

```

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#
# This file acts as a catalogue of all pinout bindings you may want,
# so that you can copy-paste them to build your own .pcf file out
# of it. It is also possible, of course, to use custom names.
#
# See https://pico-ice.tinyvision.ai/pinout.html for the position
# of the pins on the board.

# Reference for PMOD names:
# https://digilent.com/reference/pmod/start

# Signals used by the default firmware
set_io -nowarn CLK          35
set_io -nowarn UART_TX      25
set_io -nowarn UART_RX      27

# Signals definition (as in the circuit diagram)
set_io -nowarn ICE_2        2
set_io -nowarn ICE_3        3
set_io -nowarn ICE_4        4
set_io -nowarn ICE_6        6
set_io -nowarn ICE_9        9
set_io -nowarn ICE_10       10
set_io -nowarn ICE_11       11
set_io -nowarn ICE_18       18
set_io -nowarn ICE_19       19
set_io -nowarn ICE_20_G3    20
set_io -nowarn ICE_21       21
set_io -nowarn ICE_23       23
set_io -nowarn ICE_25       25
set_io -nowarn ICE_26       26
set_io -nowarn ICE_27       27
set_io -nowarn ICE_28       28
set_io -nowarn ICE_31       31
set_io -nowarn ICE_32       32
set_io -nowarn ICE_34       34
set_io -nowarn ICE_35_G0    35
set_io -nowarn ICE_36       36
set_io -nowarn ICE_38       38
set_io -nowarn ICE_42       42
set_io -nowarn ICE_43       43
set_io -nowarn ICE_44_G6    44
set_io -nowarn ICE_45       45
set_io -nowarn ICE_46       46
set_io -nowarn ICE_47       47
set_io -nowarn ICE_48       48
set_io -nowarn ICE_FLASH_I02 12
set_io -nowarn ICE_FLASH_I03 13
set_io -nowarn ICE_PB       10 # active-low
set_io -nowarn ICE_S0       14
set_io -nowarn ICE_SI       17
set_io -nowarn ICE_SCK      15
set_io -nowarn ICE_SSN      16 # active-low
set_io -nowarn SRAM_SS      37 # active-high
set_io -nowarn LED_G        39 # active-low
set_io -nowarn LED_B        40 # active-low
set_io -nowarn LED_R        41 # active-low

```

```
# Alternate names found on the silkscreen
set_io -nowarn ICE_SW2          10 # active-low
```

```
# Silicon IO names
```

```
set_io -nowarn IOB_6a           2
set_io -nowarn IOB_9b           3
set_io -nowarn IOB_8a           4
set_io -nowarn IOB_13b          6
set_io -nowarn IOB_16a          9
set_io -nowarn IOB_18a         10
set_io -nowarn IOB_20a         11
set_io -nowarn IOB_31b         18
set_io -nowarn IOB_29b         19
set_io -nowarn IOB_25b         20
set_io -nowarn IOT_23b         21
set_io -nowarn IOT_37a         23
set_io -nowarn IOT_36b         25
set_io -nowarn IOT_39a         26
set_io -nowarn IOT_38b         27
set_io -nowarn IOT_41a         28
set_io -nowarn IOT_42b         31
set_io -nowarn IOT_43a         32
set_io -nowarn IOT_44b         34
set_io -nowarn IOT_46b         35
set_io -nowarn IOT_48b         36
set_io -nowarn IOT_50b         38
set_io -nowarn IOT_51a         42
set_io -nowarn IOT_49a         43
set_io -nowarn IOB_3b          44
set_io -nowarn IOB_5b          45
set_io -nowarn IOB_0a          46
