

STM32L4xx Series Pinouts

Pin Function	32Pin	48 Pin	64 Pin	Name
INT1PIN	6	10	14	//PA0
INT2PIN	22	33	45	//PA12
INT3PIN	15	19	27	//PB1
IRPIN	6	10	14	//PA0
//COUNT5		11	15	//PA5
// I2C pin numbers				
P_I2C_SCL	29	42	58	//PB6
P_I2C_SDA	30	43	59	//PB7
//Console pin numbers				
CONSOLE_RX_PIN	25	13	17	//PA15/PA3/PA3 USART2
CONSOLE_TX_PIN	8	12	16	//PA2
// COMx: port pin numbers				
COM1_TX_PIN	19	30	42	//PA9 USART1
COM1_RX_PIN	20	31	43	//PA10
COM1_EN_PIN	22	33	45	//PA12
COM2_TX_PIN	0	21	29	//PB10 USART3
COM2_RX_PIN	0	22	30	//PB11
// SPI pin numbers				
SPI_CLK_PIN	7	11	15	//PA1
SPI_INP_PIN	12	16	22	//PA6
SPI_OUT_PIN	13	17	23	//PA7
SPI2_CLK_PIN	26	39	55	//PB3
SPI2_INP_PIN	27	40	56	//PB4
SPI2_OUT_PIN	28	41	57	//PB5
SPI3_CLK_PIN		26	34	//PB13
SPI3_INP_PIN		27	35	//PB14
SPI3_OUT_PIN		28	36	//PB15
// DAC pin numbers				
DAC_1_PIN	10	14	20	//PA4
DAC_2_PIN	11	15	21	//PA5
// PWM pin numbers				
PWM_CH1_PIN	18	29	41	//PA8 - PWM1A
PWM_CH2_PIN	21	32	44	//PA11 - PWM1B
PWM_CH3_PIN	19	30	42	//PA9 - PWM1C
PWM_CH4_PIN	20	31	43	//PA10 - PWM1D
PWM_CH5_PIN	9	45	61	//PA3/PB8/PB8 - PWM2A
// Arduino				
D0	20		17	
D1	19		16	
D2	22		43	
D3	14		55	
D4	30		57	
D5	29		56	
D6	15		29	
D7			41	
D8			42	
D9	18		38	
D10	21		58	
D11	28		23	
D12	27		22	
D13	26		21	
A0	6	10	14	
A1	7	11	15	
A2	9		20	
A3	10	13	26	
A4	11	14	9	
A5	12	15	8	
A6		16		
A7		17		
A8		29		
A9		30		
A10		31		
A11		32		
A12		33		

NUCLEO 32 Pin STM32L432KC

Register/Pin	Digital	Analogue	ADC	Arduino	Pin/Function
NULL	UNUSED	NULL	0		// pin 1 VDD
NULL	UNUSED	NULL	0		// pin 2 OSC32_IN
NULL	UNUSED	NULL	0		// pin 3 OSC32_OUT
NULL	UNUSED	NULL	0		// pin 4 NRST
NULL	UNUSED	NULL	0		// pin 5 VDD
PA 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_5	A0	// pin 6 COUNT/WAKEUP/IR
PA 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_6	A1	// pin 7 SPI-CLK
NULL	UNUSED	NULL	0		// pin 8 Console-TX
PA 3	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_8	A2	// pin 9 PWM2A
PA 4	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_9	A3	// pin 10 DAC1
PA 5	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_10	A4	// pin 11 DAC2
PA 6	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_11	A5	// pin 12 SPI-IN
PA 7	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_12	A6	// pin 13 SPI-OUT
PB 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_15	D3	// pin 14
PB 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1ADC_CHANNEL_16	D6	// pin 15
NULL	UNUSED	NULL	0		// pin 16 VSS
NULL	UNUSED	NULL	0		// pin 17 VDD
PA 8	DIGITAL_IN DIGITAL_OUT	NULL	0	D9	// pin 18 PWM1A
PA 9	DIGITAL_IN DIGITAL_OUT	NULL	0	D1	// pin 19 COM1-Tx
	(PWM1C to be implemented)				
PA 10	DIGITAL_IN DIGITAL_OUT	NULL	0	D0	// pin 20 COM1-Rx
	(PWM1D to be implemented)				
PA 11	DIGITAL_IN DIGITAL_OUT	NULL	0	D10	// pin 21 PWM1B
PA 12	DIGITAL_IN DIGITAL_OUT	NULL	0	D2	// pin 22 USART1-DE/COUNT
PA 13	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 23 SWDIO
	(not broken out on Nucleo)				
PA 14	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 24 SWCLK
	(not broken out on Nucleo)				
NULL	UNUSED	NULL	0		// pin 25 Console-RX
PB 3	DIGITAL_IN DIGITAL_OUT	NULL	0	D13	// pin 26 Green-LED/SPI2-CLK
PB 4	DIGITAL_IN DIGITAL_OUT	NULL	0	D12	// pin 27 SPI 2-IN
PB 5	DIGITAL_IN DIGITAL_OUT	NULL	0	D11	// pin 28 SPI 2-OUT
PB 6	DIGITAL_IN DIGITAL_OUT	NULL	0	D5	// pin 29 I2C-SCL
PB 7	DIGITAL_IN DIGITAL_OUT	NULL	0	D4	// pin 30 I2C-SDA
NULL	UNUSED	NULL	0		// pin 31 BOOT0
NULL	UNUSED	NULL	0		// pin 32 VSS

