Getting started –
Riverdi GUI design with TouchGFX Designer

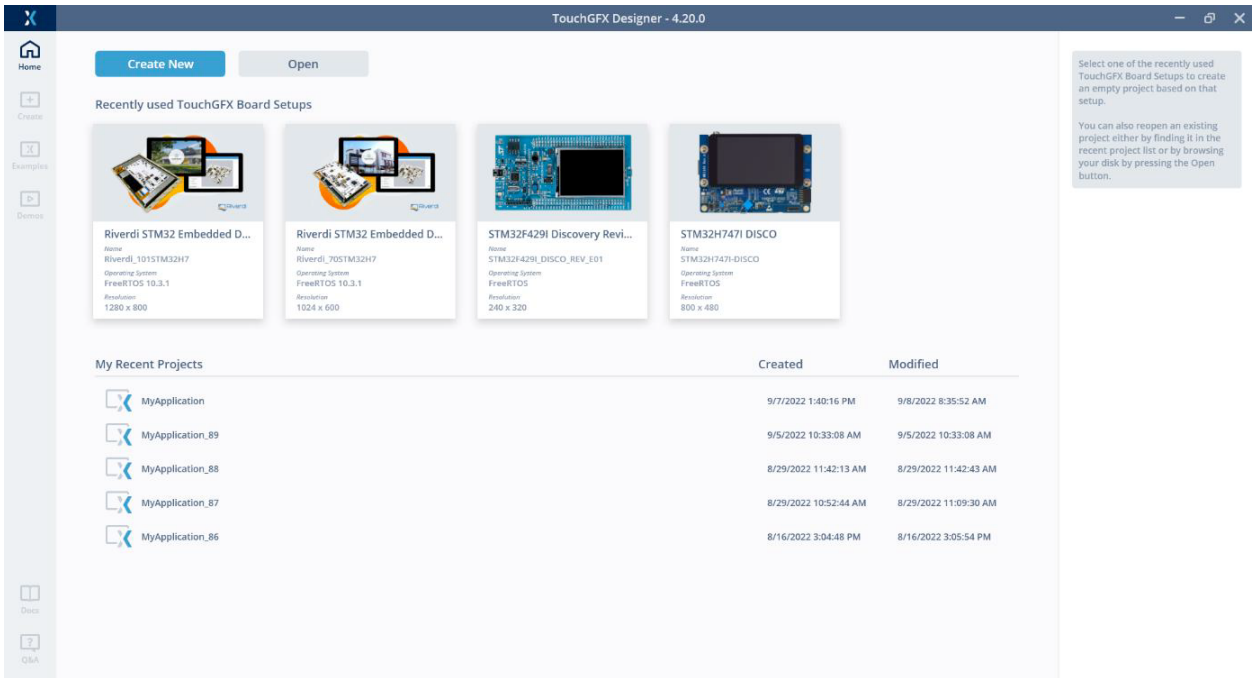
TouchGFX Designer is an advanced PC GUI-builder and simulator for STM32 microcontrollers from ST Microelectronics. It is ready-to-use solution to design stunning GUI.

TouchGFX version 4.20 is fully compatible and seamlessly integrated with all Riverdi products based on STM32H7.

