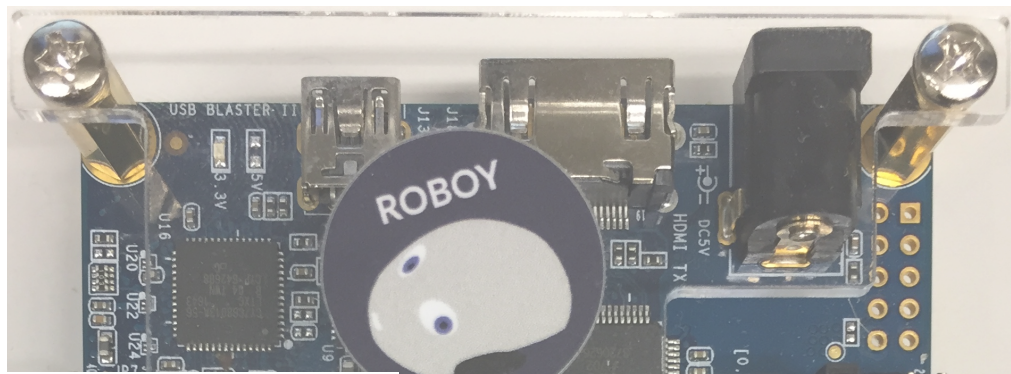


# roboy de10-nano-soc PINOUT

## LEGEND

|                   |  |
|-------------------|--|
| SCK[0-2]          | SPI clock lines  |
| MOSI[0-2]         | SPI Master Out Slave In lines                                |
| MISO[0-2]         | SPI Master In Slave Out                                      |
| SS0[0-8]          | SPI Slave Select lines of SPI bus 0 (the [] is the motor ID) |
| SS1[9-12]         | SPI Slave Select lines of SPI bus 1 (the [] is the motor ID) |
| SS2[13-15]        | SPI Slave Select lines of SPI bus 2 (the [] is the motor ID) |
| SCL[0-1]/SDA[0-1] | I2C clock/data lines for myoControl [1-2]                    |
| SCL/SDA[0-3]      | I2C clock/data lines for 2 cores                             |
| SCK[ESP]          | SPI clock line for ESP8266                                   |
| MOSI[ESP]         | SPI Master Out Slave In line for ESP8266                     |
| SS[ESP]           | SPI Slave Select line for ESP8266                            |
| LS_D[0-15]        | DarkRoom Lighthouse Sensor TS4231 data lines                 |
| LS_E[0-15]        | DarkRoom Lighthouse Sensor TS4231 envelope lines             |
| LS_TX             | DarkRoomOOTXDecoder uart TX                                  |
| PWR_S             | Power Sense, active low                                      |



|         |            |    |    |            |         |           |            |    |    |            |          |
|---------|------------|----|----|------------|---------|-----------|------------|----|----|------------|----------|
| SCL[0]  | GPIO_1[35] | 40 | 39 | GPIO_1[34] | SDA[0]  | MOSI[ESP] | GPIO_0[0]  | 1  | 2  | GPIO_0[1]  | SCK[ESP] |
| SCL[1]  | GPIO_1[33] | 38 | 37 | GPIO_1[32] | SDA[1]  | SS[ESP]   | GPIO_0[2]  | 3  | 4  | GPIO_0[3]  | LS_TX    |
| SCL[2]  | GPIO_1[31] | 36 | 35 | GPIO_1[30] | SDA[2]  | LS_D[0]   | GPIO_0[4]  | 5  | 6  | GPIO_0[5]  | LS_E[0]  |
| SCL[2]  | GPIO_1[29] | 34 | 33 | GPIO_1[28] | SDA[2]  | LS_D[1]   | GPIO_0[6]  | 7  | 8  | GPIO_0[7]  | LS_E[1]  |
| SCL[1]  | GPIO_1[27] | 32 | 31 | GPIO_1[26] | SDA[1]  | LS_D[2]   | GPIO_0[8]  | 9  | 10 | GPIO_0[9]  | LS_E[2]  |
|         | GND        | 30 | 29 |            | 3.3V    |           |            | 11 | 12 | GND        |          |
| SS2[15] | GPIO_1[25] | 28 | 27 | GPIO_1[24] | SS2[14] | LS_D[3]   | GPIO_0[10] | 13 | 14 | GPIO_0[11] | LS_E[3]  |
| SS2[13] | GPIO_1[23] | 26 | 25 | GPIO_1[22] | SCK[2]  | LS_D[4]   | GPIO_0[12] | 15 | 16 | GPIO_0[13] | LS_E[4]  |
| MISO[2] | GPIO_1[21] | 24 | 23 | GPIO_1[20] | MOSI[2] | LS_D[5]   | GPIO_0[14] | 17 | 18 | GPIO_0[15] | LS_E[5]  |
| PWR_S   | GPIO_1[19] | 22 | 21 | GPIO_1[18] | SS1[12] | LS_D[6]   | GPIO_0[16] | 19 | 20 | GPIO_0[17] | LS_E[6]  |
| SS1[11] | GPIO_1[17] | 20 | 19 | GPIO_1[16] | SS1[10] | LS_D[7]   | GPIO_0[18] | 21 | 22 | GPIO_0[19] | LS_E[7]  |
| SS1[9]  | GPIO_1[15] | 18 | 17 | GPIO_1[14] | SCK[1]  | LS_D[8]   | GPIO_0[20] | 23 | 24 | GPIO_0[21] | LS_E[8]  |
| MISO[1] | GPIO_1[13] | 16 | 15 | GPIO_1[12] | MOSI[1] | LS_D[9]   | GPIO_0[22] | 25 | 26 | GPIO_0[23] | LS_E[9]  |
| SS1[8]  | GPIO_1[11] | 14 | 13 | GPIO_1[10] | SS1[7]  | LS_D[10]  | GPIO_0[24] | 27 | 28 | GPIO_0[25] | LS_E[10] |
|         | GND        | 12 | 11 |            | 3.3V    |           |            | 29 | 30 | GND        |          |
| SS0[6]  | GPIO_1[9]  | 10 | 9  | GPIO_1[8]  | SS0[5]  | LS_D[11]  | GPIO_0[26] | 31 | 32 | GPIO_0[27] | LS_E[11] |
| SS0[4]  | GPIO_1[7]  | 8  | 7  | GPIO_1[6]  | SS0[3]  | LS_D[12]  | GPIO_0[28] | 33 | 34 | GPIO_0[29] | LS_E[12] |
| SS0[2]  | GPIO_1[5]  | 6  | 5  | GPIO_1[4]  | SS0[1]  | LS_D[13]  | GPIO_0[30] | 35 | 36 | GPIO_0[31] | LS_E[13] |
| SS0[0]  | GPIO_1[3]  | 4  | 3  | GPIO_1[2]  | SCK[0]  | LS_D[14]  | GPIO_0[32] | 37 | 38 | GPIO_0[33] | LS_E[14] |
| MISO[0] | GPIO_1[1]  | 2  | 1  | GPIO_1[0]  | MOSI[0] | LS_D[15]  | GPIO_0[34] | 39 | 40 | GPIO_0[35] | LS_E[15] |