set_io -nowarn IOB_2b          47
set_io -nowarn IOB_4a          48
set_io -nowarn IOB_22a         12
set_io -nowarn IOB_24a         13
set_io -nowarn IOB_18a         10
set_io -nowarn IOB_32a         14
set_io -nowarn IOB_33b         17
set_io -nowarn IOB_34a         15
set_io -nowarn IOB_35b         16
set_io -nowarn IOT_45a         37
set_io -nowarn RGB0           39
set_io -nowarn RGB1           40
set_io -nowarn RGB2           41
```

```
# ICE_PMOD0A (near USB) top row
```

```
# GPIO
```

```
set_io -nowarn ICE_PMOD0A_I04   45
set_io -nowarn ICE_PMOD0A_I03   47
set_io -nowarn ICE_PMOD0A_I02    2
set_io -nowarn ICE_PMOD0A_I01    4
```

```
# I2C
```

```
set_io -nowarn ICE_PMOD0A_SDA   45
set_io -nowarn ICE_PMOD0A_SCL   47
set_io -nowarn ICE_PMOD0A_RST    2
set_io -nowarn ICE_PMOD0A_INT    4
```

```
# I2S
```

```
set_io -nowarn ICE_PMOD0A_BCLK  45
```

```

set_io -nowarn ICE_PMOD0A_ADC 47
set_io -nowarn ICE_PMOD0A_DAC 2
set_io -nowarn ICE_PMOD0A_LRCLK 4
# SPI
set_io -nowarn ICE_PMOD0A_SCK 45
set_io -nowarn ICE_PMOD0A_MISO 47
set_io -nowarn ICE_PMOD0A_MOSI 2
set_io -nowarn ICE_PMOD0A_CS 4
# UART
set_io -nowarn ICE_PMOD0A_RTS 45
set_io -nowarn ICE_PMOD0A_RXD 47
set_io -nowarn ICE_PMOD0A_TXD 2
set_io -nowarn ICE_PMOD0A_CTS 4
# HBridge
set_io -nowarn ICE_PMOD0A_SB 45
set_io -nowarn ICE_PMOD0A_SA 47
set_io -nowarn ICE_PMOD0A_EN 2
set_io -nowarn ICE_PMOD0A_DIR 4

# ICE_PMOD0B (near USB) bottom row
# GPIO
set_io -nowarn ICE_PMOD0B_I04 44
set_io -nowarn ICE_PMOD0B_I03 46
set_io -nowarn ICE_PMOD0B_I02 48
set_io -nowarn ICE_PMOD0B_I01 3
# I2C
set_io -nowarn ICE_PMOD0B_SDA 44
set_io -nowarn ICE_PMOD0B_SCL 46
set_io -nowarn ICE_PMOD0B_RST 48
set_io -nowarn ICE_PMOD0B_INT 3
# I2S
set_io -nowarn ICE_PMOD0B_BCLK 44
set_io -nowarn ICE_PMOD0B_ADC 46
set_io -nowarn ICE_PMOD0B_DAC 48
set_io -nowarn ICE_PMOD0B_LRCLK 3
# SPI
set_io -nowarn ICE_PMOD0B_SCK 44
set_io -nowarn ICE_PMOD0B_MISO 46
set_io -nowarn ICE_PMOD0B_MOSI 48
set_io -nowarn ICE_PMOD0B_CS 3
# UART
set_io -nowarn ICE_PMOD0B_RTS 44
set_io -nowarn ICE_PMOD0B_RXD 46
set_io -nowarn ICE_PMOD0B_TXD 48
set_io -nowarn ICE_PMOD0B_CTS 3
# HBridge
set_io -nowarn ICE_PMOD0B_SB 44
set_io -nowarn ICE_PMOD0B_SA 46
set_io -nowarn ICE_PMOD0B_EN 48
set_io -nowarn ICE_PMOD0B_DIR 3

# ICE_PMOD1A (near LED) top row
# GPIO
set_io -nowarn ICE_PMOD1A_I04 31
set_io -nowarn ICE_PMOD1A_I03 34
set_io -nowarn ICE_PMOD1A_I02 38
set_io -nowarn ICE_PMOD1A_I01 43
# I2C
set_io -nowarn ICE_PMOD1A_SDA 31

```

```
set_io -nowarn ICE_PMOD1A_SCL 34
set_io -nowarn ICE_PMOD1A_RST 38
set_io -nowarn ICE_PMOD1A_INT 43
```

```
# I2S
```

```
set_io -nowarn ICE_PMOD1A_BCLK 31
set_io -nowarn ICE_PMOD1A_ADC 34
set_io -nowarn ICE_PMOD1A_DAC 38
set_io -nowarn ICE_PMOD1A_LRCLK 43
```

```
# SPI
```

```
set_io -nowarn ICE_PMOD1A_SCK 31
set_io -nowarn ICE_PMOD1A_MISO 34
set_io -nowarn ICE_PMOD1A_MOSI 38
set_io -nowarn ICE_PMOD1A_CS 43
```

```
# UART
```

```
set_io -nowarn ICE_PMOD1A_RTS 31
set_io -nowarn ICE_PMOD1A_RXD 34
set_io -nowarn ICE_PMOD1A_TXD 38
