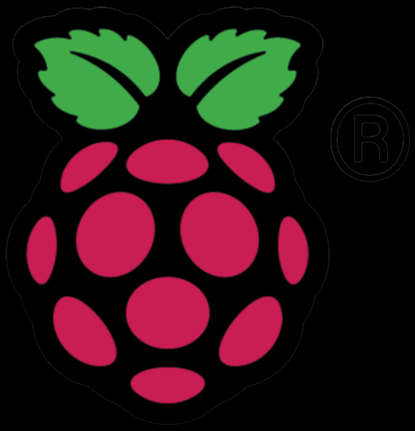


UKŁADY CYFROWE I SYSTEMY WBUDOWANE 2 – PROJEKT

STEROWANIE UKŁADAMI PERYFERYJNYMI PODŁĄCZONYMI DO RASPBERRY PI PRZEZ STRONĘ WWW

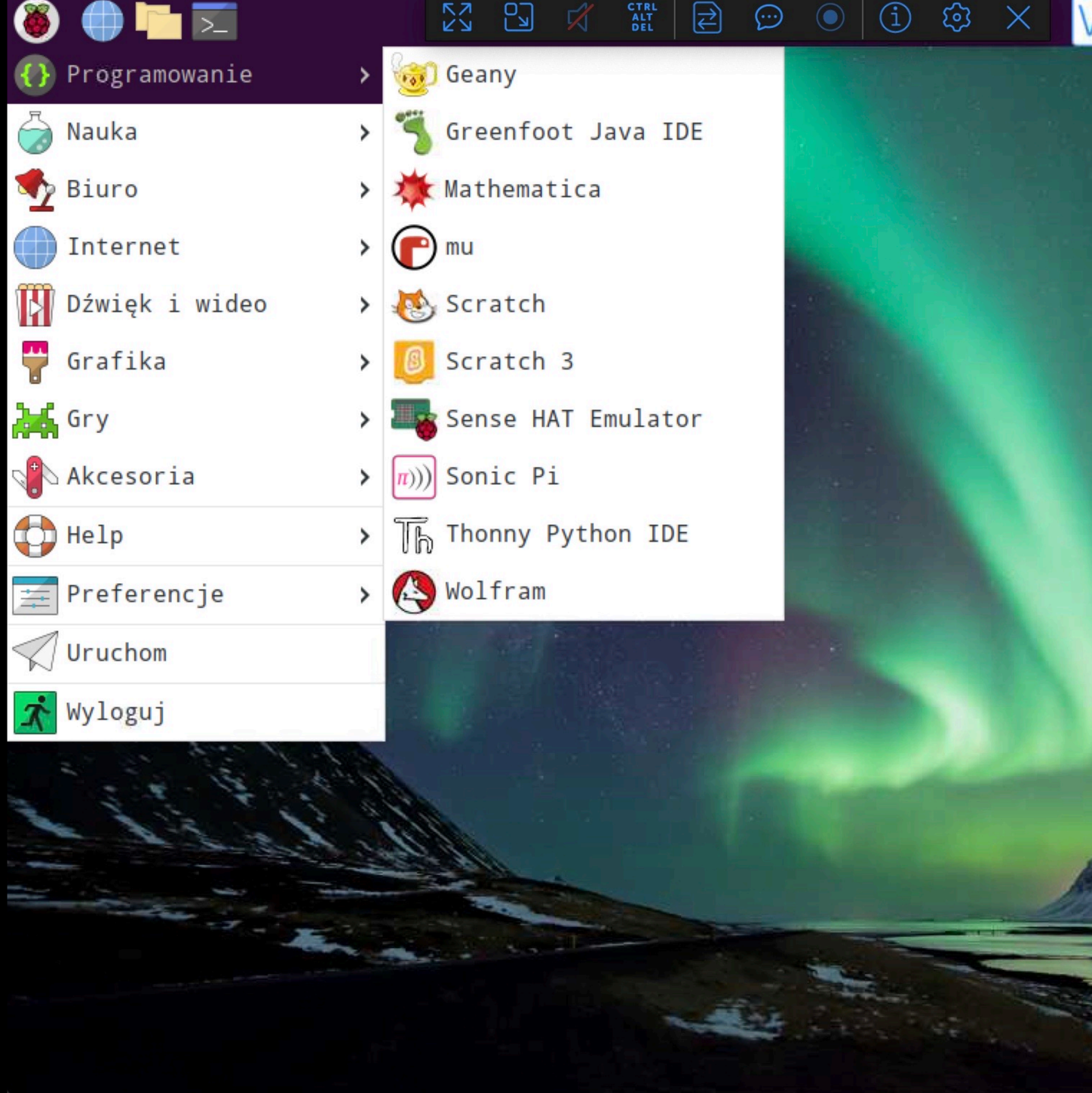
SAMANTA SZENAJCH

RASPBERRY PI 3A+

