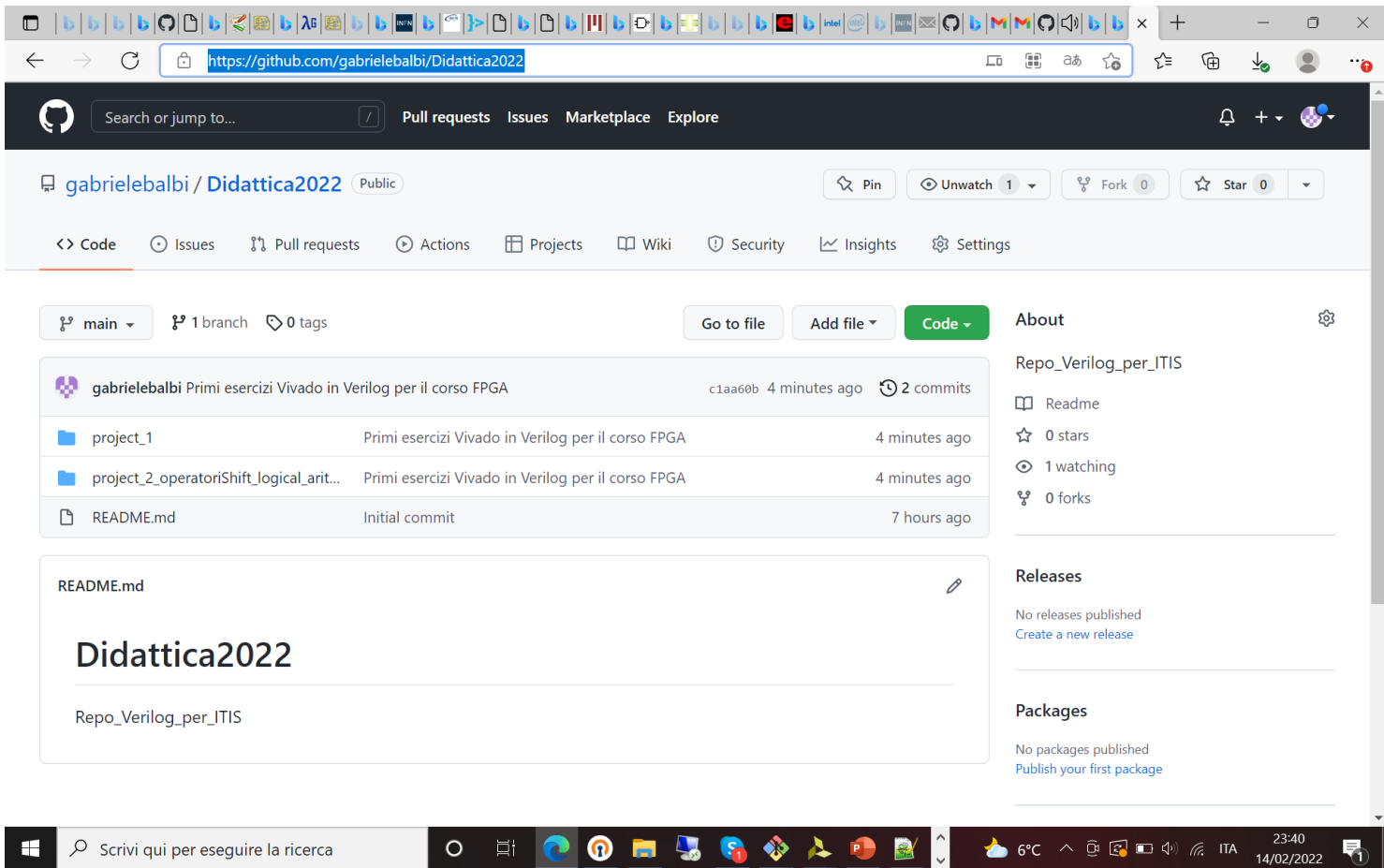


# NOTE OPERATIVE

## per il laboratorio e gli esempi delle lezioni

- Scaricate il pacchetto Git Bash:  
[Git for Windows](#)
- Git è un pacchetto che serve per condividere software-firmware a livello industriale. Molto utile per lavorare in team su un unico progetto. Noi lo useremo per scaricare le versioni aggiornate dei fw delle schede che useremo
  - Comando da usare per copiare i file in locale:

