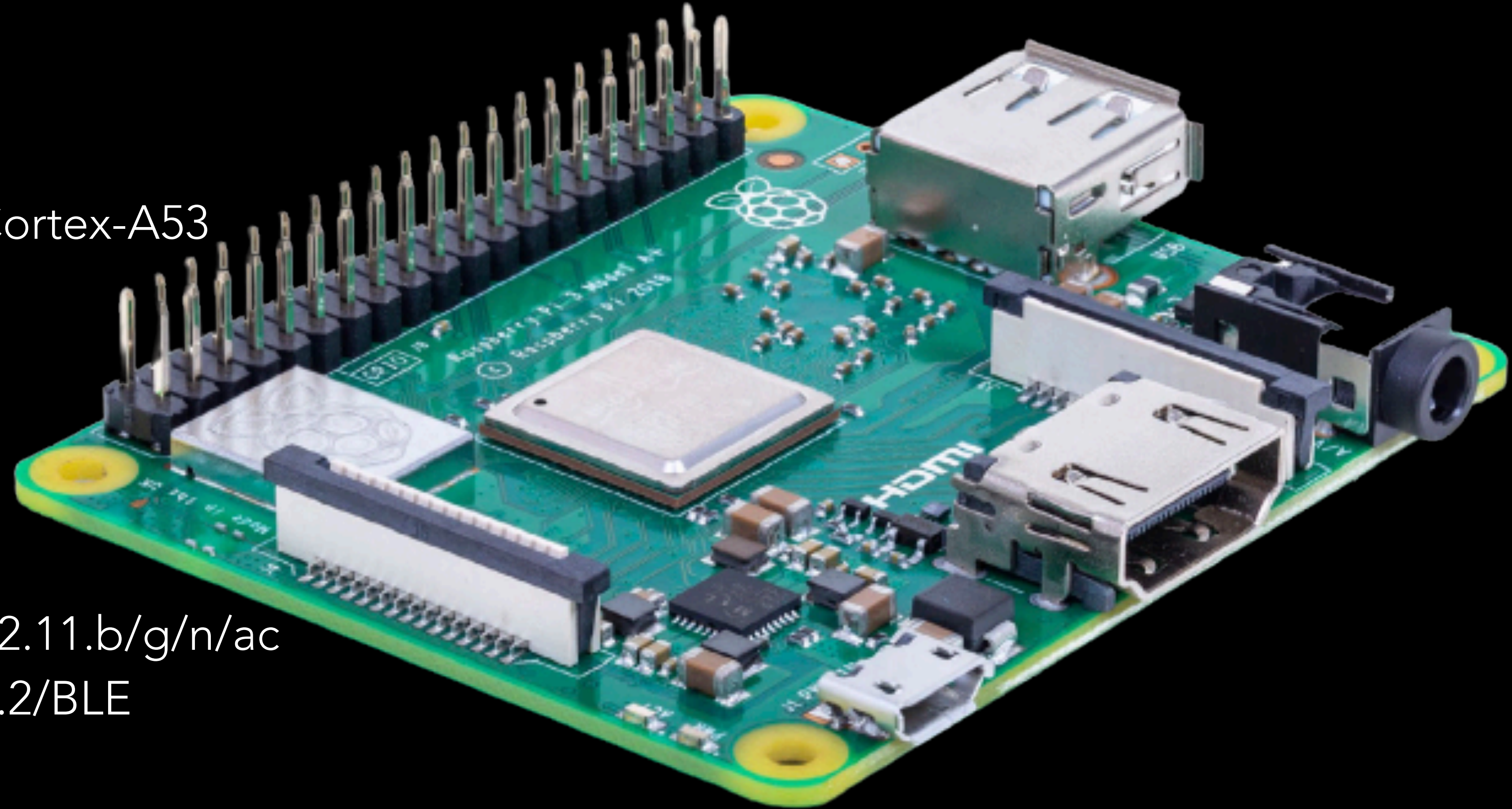


UKŁADY CYFROWE I SYSTEMY WBUDOWANE 2 – PROJEKT

# STEROWANIE UKŁADAMI PERYFERYJNYMI PODŁĄCZONYMI DO RASPBERRY PI PRZEZ STRONĘ WWW

# RASPBERRY PI 3A+

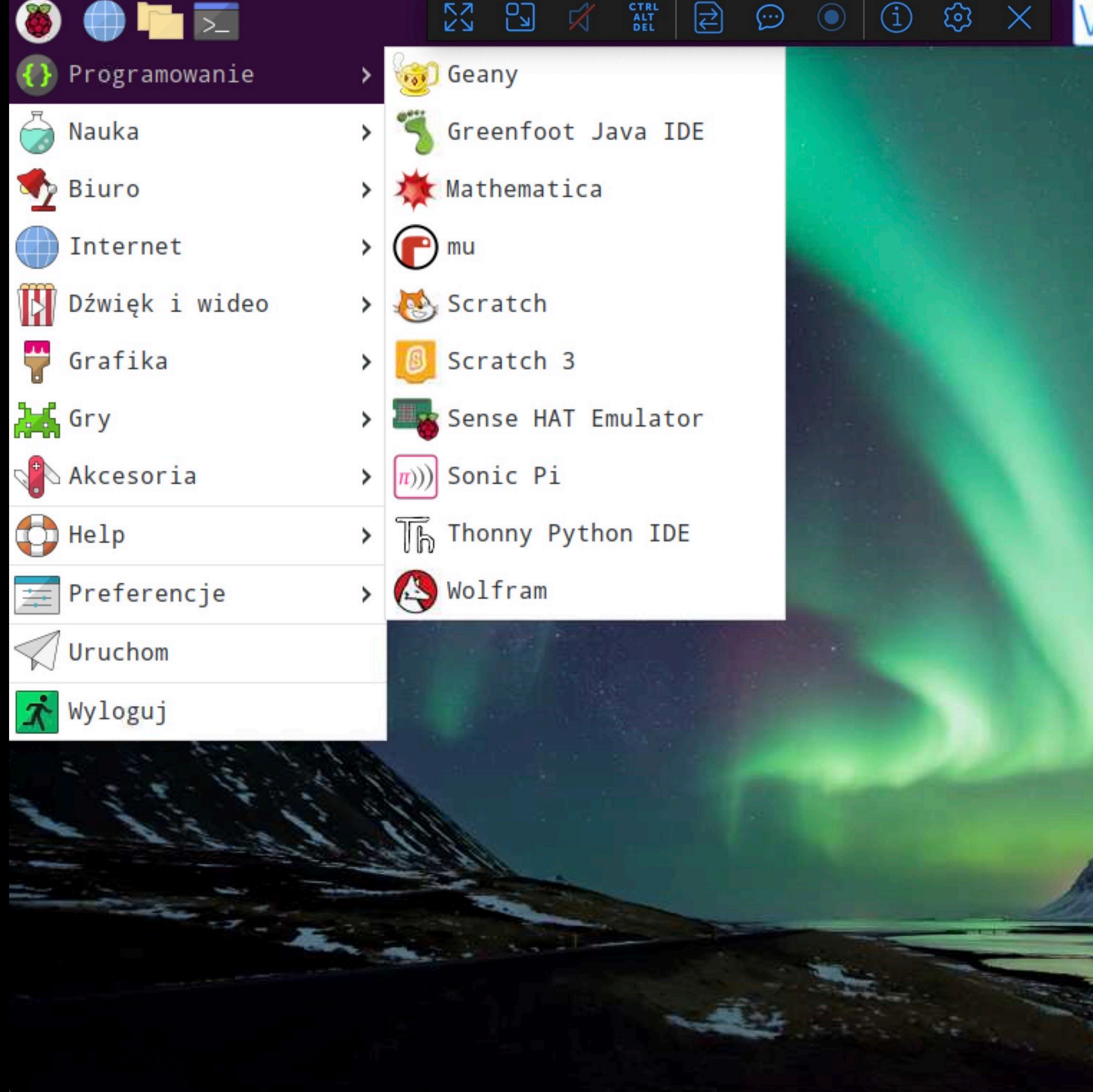
- Broadcom BCM2837B0, Cortex-A53 64-bit SoC @ 1.4 GHz
- 512MB LPDDR2 SDRAM
- 40-pin GPIO
- 2.4 GHz and 5 GHz IEEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2/BLE
- 1 × USB 2.0
- 5 V/2.5 A DC via micro USB