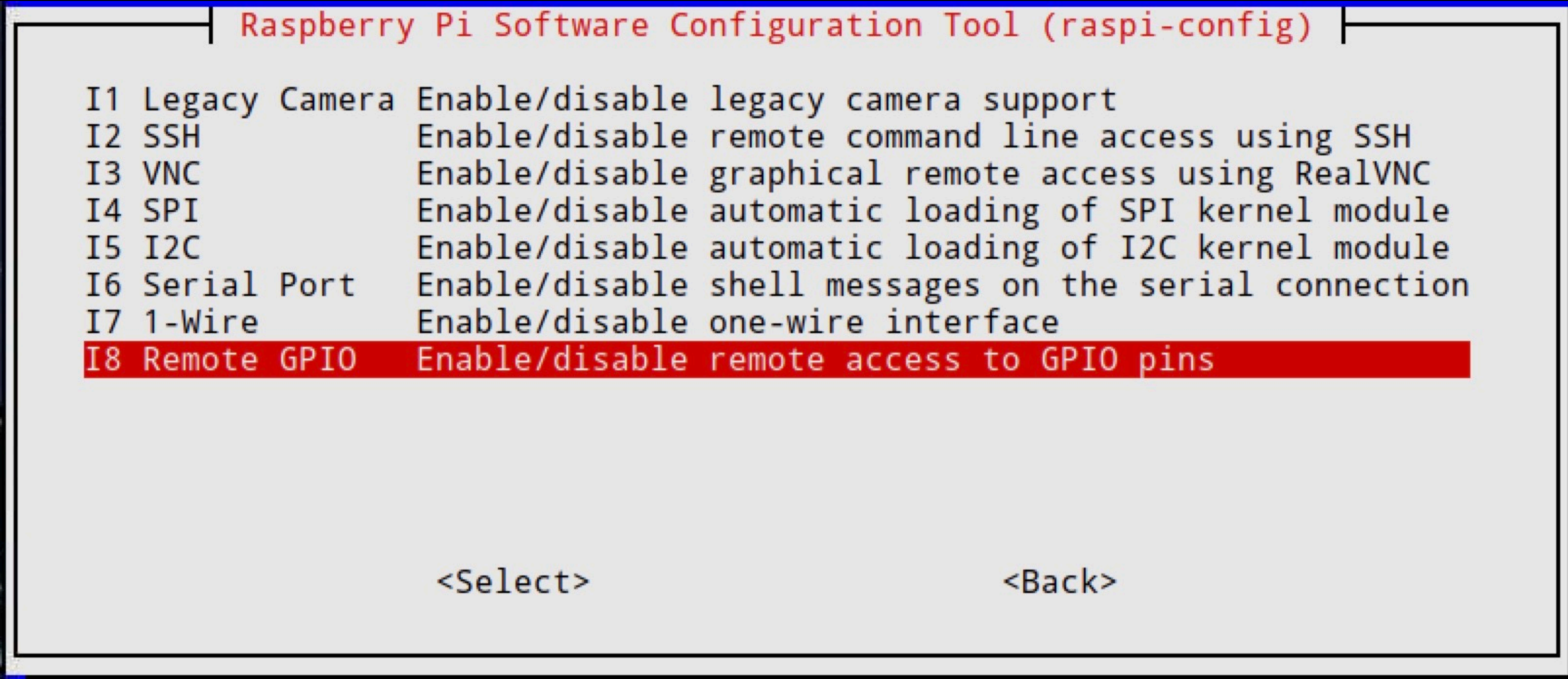
- Broadcom BCM2837B0, Cortex-A53 64-bit SoC @ 1.4 GHz
- 512MB LPDDR2 SDRAM
- 40-pin GPIO
- 2.4 GHz and 5 GHz IEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2/BLE
- 1 × USB 2.0
- 5 V/2.5 A DC via micro USB