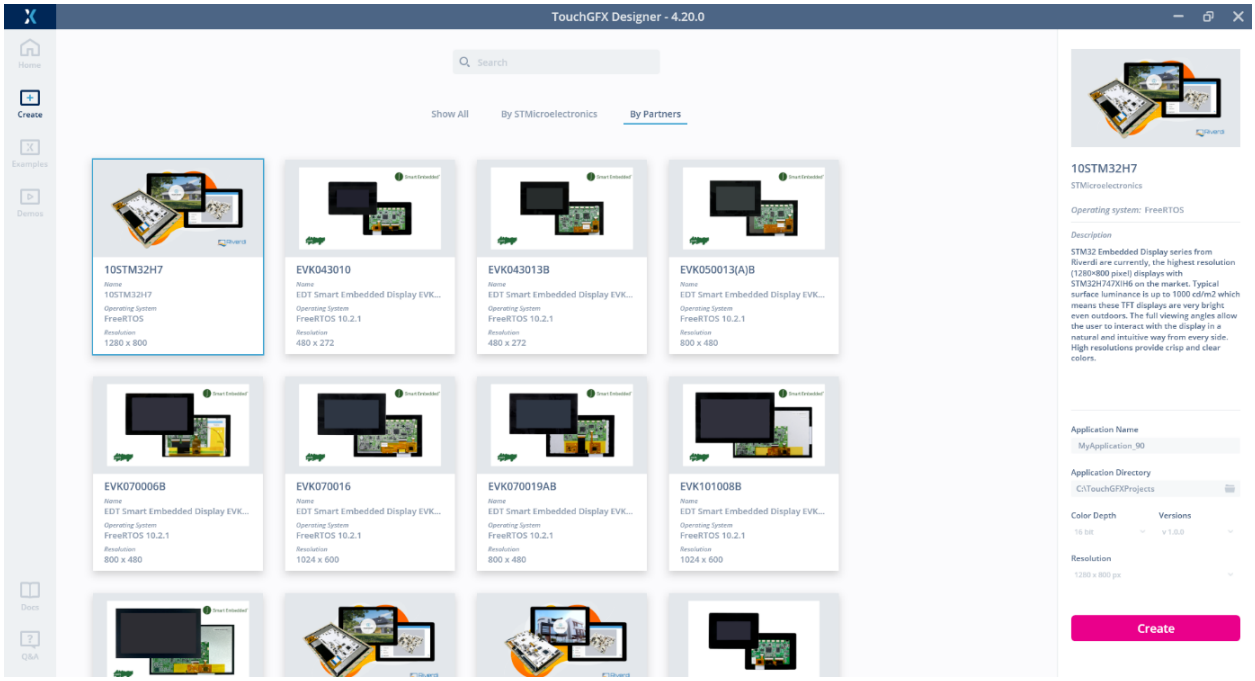
Learn how to create GUI for your Riverdi display.

First, you need to install software and create a new project:

1. Install latest TouchGFX (4.20), CubeIDE 1.10.1 and Cube Programmer into default location: available here
2. Start TouchGFX Designer
3. Create your project by clicking “Create New”