***git clone https://github.com/gabrielebalbi/Didattica2022.git didattica2022***



**N.B.1 Durante queste settimane il repository verrà integrato con diverse esercitazioni e dispense**

**N.B.2 Per il momento ho messo il repository su GitHub. Non è escluso che nelle prossime settimane vi dia un nuovo indirizzo**

## **GLI AMBIENTI DI SVILUPPO: QUARTUS E VIVADO**

- Noi useremo 2 ambienti di sviluppo per i nostri progetti sulle FPGA: Vivado (XILINX) e Quartus (ALTERA-INTEL)
- Ora vi darò un paio di indicazioni per le installazioni

La versione LITE non ha bisogno di licenza

# INSTALLATION NOTES QUARTUS 18.1

for **MAX II** Family

1. Go to the Download Center:

<https://www.intel.com/content/www/us/en/software-kit/665990/intel-quartus-prime-lite-edition-design-software-version-18-1-for-windows.html>

2. Select the 18.1 LITE version (!!!)

The screenshot shows a web browser window displaying the Intel Quartus Prime Software download page. The browser's address bar shows the URL: <https://www.intel.com/content/www/us/en/collections/products/fpga/software/downloads.html?edition=lite>. The page has a blue header with the text "Download Intel® Quartus® Prime Software". Below the header is a navigation bar with links: "Download", "Supported Devices", "Features", and "Support". The main content area is titled "Download Intel® Quartus® Prime Software" and includes the subtitle "Three Intel® Quartus® Prime Editions to Meet Your System Design Requirements". There are three columns representing different editions: "Pro Edition", "Standard Edition", and "Lite Edition". Each column contains a description of the edition and a "Download now" button. The "Pro Edition" button says "Download now (paid license required) →". The "Standard Edition" button says "Download now (paid license required) →". The "Lite Edition" button says "Download now (free, no license required) →". At the bottom of the page, there is a section titled "Supported Devices".

Download Intel® Quartus® Prime Software

Download Supported Devices Features Support

Download Intel® Quartus® Prime Software

Three Intel® Quartus® Prime Editions to Meet Your System Design Requirements

**Pro Edition**

The Intel® Quartus® Prime Pro Edition Software supports the advanced features in Intel's next-generation FPGAs and SoCs with the Intel® Agilex™, Intel® Stratix® 10, Intel® Arria® 10, and Intel® Cyclone® 10 GX device families.

Download now (paid license required) →

**Standard Edition**

The Intel® Quartus® Prime Standard Edition software includes extensive support for earlier device families in addition to the Intel® Cyclone® 10 LP device family.

Download now (paid license required) →

**Lite Edition**

The Intel® Quartus® Prime Lite Edition software supports Intel's low-cost FPGA device families.

