Pocket Science Lab V6

Pin Layout Diagram

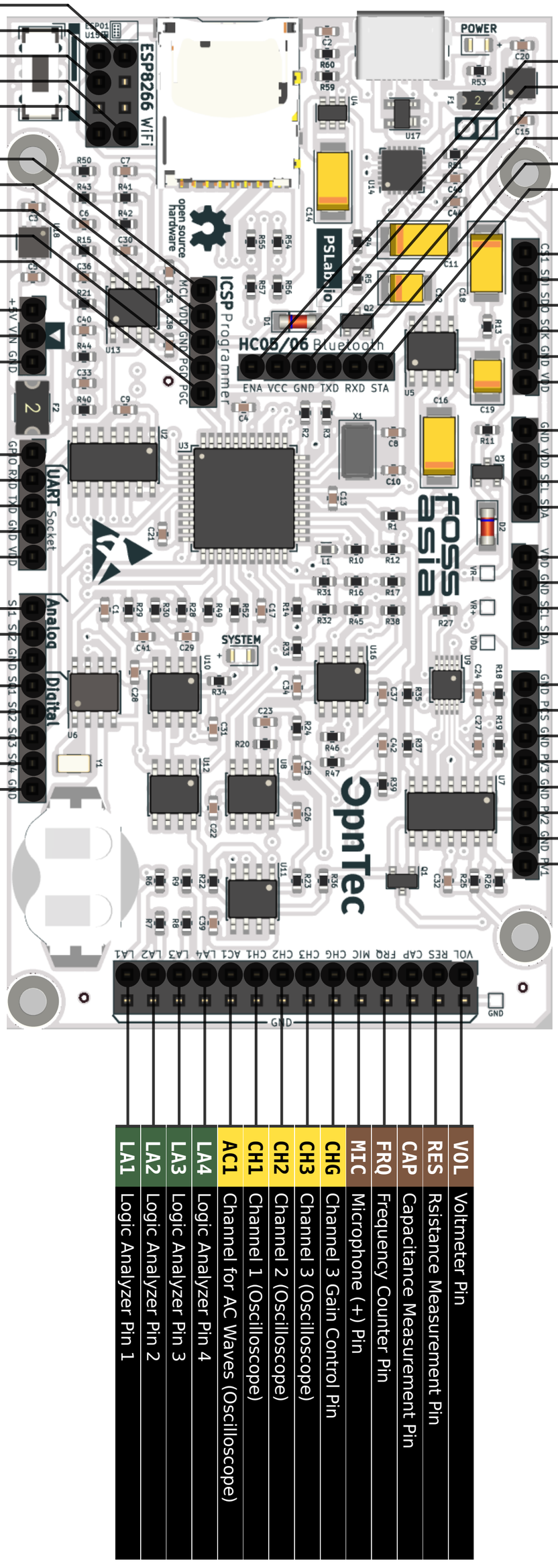
Ground Pin (0 V)	GND
UART Rx Pin for ESP	RXD
ESP Enable Pin / CH_PD	ENP
UART Tx Pin for ESP	TXD
Voltage Suppy Pin (+3.3 V)	VDD

Master Clear Pin	MCL
Voltage Suppy Pin (+3.3 V)	VDD
Ground Pin (0 V)	GND
Programmer Data Pin	PGD
Programmer Clock Pin	PGC

Voltage Supply Pin (+5 V)	+5V
External Power input Pin (< 15 V)	VIN
Ground Pin (0 V)	GND

General Purpose Input Output Pin (GPIO)	PIN
External UART Rx Pin	RXD
External UART Tx Pin	TXD
Ground Pin (0 V)	GND
Voltage Supply Pin (+3.3 V)	VDD

Wave Generator Pin 1 (5 Hz ~ 5 kHz)	SI1
Wave Generator Pin 2 (5Hz ~ 5kHz)	SI2
Ground Pin (0 V)	GND
PWM Generator Pin 1 (32 MHz)	SQ1
PWM Generator Pin 2 (32 MHz)	SQ2
PWM Generator Pin 3 (32 MHz)	SQ3
PWM Generator Pin 4 (32 MHz)	SQ4
Ground Pin (0 V)	GND



ENA	Bluetooth Module Enable Pin
VCC	Voltage Supply Pin (+5 V)
GND	Ground Pin (0V)
TXD	UART Tx Pin for Bluetooth
RXD	UART Rx Pin for Bluetooth
STA	Bluetooth Status Pin (Not Connected)

CS1	Channel Select Pin for SPI
SDI	SPI Data In
SDO	SPI Data Out
SCK	SPI Clock Pin
GND	Ground Pin (0 V)
VDD	Voltage Supply Pin (+3.3 V)

GND	Ground Pin (0 V)
VDD	Voltage Supply Pin (+3.3 V)
SCL	I^2C Serial Clock Pin
SDA	I2C Serial Data Pin

VDD	Voltage Supply Pin (+3.3 V)
GND	Ground Pin (0 V)
SCL	I2C Serial Clock Pin
SDA	I2C Serial Data Pin

GND	Ground Pin (0 V)
PCS	Programmable Current Source (3.3 mA)
GND	Ground Pin (0 V)
PV3	Programmable Voltage Source (0 - 3 V)
GND	Ground Pin (0 V)
PV2	Programmable Voltage Source (± 3.3 V)
GND	Ground Pin (0 V)
PV1	Programmable Voltage Source (± 5.0 V)

LA1	Logic Analyzer Pin 1
LA2	Logic Analyzer Pin 2
LA3	Logic Analyzer Pin 3
LA4	Logic Analyzer Pin 4
AC1	Channel for AC Waves (Oscilloscope)
CH1	Channel 1 (Oscilloscope)
CH2	Channel 2 (Oscilloscope)
CH3	Channel 3 (Oscilloscope)
CHG	Channel 3 Gain Control Pin
MIC	Microphone (+) Pin
FRQ	Frequency Counter Pin
CAP	Capacitance Measurement Pin
RES	Rsistance Measurement Pin
VOL	Voltmeter Pin

Power from USB port	UP
External power from VIN pin	DOWN
CR1225 Coin cell battery	BAT

PIN	Description of Pin
PIN	Power Pins
PIN	Signal Pins
PIN	Function Pins
PIN	Programmable Power Pins
PIN	Special Function Pins
PIN	Oscilloscope Pins
PIN	Special Information

! Double check connections when using PIN pins