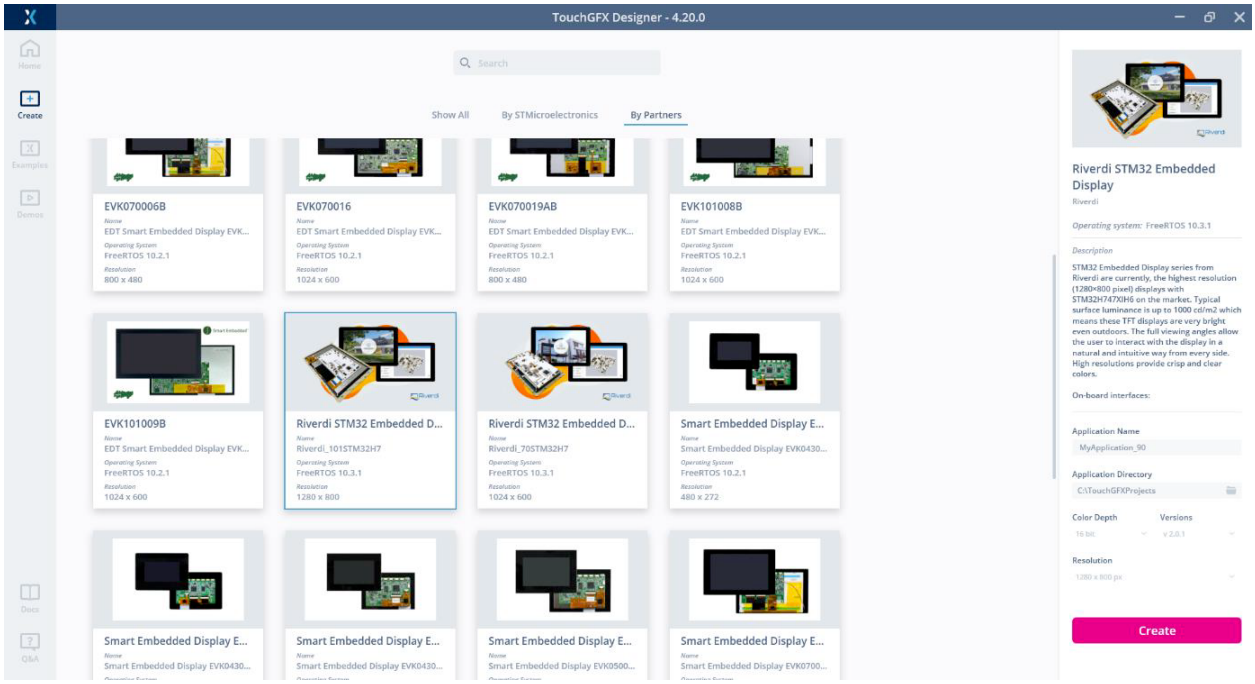


4. Go to “By Partners” tab to choose Riverdi display compatible project



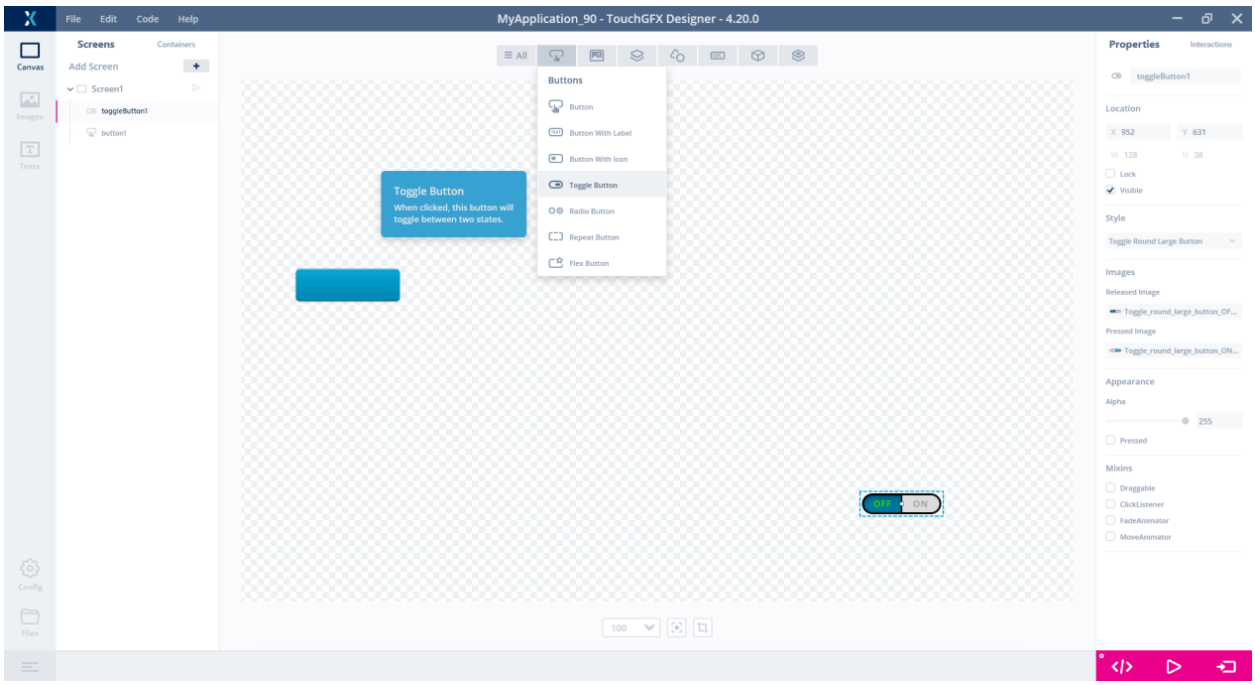
5. Select Riverdi board.

NOTE: There might be more than one template for the same Riverdi Display. Always select the latest version. Check the template details shown on the right panel. (In this case it’s v 2.0.1)



6. Click “Create”

Now you have an empty Canvas to design your GUI. You can put widgets using drag and drop from the menu. For example buttons, sliders, progress bars, images.