48 Pin STM32L431CCT6

Register/Pin	Digital	Analogue	ADC	Arduino	Pin/Function
NULL	UNUSED	NULL	0		// pin 1 VBAT
PC 13	DIGITAL_IN DIGITAL_OUT	NULL	0	C13	// pin 2
NULL	UNUSED	NULL	0		// pin 3 OSC32_IN
NULL	UNUSED	NULL	0		// pin 4 OSC32_OUT
NULL	UNUSED	NULL	0		// pin 5 PH0
NULL	UNUSED	NULL	0		// pin 6 PH1
NULL	UNUSED	NULL	0		// pin 7 NRST
NULL	UNUSED	NULL	0		// pin 8 VSSA
NULL	UNUSED	NULL	0		// pin 9 VDDA
PA 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_5	A0	// pin 10
PA 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_6	A1	// pin 11 SPI-CLK
NULL	UNUSED	NULL	0		// pin 12 CONSOLE-TX
PA 3	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_8	A3	// pin 13
PA 4	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_9	A4	// pin 14 DAC-1
PA 5	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_10	A5	// pin 15 DAC-2
PA 6	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_11	A6	// pin 16 SPI-IN
PA 7	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_12	A7	// pin 17 SPI-OUT
PB 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_15	B0	// pin 18
PB 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_16	B1	// pin 19 COUNT
PB 2	DIGITAL_IN DIGITAL_OUT	NULL	0	B2	// pin 20
PB 10	DIGITAL_IN DIGITAL_OUT	NULL	0	B10	// pin 21 COM 2-TX
PB 11	DIGITAL_IN DIGITAL_OUT	NULL	0	B11	// pin 22 COM 2-RX
NULL	UNUSED	NULL	0		// pin 23 VSS
NULL	UNUSED	NULL	0		// pin 24 VDD
PB 12	DIGITAL_IN DIGITAL_OUT	NULL	0	B12	// pin 25
PB 13	DIGITAL_IN DIGITAL_OUT	NULL	0	B13	// pin 26
PB 14	DIGITAL_IN DIGITAL_OUT	NULL	0	B14	// pin 27
PB 15	DIGITAL_IN DIGITAL_OUT	NULL	0	B15	// pin 28
PA 8	DIGITAL_IN DIGITAL_OUT	NULL	0	A8	// pin 29
PA 9	DIGITAL_IN DIGITAL_OUT	NULL	0	A9	// pin 30 COM1-TX
PA 10	DIGITAL_IN DIGITAL_OUT	NULL	0	A10	// pin 31 COM1-RX
PA 11	DIGITAL_IN DIGITAL_OUT	NULL	0	A11	// pin 32
PA 12	DIGITAL_IN DIGITAL_OUT	NULL	0	A12	// pin 33 COM1-DE
NULL	UNUSED	NULL	0		// pin 34 SWDIO
NULL	UNUSED	NULL	0		// pin 35 VSS
NULL	UNUSED	NULL	0		// pin 36 VDD
NULL	UNUSED	NULL	0		// pin 37 SWCLK
NULL	UNUSED	NULL	0		// pin 38 CONSOLE-RX
PB 3	DIGITAL_IN DIGITAL_OUT	NULL	0	B3	// pin 39 SPI2-CLK
PB 4	DIGITAL_IN DIGITAL_OUT	NULL	0	B4	// pin 40 SPI2-IN
PB 5	DIGITAL_IN DIGITAL_OUT	NULL	0	B5	// pin 41 SPI2-OUT
PB 6	DIGITAL_IN DIGITAL_OUT	NULL	0	B6	// pin 42 I2C SCL
PB 7	DIGITAL_IN DIGITAL_OUT	NULL	0	B7	// pin 43 I2C SDA
NULL	UNUSED	NULL	0		// pin 44 BOOT0
PB 8	DIGITAL_IN DIGITAL_OUT	NULL	0	B8	// pin 45
PB 9	DIGITAL_IN DIGITAL_OUT	NULL	0	B9	// pin 46
NULLO	UNUSED	NULL	0		// pin 47 VSS
NULLO	UNUSED	NULL	0		// pin 48 VDD