# RASPBERRY PI OS

- Oparty na Debianie
- Zoptymalizowany dla Raspberry Pi
- PIXEL + Openbox





# POŁĄCZENIE ZDALNE

## Raspberry Pi Software Configuration Tool (raspi-config)

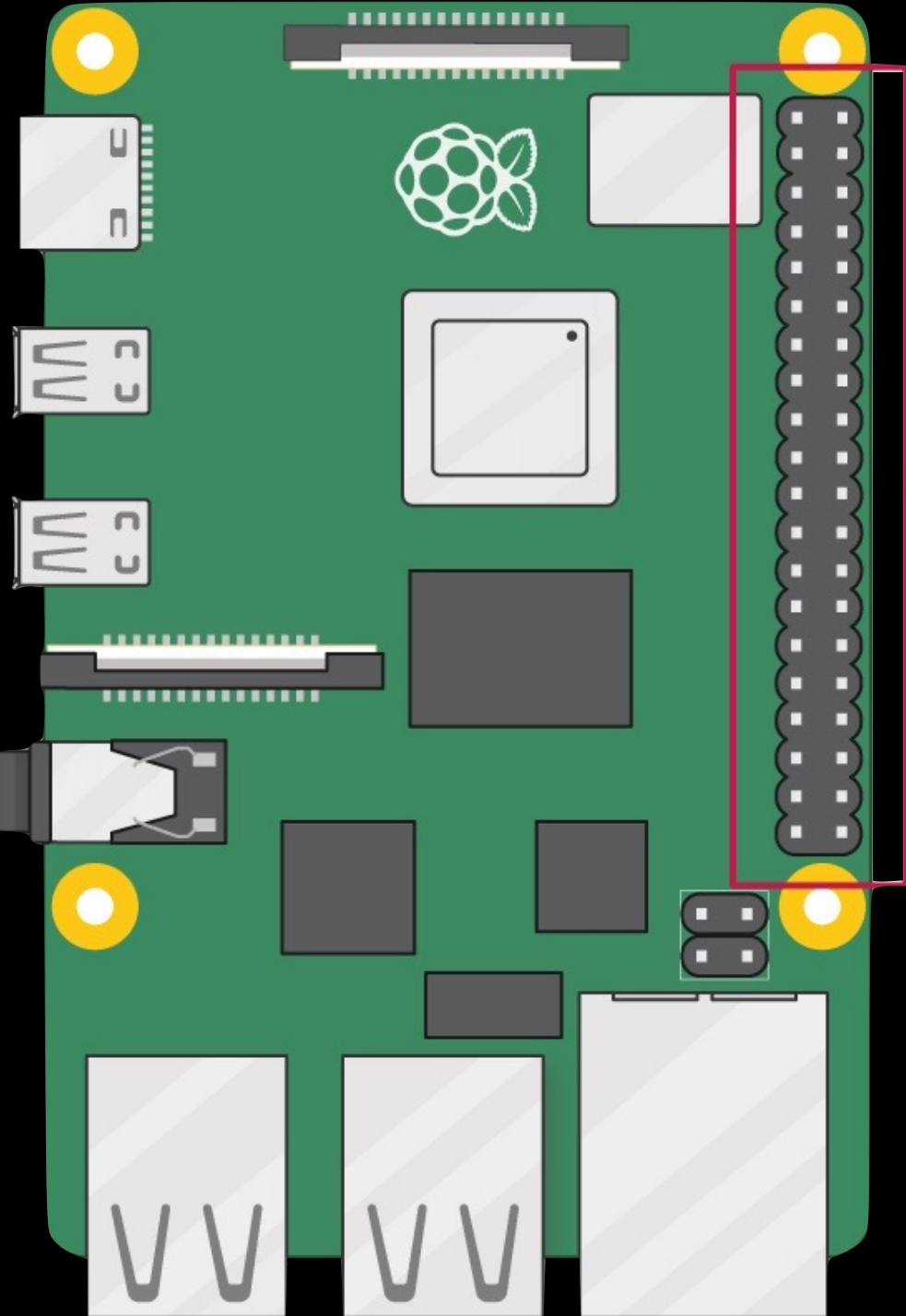
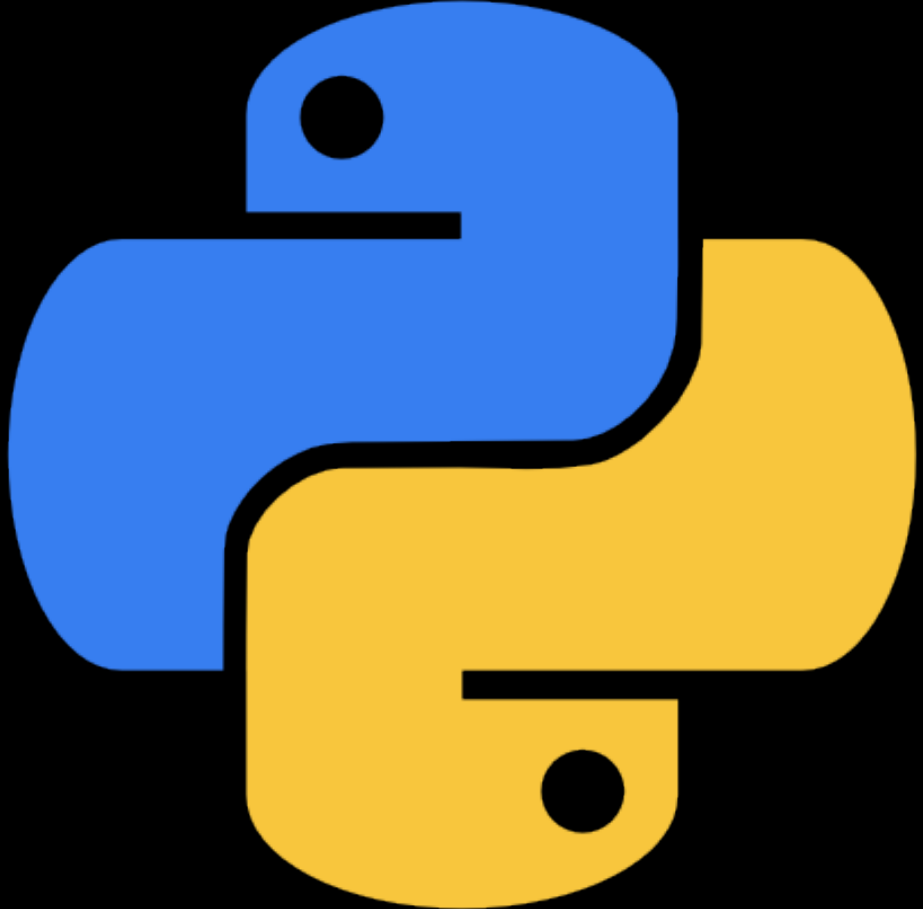
- I1 Legacy Camera Enable/disable legacy camera support
- I2 SSH Enable/disable remote command line access using SSH
- I3 VNC Enable/disable graphical remote access using RealVNC
- I4 SPI Enable/disable automatic loading of SPI kernel module
- I5 I2C Enable/disable automatic loading of I2C kernel module
- I6 Serial Port Enable/disable shell messages on the serial connection
- I7 1-Wire Enable/disable one-wire interface
- I8 Remote GPIO Enable/disable remote access to GPIO pins