set_io -nowarn ICE_PMOD1A_CTS 43
```

```
# HBridge
```

```
set_io -nowarn ICE_PMOD1A_SB 31
set_io -nowarn ICE_PMOD1A_SA 34
set_io -nowarn ICE_PMOD1A_EN 38
set_io -nowarn ICE_PMOD1A_DIR 43
```

```
# ICE_PMOD1B (near LED) bottom row
```

```
# GPIO
```

```
set_io -nowarn ICE_PMOD1B_I04 28
set_io -nowarn ICE_PMOD1B_I03 32
set_io -nowarn ICE_PMOD1B_I02 36
set_io -nowarn ICE_PMOD1B_I01 42
```

```
# I2C
```

```
set_io -nowarn ICE_PMOD1B_SDA 28
set_io -nowarn ICE_PMOD1B_SCL 32
set_io -nowarn ICE_PMOD1B_RST 36
set_io -nowarn ICE_PMOD1B_INT 42
```

```
# I2S
```

```
set_io -nowarn ICE_PMOD1B_BCLK 28
set_io -nowarn ICE_PMOD1B_ADC 32
set_io -nowarn ICE_PMOD1B_DAC 36
set_io -nowarn ICE_PMOD1B_LRCLK 42
```

```
# SPI
```

```
set_io -nowarn ICE_PMOD1B_SCK 28
set_io -nowarn ICE_PMOD1B_MISO 32
set_io -nowarn ICE_PMOD1B_MOSI 36
set_io -nowarn ICE_PMOD1B_CS 42
```

```
# UART
```

```
set_io -nowarn ICE_PMOD1B_RTS 28
set_io -nowarn ICE_PMOD1B_RXD 32
set_io -nowarn ICE_PMOD1B_TXD 36
set_io -nowarn ICE_PMOD1B_CTS 42
```

```
# HBridge
```

```
set_io -nowarn ICE_PMOD1B_SB 28
set_io -nowarn ICE_PMOD1B_SA 32
set_io -nowarn ICE_PMOD1B_EN 36
set_io -nowarn ICE_PMOD1B_DIR 42
```

```
# ICE_PMOD2A (near LED, shared with RP2040) top row
```

```
# GPIO
```

```
set_io -nowarn ICE_PMOD2A_I04 19
```

```

set_io -nowarn ICE_PMOD2A_I03 21
set_io -nowarn ICE_PMOD2A_I02 25
set_io -nowarn ICE_PMOD2A_I01 27
# I2C
set_io -nowarn ICE_PMOD2A_SDA 19
set_io -nowarn ICE_PMOD2A_SCL 21
set_io -nowarn ICE_PMOD2A_RST 25
set_io -nowarn ICE_PMOD2A_INT 27
# I2S
set_io -nowarn ICE_PMOD2A_BCLK 19
set_io -nowarn ICE_PMOD2A_ADC 21
set_io -nowarn ICE_PMOD2A_DAC 25
set_io -nowarn ICE_PMOD2A_LRCLK 27
# SPI
set_io -nowarn ICE_PMOD2A_SCK 19
set_io -nowarn ICE_PMOD2A_MISO 21
set_io -nowarn ICE_PMOD2A_MOSI 25
set_io -nowarn ICE_PMOD2A_CS 27
# UART
set_io -nowarn ICE_PMOD2A_RTS 19
set_io -nowarn ICE_PMOD2A_RXD 21
set_io -nowarn ICE_PMOD2A_TXD 25
set_io -nowarn ICE_PMOD2A_CTS 27
# HBridge
set_io -nowarn ICE_PMOD2A_SB 19
set_io -nowarn ICE_PMOD2A_SA 21
set_io -nowarn ICE_PMOD2A_EN 25
set_io -nowarn ICE_PMOD2A_DIR 27

# ICE_PMOD2B (near LED, shared with RP2040) bottom row
# GPIO
set_io -nowarn ICE_PMOD2B_I04 18
set_io -nowarn ICE_PMOD2B_I03 20
set_io -nowarn ICE_PMOD2B_I02 23
set_io -nowarn ICE_PMOD2B_I01 26
# I2C
set_io -nowarn ICE_PMOD2B_SDA 18
set_io -nowarn ICE_PMOD2B_SCL 20
set_io -nowarn ICE_PMOD2B_RST 23
set_io -nowarn ICE_PMOD2B_INT 26
# I2S
set_io -nowarn ICE_PMOD2B_BCLK 18
set_io -nowarn ICE_PMOD2B_ADC 20
set_io -nowarn ICE_PMOD2B_DAC 23
set_io -nowarn ICE_PMOD2B_LRCLK 26
# SPI
set_io -nowarn ICE_PMOD2B_SCK 18
set_io -nowarn ICE_PMOD2B_MISO 20
set_io -nowarn ICE_PMOD2B_MOSI 23
set_io -nowarn ICE_PMOD2B_CS 26
# UART
set_io -nowarn ICE_PMOD2B_RTS 18
set_io -nowarn ICE_PMOD2B_RXD 20
set_io -nowarn ICE_PMOD2B_TXD 23
set_io -nowarn ICE_PMOD2B_CTS 26
# HBridge
set_io -nowarn ICE_PMOD2B_SB 18
set_io -nowarn ICE_PMOD2B_SA 20
set_io -nowarn ICE_PMOD2B_EN 23

```

set_io -nowarn ICE_PMOD2B_DIR 26