This board is handmade: except for the cost of components, every cent will be reinvested to improve the FabGL library, applications and to produce even better boards.

Here are some instructions on how to get started.

1) Install the current upstream Arduino IDE at the 1.8 level or later. The current version is at the arduino.cc website.

2) Start Arduino and open the **Preferences** window.

3) Into ***Additional Board Manager*** *URLs* field enter:

"https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json"

4) Open Boards Manager from **Tools > Boards Manager...** menu and install **esp32** platform

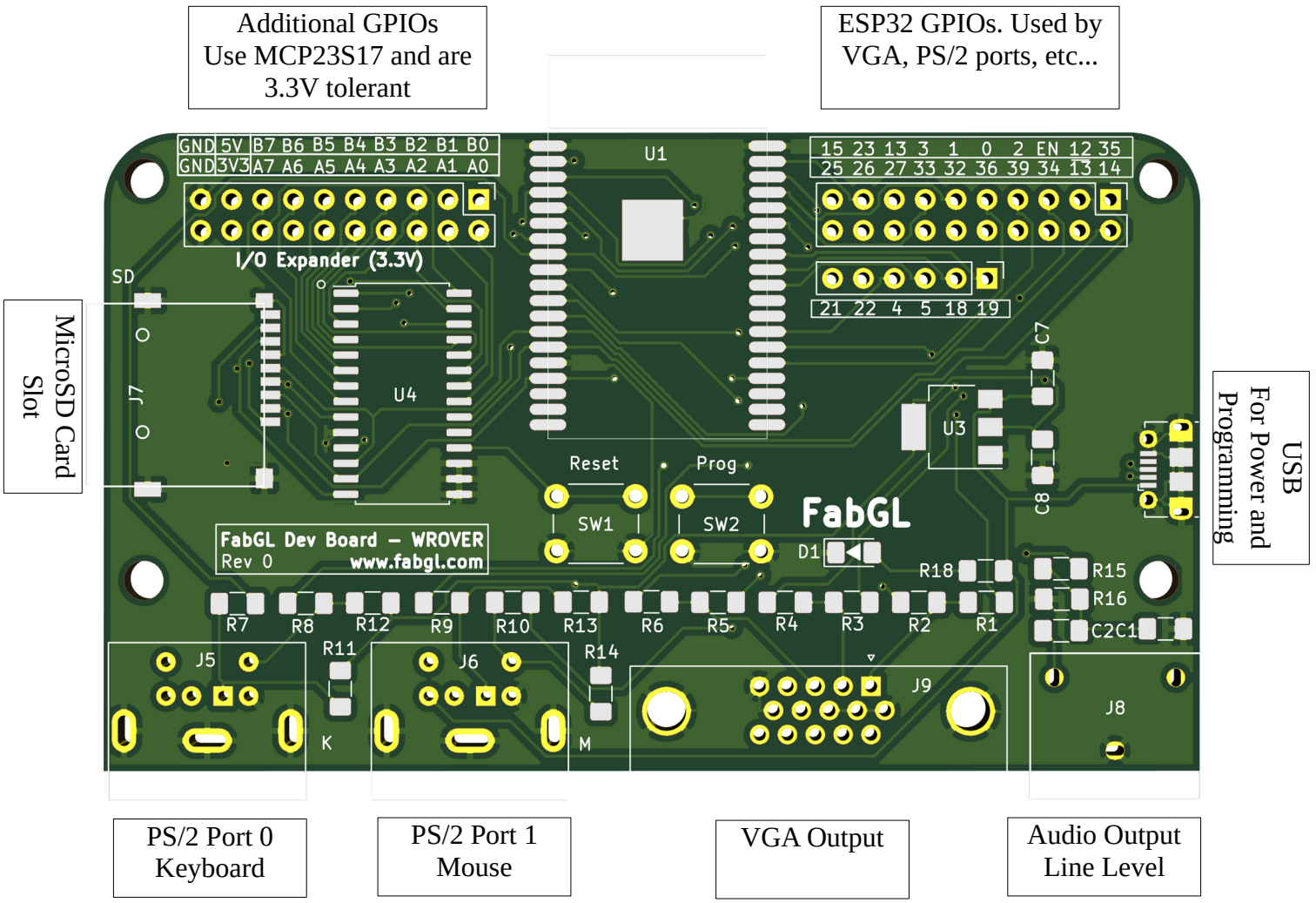
5) From **Tools** menu select the board "**ESP32 Dev Module**". In the board menu, set following parameters:
- Upload speed: **460800**
- Partition Scheme: **Huge App**

6) Open **Tools > Manage Libraries** menu and install **fabgl** library.

