

### INTERFACE FPC

GEN4 DISPLAY	DIABLO16	PICASO	PixxiLCD (via 15-to-30)	PIXXI-44	THIS ADAPTOR
1	GPIO1	PA3	IO1	IO1	GPIO1
2	GPIO2	PA2	IO2	IO2	GPIO2
3	GPIO3	PA1	IO3	IO3	GPIO3
4	GPIO4	PA0	IO4*	IO4	GPIO4
5	GPIO5	PA9	IO5*	IO5	GPIO5
6	GPIO6	PA8	N/C	IO6	GPIO6
7	GPIO7	PA7	BUS3	IO7	GPIO7
8	GPIO8	PA6	BUS2	IO12	GPIO8
9	GPIO9	PA5	BUS1	IO13	GPIO9
10	GPIO10	PA4	BUS0	IO14	GPIO10
11	GPIO11	PA10	BUS6	IO15	GPIO11
12	GPIO12	PA11	BUS7	IO16	GPIO12
13	GPIO13	PA12	IO5	IO17	GPIO13
14	GPIO14	PA13	RX1	IO18	GPIO14
15	GPIO15	PA14	TX1	IO6	GPIO15
16	GPIO16	PA15	I2C_SCL	IO7	GPIO16
17	GPIO17	N/C	I2C_SDA	N/C	GPIO17
18	AUDIO-OUT	AUDIO-OUT	AUDIO-OUT	AUDIO-OUT	AUDIO-OUT
19	AUDENB	AUDENB	AUDENB	AUDENB	AUDENB
20					
21	RESET	RESET	RESET	RESET	RESET
22	TX	RX0	RX0	RX0	RX0
23	RX	TX0	TX0	TX0	TX0
24					
25					
26					
27					
28					
29					
30					
31					
32					

\* Not all PIXXI modules have all GPIO available. Check individual product Datasheets

30 way FFC Cable

NOTE: PICASO, DIABLO16 and PIXXI pinouts are quite different, and they feature a different number of GPIO.

This adaptor therefore references the GPIO from the modules as GPIOxx naming, rather than platform specific PA / IO / BUS type naming.

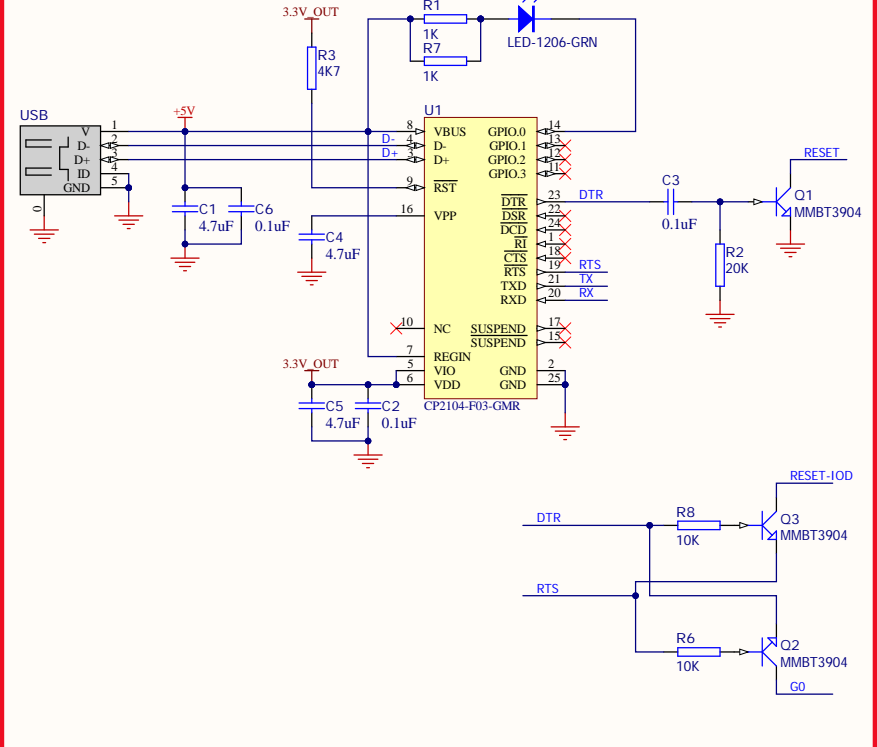
Please refer to the columns to the left, to map the Picaso, Diablo16 and PIXXI GPIO to those used on this board.