Download now (free, no license required) →

Supported Devices

La versione LITE non ha bisogno di licenza

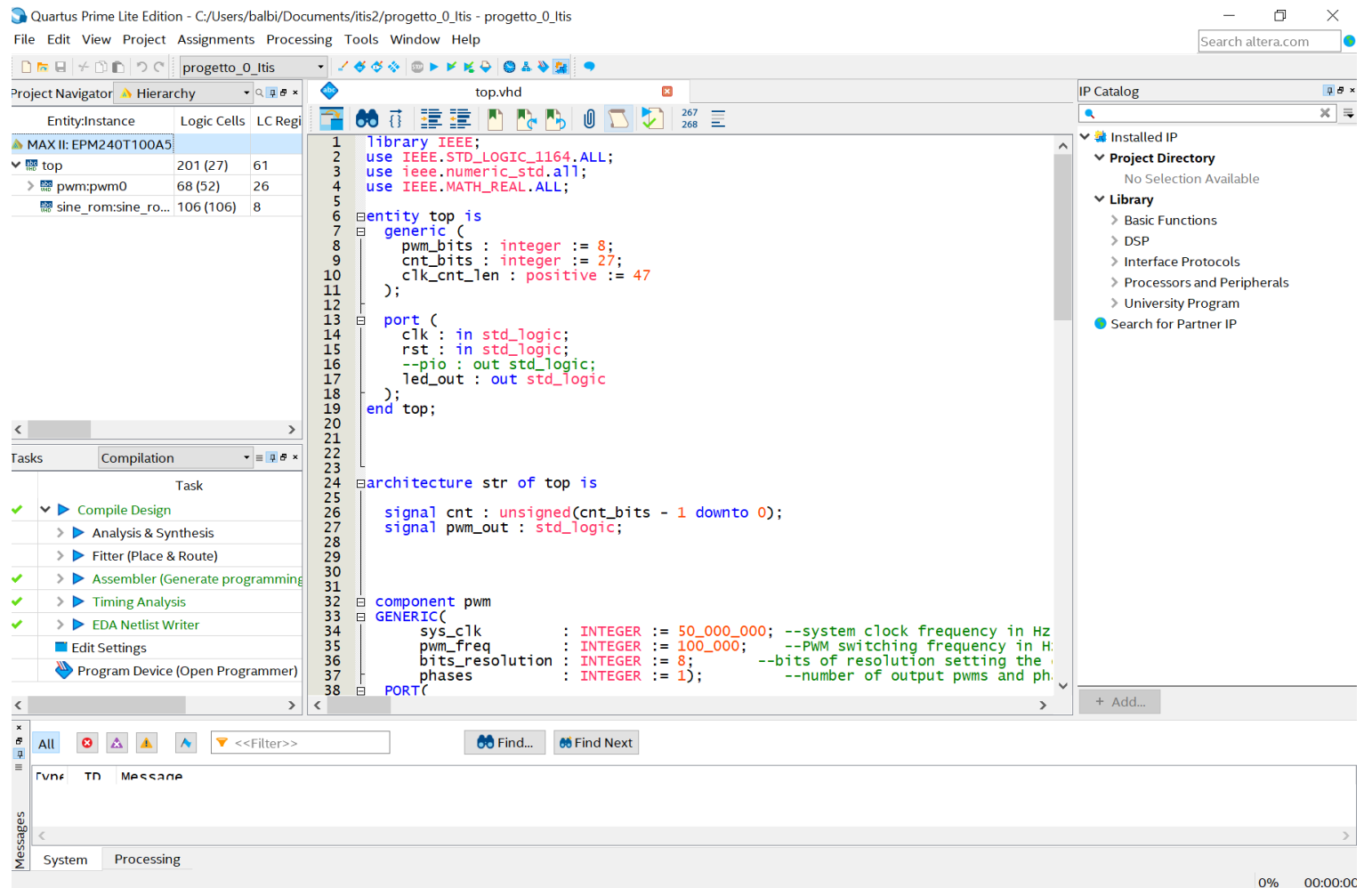
# INSTALLATION NOTES QUARTUS 18.1

for **MAX II** Family

1. Go to the Download Center:

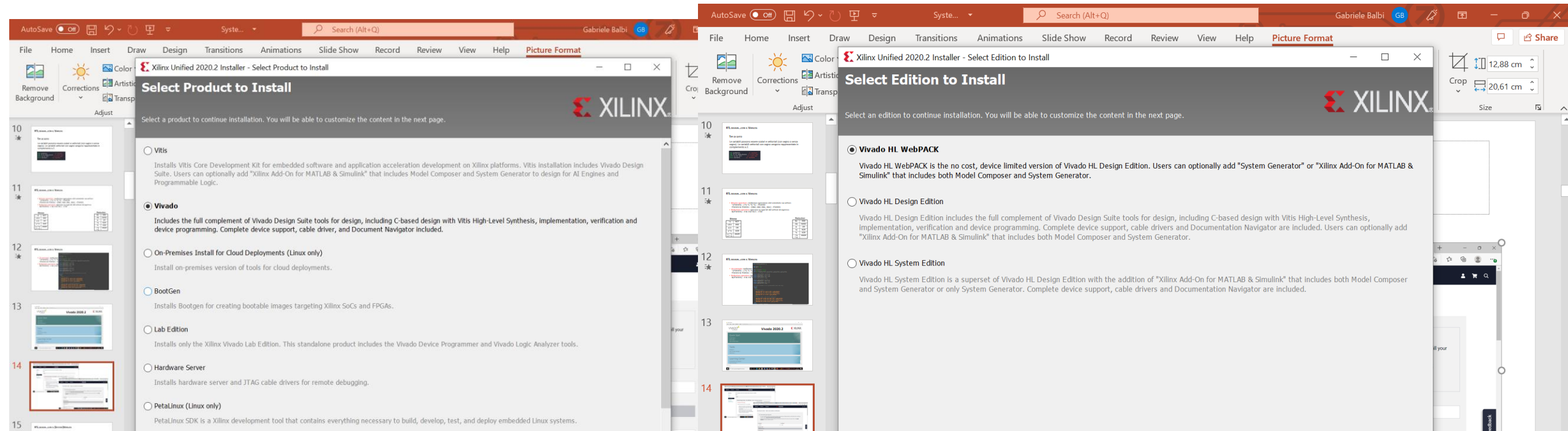
<https://www.intel.com/content/www/us/en/software-kit/665990/intel-quartus-prime-lite-edition-design-software-version-18-1-for-windows.html>

2. Select the 18.1 LITE version (!!!)



# INSTALLATION NOTES VIVADO 2020.2

1. Create a Xilinx account: [Xilinx Inc - Accedi](#)
2. Go to the Download Center: [Downloads \(xilinx.com\)](#)
3. Select the 2020.2 version (!!!)
4. During the installation select the WebPack Edition (no license required)



## Version

2021.2

2021.1

2020.3

Vivado Archive

ISE Archive

CAE Vendor

Libraries Archive

We strongly recommend using the latest releases available.

2020

2020.2

### Vivado Design Suite - HLx Editions - 2020.2 Full Product Installation

#### Important Information

Vivado® Design Suite 2020.2 is now available

- Public access support for the Xilinx® Versal™ Platform
- Petalinux now a part of Xilinx Unified Installer
- Access Block Design container now to create team-based designs
- Abstract Shell for Dynamic Function eXchange
- 2020.2 Introduces Vitis™ HLS for Vivado flows
- Add-on for MATLAB® and Simulink® (Unified Model Composer and System Generator)

We strongly recommend to use the web installers as it reduces download time and saves significant disk space

## Download Center - Name and Address Verification

### U.S. Government Export Approval

- U.S. export regulations require that your First Name, Last Name, Company Name and Shipping Address be verified before Xilinx can fulfill your download request. **Please provide accurate and complete information.**