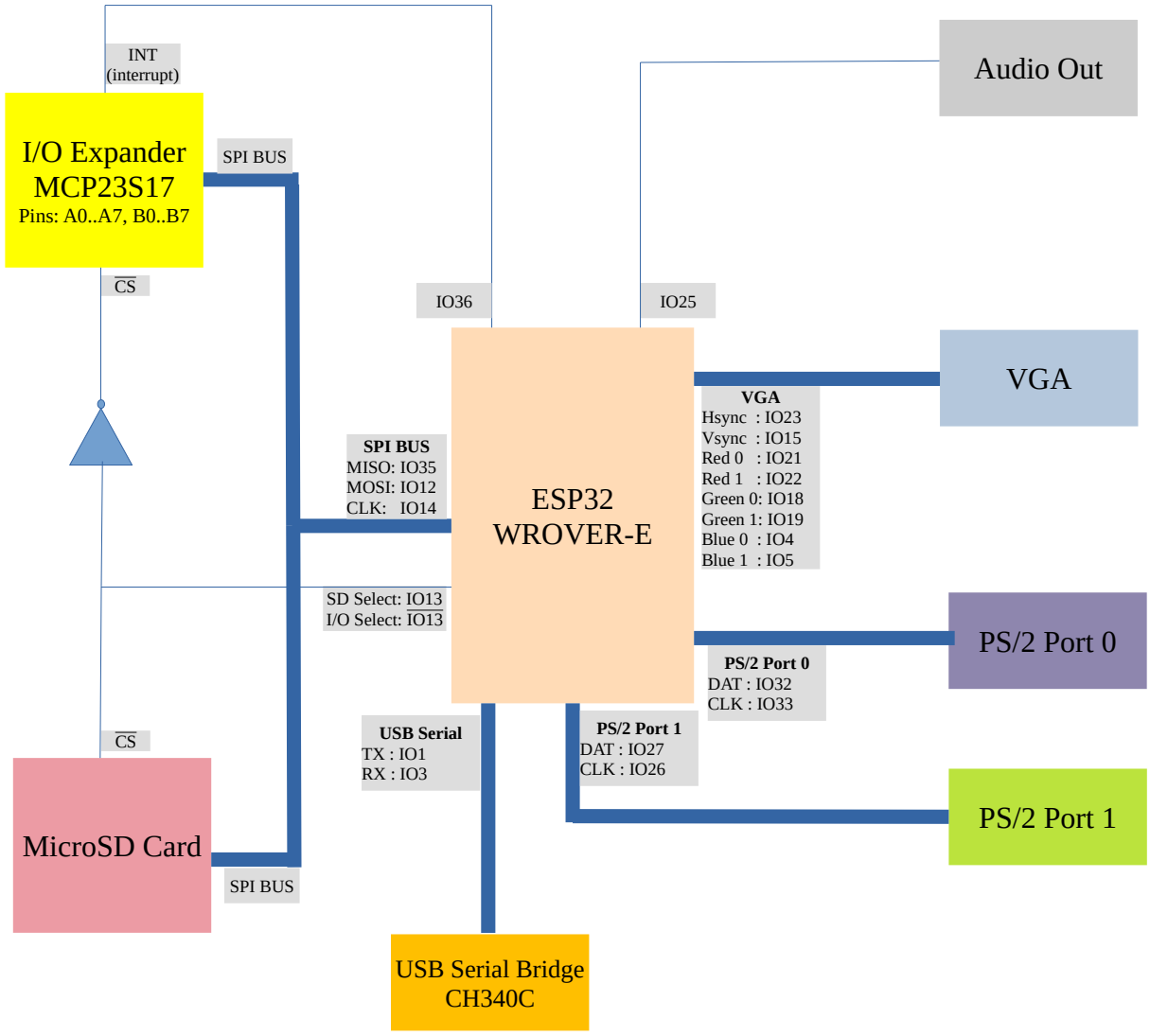
7) Restart Arduino IDE.

8) Open **File > Examples > FabGL** menu to select one of the FabGL examples.

The Board


Additional GPIOs
Use MCP23S17 and are
3.3V tolerant
ESP32 GPIOs. Used by
VGA, PS/2 ports, etc...
MicroSD Card
Slot
USB
For Power and
Programming
GND 5V B7 B6 B5 B4 B3 B2 B1 B0
GND 3V3 A7 A6 A5 A4 A3 A2 A1 A0
I/O Expander (3.3V)
15 23 13 3 1 0 2 EN 12 35
25 26 27 33 32 36 39 34 13 14
21 22 4 5 18 19
SD
J7
U1
U4
U3
C7
C8
Reset
Prog
SW1
SW2
FabGL
FabGL Dev Board – WROVER
Rev 0
www.fabgl.com
D1
R18
R15
R16
C2C1
R7
R8
R12
R9
R10
R13
R6
R5
R4
R3
R2
R1
R11
R14
J5
J6
J9
J8
K
M
PS/2 Port 0
Keyboard
PS/2 Port 1
Mouse
VGA Output
Audio Output
Line Level

Block Diagram and GPIO Assignments



References

- Library Source Code: **https://github.com/fdivitto/FabGL**

- Library Documentation: **http://www.fabgl.com**

- YouTube Channel: **https://www.youtube.com/c/fdivitto/videos**

- Install Tutorial: **https://www.youtube.com/watch?v=upgogkPwG6E**