Once you have finished designing your GUI you need to:

1. Save the project.

2. Click “Generate Code” on the right bottom corner (or press F4).

TIP: You can check how your GUI will look like without connecting real hardware. To see how it works run the simulator by clicking play button on the right bottom corner (or press F5).

When you are happy with your project it’s time to make it work on your display:

1. Connect ST-Link programmer to PC

2. Connect SWD cable to Riverdi display

3. Connect power

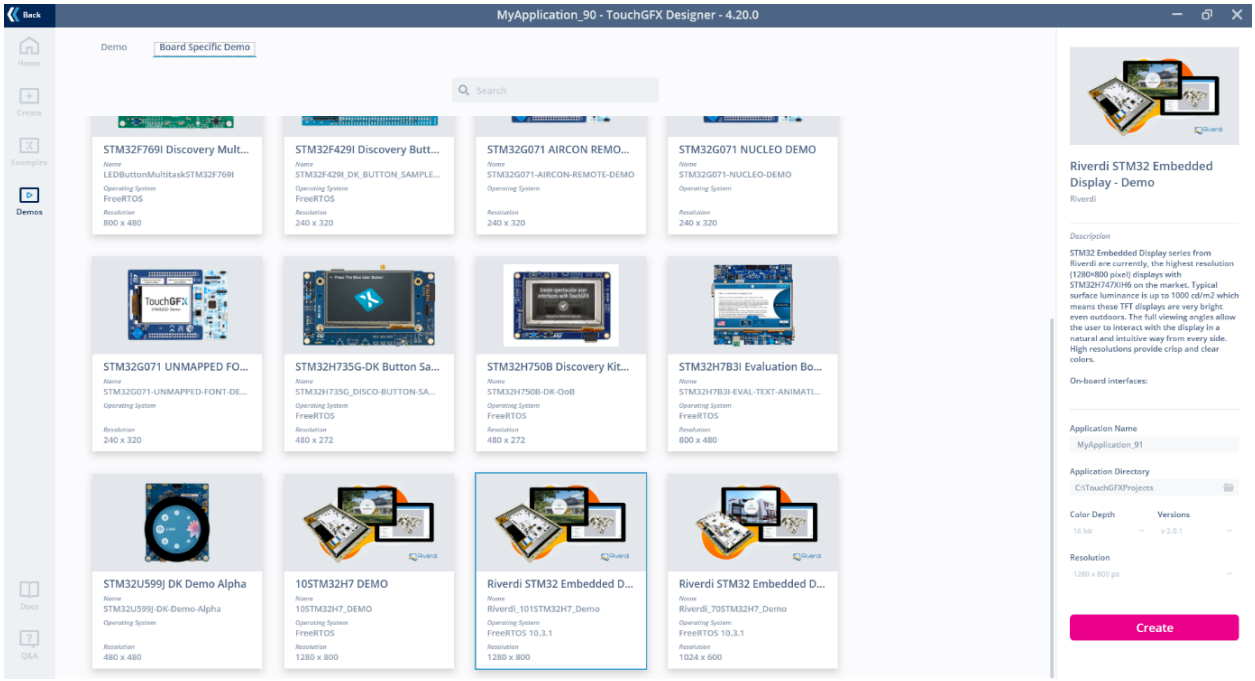
4. Press “Run on Target” (or press F6)

TouchGFX Designer will compile project and create binary code. It will also automatically upload FW to Riverdi Display. Once this process is finished you should have your GUI running on actual board. Thanks to WYSIWYG (What You See Is What You Get) environment you don't need to know any programming languages or hardware structure to create great GUI design.

Need some inspiration? There are demos!

Check out the Riverdi demo GUI project (IoT Smart Home):

1. File-> New
2. Select "Demos" from icons on the left
3. Go to "Board Specific Demo"
4. Select latest demo for your Riverdi Display



5. Click "Create"
6. Have fun and see how it works
7. To run it on a hardware display click "Generate Code" (or press F4)
8. Connect your display
9. Click "Run on Target" (or press F6)