<Select>

<Back>



# GPIO



3V3 power	1	2	5V power
GPIO 2 (SDA)	3	4	5V power
GPIO 3 (SCL)	5	6	Ground
GPIO 4 (GPCLK0)	7	8	GPIO 14 (TXD)
Ground	9	10	GPIO 15 (RXD)
GPIO 17	11	12	GPIO 18 (PCM_CLK)
GPIO 27	13	14	Ground
GPIO 22	15	16	GPIO 23
3V3 power	17	18	GPIO 24
GPIO 10 (MOSI)	19	20	Ground
GPIO 9 (MISO)	21	22	GPIO 25
GPIO 11 (SCLK)	23	24	GPIO 8 (CE0)
Ground	25	26	GPIO 7 (CE1)
GPIO 0 (ID_SD)	27	28	GPIO 1 (ID_SC)
GPIO 5	29	30	Ground
GPIO 6	31	32	GPIO 12 (PWM0)
GPIO 13 (PWM1)	33	34	Ground
GPIO 19 (PCM_FS)	35	36	GPIO 16
GPIO 26	37	38	GPIO 20 (PCM_DIN)
Ground	39	40	GPIO 21 (PCM_DOUT)

# STRONA WWW

- Micro-framework w Pythonie
- Brak bazy danych, sprawdzania poprawności formularzy itp
- Tylko niezbędne funkcjonalności, do pozostałych istnieją inne biblioteki