RASPBERRY PI OS

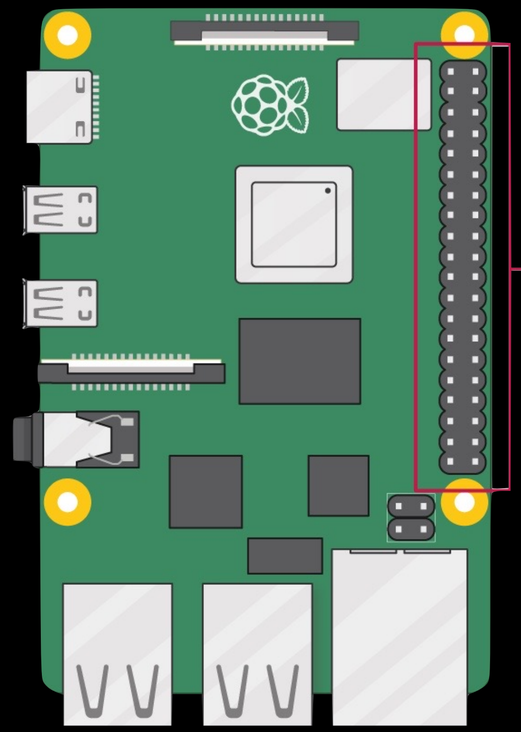
- Oparty na Debianie
- Zoptymalizowany dla Raspberry Pi
- PIXEL + Openbox

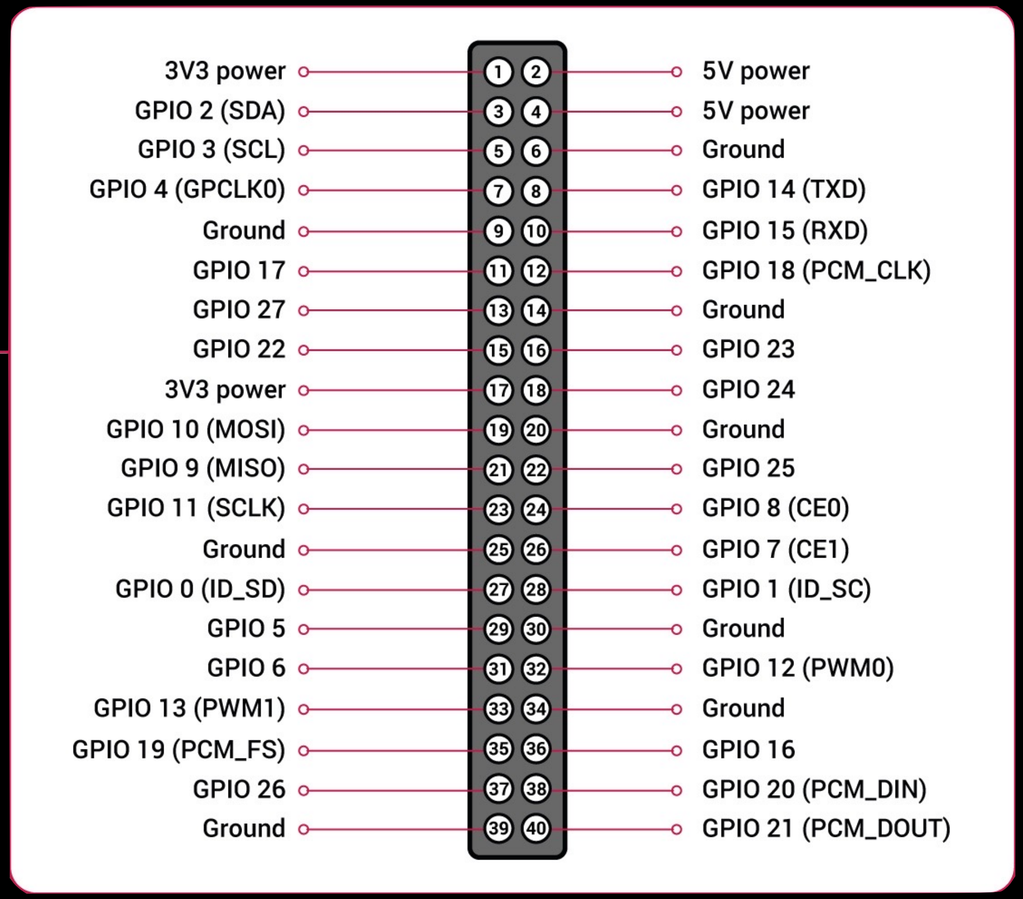


POŁĄCZENIE ZDALNE



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