NUCLEO 64 Pin STM32L476RG

Register/Pin	Digital	Analogue	ADC	Arduino	Pin/Function
NULL	UNUSED	NULL	0		// pin 1 VBAT
PC 13	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 2
NULL	UNUSED	NULL	0		// pin 3 OSC32_IN
NULL	UNUSED	NULL	0		// pin 4 OSC32_OUT
PH 0	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 5
PH 1	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 6
NULL	UNUSED	NULL	0		// pin 7 NRST
PC 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_1	A5	// pin 8 -A5
PC 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_2	A4	// pin 9 -A4
PC 2	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_3		// pin 10
PC 3	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_4		// pin 11
NULL	UNUSED	NULL	0		// pin 12 VSS
NULL	UNUSED	NULL	0		// pin 13 VDD
PA 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_5	A0	// pin 14 COUNT/WAKEUP/IR -A0
PA 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_6	A1	// pin 15 SPI-CLK -A1
NULL	UNUSED	NULL	0	D1	// pin 16 CONSOLE-TX -D1
NULL	UNUSED	NULL	0	D0	// pin 17 CONSOLE-RX -D0
NULL	UNUSED	NULL	0		// pin 18 VSS
NULL	UNUSED	NULL	0		// pin 19 VDD
PA 4	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_9	A2	// pin 20 DAC-1 -A2
PA 5	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_10	D13	// pin 21 DAC-2 -D13
PA 6	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_11	D12	// pin 22 SPI-IN -D12
PA 7	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_12	D11	// pin 23 SPI-OUT -D11
PC 4	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_13		// pin 24
PC 5	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_14		// pin 25
PB 0	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_15	A3	// pin 26 -A3
PB 1	DIGITAL_IN DIGITAL_OUT	ANALOG_IN	ADC1 ADC_CHANNEL_16		// pin 27 COUNT
NULL	UNUSED	NULL	0		// pin 28
PB 10	DIGITAL_IN DIGITAL_OUT	NULL	0	D6	// pin 29 COM2-TX -D6
PB 11	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 30 COM2-RX
NULL	UNUSED	NULL	0		// pin 31 VSS
NULL	UNUSED	NULL	0		// pin 32 VDD
PB 12	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 33
PB 13	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 34 SPI3-CLK
PB 14	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 35 SPI3-IN
PB 15	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 36 SPI3-OUT
PC 6	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 37
PC 7	DIGITAL_IN DIGITAL_OUT	NULL	0	D9	// pin 38 -D9
PC 8	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 39
PC 9	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 40
PA 8	DIGITAL_IN DIGITAL_OUT	NULL	0	D7	// pin 41 PWM1A -D7
PA 9	DIGITAL_IN DIGITAL_OUT	NULL	0	D8	// pin 42 COM1-TX / PWM1C -D8
PA 10	DIGITAL_IN DIGITAL_OUT	NULL	0	D2	// pin 43 COM1-RX / PWM1D -D2
PA 11	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 44 PWM1B
PA 12	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 45 COM1-DE /COUNT
NULL	UNUSED	NULL	0		// pin 46 SWDIO
NULL	UNUSED	NULL	0		// pin 47 VSS
NULL	UNUSED	NULL	0		// pin 48 VDD
NULL	UNUSED	NULL	0		// pin 49 SWCLK
PA 15	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 50
PC 10	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 51
PC 11	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 52
PC 12	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 53
PD 2	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 54
PB 3	DIGITAL_IN DIGITAL_OUT	NULL	0	D3	// pin 55 SPI2-CLK -D3
PB 4	DIGITAL_IN DIGITAL_OUT	NULL	0	D5	// pin 56 SPI2-IN -D5
PB 5	DIGITAL_IN DIGITAL_OUT	NULL	0	D4	// pin 57 SPI2-OUT -D4
PB 6	DIGITAL_IN DIGITAL_OUT	NULL	0	D10	// pin 58 I2C-SCL -D10
PB 7	DIGITAL_IN DIGITAL_OUT	NULL	0		// pin 59 I2C-SDA
NULL	UNUSED	NULL	0		// pin 60 BOOT0
PB 8	DIGITAL_IN DIGITAL_OUT	NULL	0	D15	// pin 61 PWM2A -D15
PB 9	DIGITAL_IN DIGITAL_OUT	NULL	0	D14	// pin 62 -D14
NULL	UNUSED	NULL	0		// pin 63 VSS
NULL	UNUSED	NULL	0		// pin 64 VDD