- Addresses with Post Office Boxes and names/addresses with Non-Roman Characters with accents such as grave, tilde or colon **are not supported** by US export compliance systems.

First Name\*

Last Name\*

Business E-mail\*

Company Name\*

Please enter the name of your business or institution.

Address 1\*

Feedback



# Vivado 2020.2



## Quick Start

Create Project >

Open Project >

Open Example Project >

## Tasks

Manage IP >

Open Hardware Manager >

XHub Stores >

## Learning Center

Documentation and Tutorials >

Quick Take Videos >

Tcl Console



## INSTALLATION NOTES VIVADO 2020.2

- Una volta installato Vivado è necessario installare i files che descrivono le demo board Digilent che verranno usate durante il corso. Si trova sottoforma di pacchetto GIT alla pagina [Digilent/vivado-boards \(github.com\)](https://github.com/Digilent/vivado-boards)

- Comando da eseguire dal terminale GitBash:

*git clone <https://github.com/Digilent/vivado-boards.git> vivado\_boards*

balbi@LAPTOP-IMI5H5SA MINGW64 ~

\$ pwd  
/c/Users/ilpes

balbi@LAPTOP-IMI5H5SA MINGW64 ~

\$ git clone https://github.com/Digilent/vivado-boards.git vivadoBoards  
Cloning into 'vivadoBoards'...  
remote: Enumerating objects: 1904, done.  
remote: Counting objects: 100% (683/683), done.  
remote: Compressing objects: 100% (294/294), done.  
remote: Total 1904 (delta 272), reused 626 (delta 223), pack-reused 1221  
Receiving objects: 100% (1904/1904), 644.62 KiB | 506.00 KiB/s, done.  
Resolving deltas: 100% (718/718), done.