The PixxiLCD column is for all PixxiLCD devices (both Pixxi-28 and Pixxi-44) which have a 15 way FFC, and connect to the 4D-UPA via the 15-to-30 FFC cable. For PIXXI-28 modules, these use IO1/IO2 and sometimes more, depending on the module. For PIXXI-44 modules, these use IO6/IO7.

The PIXXI-44 column is for Pixxi-44 devices which feature a 30 way FFC natively. IO6/IO7 are repeated to bring the I2C compatible pins into the same position as Diablo modules.

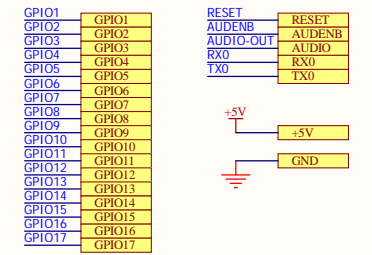
- DIABLO column, for modules such as gen4-uLCD-24DT, gen4-uLCD-43DCT etc.
- PICASO column, for modules such as gen4-uLCD-24PT, gen4-uLCD-32PT etc.
- PixxiLCD (via 15-to-30) column, for modules such as pixxiLCD-20P2, pixxiLCD-39P4CT etc
- PIXXI-44 column, for modules such as gen4-uLCD-24P4T, gen4-uLCD-43P4CT-CLB etc

### USB TO SERIAL PROGRAMMING



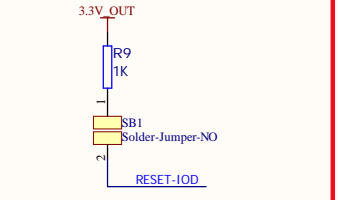
### gen4-uLCD BREAKOUT HEADERS

also uLCD and uOLED pads



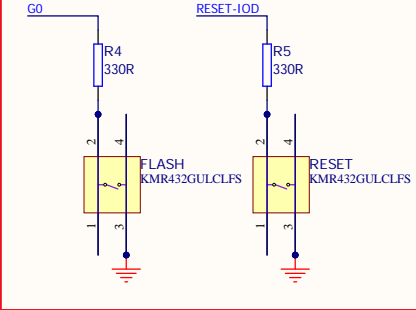
PADS with optional male pin headers - not included

### Enable for 4Discovery ESP Flashing

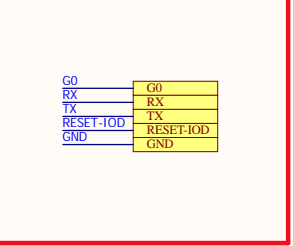


Required for both 4Discovery 5" ESP32, and 4Discovery 1.3" ESP8266

### FLASH/RESET buttons for both IoD Types



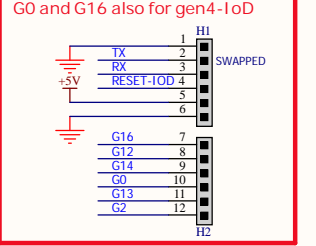
### INTERFACE 4Discovery 5" ESP



Only to program ESP32, will not power 4Discovery 5"

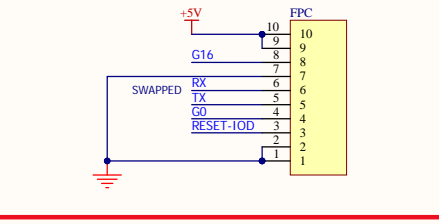
### INTERFACE IoD-09

G0 and G16 also for gen4-IoD



PADS with optional female pin headers (2x 6way) - included

### INTERFACE gen4-IoD and 4Discovery 1.3" (ESP)



10 way FFC Cable

http://www.4dsystems.com.au

Title: **4D-UPA Universal Programmer**

Revision: 1.3  
 Date: 14/11/2022  
 Time: 10:34:25 am

**4D SYSTEMS**  
 TURNING TECHNOLOGY INTO ART

File: 4D-UPA-(Universal Programmer)-REV1.3.SchDoc