balbi@LAPTOP-IMI5H5SA MINGW64 ~

\$ cd vi  
Videos/            vivadoBoards/

balbi@LAPTOP-IMI5H5SA MINGW64 ~

\$ cd vivadoBoards/

balbi@LAPTOP-IMI5H5SA MINGW64 ~/vivadoBoards (master)

\$ ls  
README.md   new/   old/   utility/

che  
durante il

git clone <https://github.com/Digilent/vivado-boards.git> vivado\_boards

Copiate le 2 directory evidenziate nel  
percorso:  
\\install\_dir\_Vivado\\2020.2\\data\\boards\\boards\_files\\

board\_files

File Home Condividi Visualizza

« vivadoBoards » new » board\_files

Cerca in board\_files

	Nome	Ultima modifica	Tip
Desktop	arty	10/02/2022 01:11	Car
Download	arty-a7-35	10/02/2022 01:11	Car
Documenti	arty-a7-100	10/02/2022 01:11	Car
Immagini	arty-s7-25	10/02/2022 01:11	Car
1871	arty-s7-50	10/02/2022 01:11	Car
Musica	arty-z7-10	10/02/2022 01:11	Car
Screenshot	arty-z7-20	10/02/2022 01:11	Car
Video	basys3	10/02/2022 01:11	Car
OneDrive - Person	cmod_a7-15t	10/02/2022 01:11	Car
Questo PC	cmod_a7-35t	10/02/2022 01:11	Car
Desktop	cmod-s7-25	10/02/2022 01:11	Car
Documenti	cora-z7-07s	10/02/2022 01:11	Car
Download	cora-z7-10	10/02/2022 01:11	Car
Immagini	eclipse-z7	10/02/2022 01:11	Car
Musica	genesys2	10/02/2022 01:11	Car
Oggetti 3D	genesys-zu-3eg	10/02/2022 01:11	Car
Video	genesys-zu-5ev	10/02/2022 01:11	Car
Windows (C:)	nexys_video	10/02/2022 01:11	Car
Rete	nexys4	10/02/2022 01:11	Car
	nexys4_ddr	10/02/2022 01:11	Car

28 elementi | 2 elementi selezionati



« Windows (C:) » Xilinx » Vivado » 2020.2 » data » boards » board\_files



Cerca in board\_files

Desktop

Download

Documenti

Immagini

1871

Musica

Screenshot

Video

OneDrive - Person

Questo PC

Desktop

Documenti

Download

Immagini

Musica

Oggetti 3D

Video

Windows (C:)

Rete

Nome

Ultima modifica

Tipo

Dimensione

ac701

04/02/2022 11:59

Cartella di file

arty

10/02/2022 01:12

Cartella di file

arty-a7-35

10/02/2022 01:12

Cartella di file

arty-a7-100

10/02/2022 01:12

Cartella di file

arty-s7-25

10/02/2022 01:12

Cartella di file

arty-s7-50

10/02/2022 01:12

Cartella di file

arty-z7-10

10/02/2022 01:12

Cartella di file

arty-z7-20

10/02/2022 01:12

Cartella di file

au200

04/02/2022 11:54

Cartella di file

au250

04/02/2022 12:00

Cartella di file

au280

04/02/2022 11:55

Cartella di file

basys3

10/02/2022 01:12

Cartella di file

cmod\_a7-15t

10/02/2022 01:12

Cartella di file

cmod\_a7-35t

10/02/2022 01:12

Cartella di file

cmod-s7-25

10/02/2022 01:12

Cartella di file

cora-z7-07s

10/02/2022 01:12

Cartella di file

cora-z7-10

10/02/2022 01:12

Cartella di file

eclipse-z7

10/02/2022 01:12

Cartella di file

genesys2

10/02/2022 01:12

Cartella di file

genesys-zu-3eg

10/02/2022 01:12

Cartella di file

genesys-zu-5ev

10/02/2022 01:12

Cartella di file

Nel mio caso è qui