
STM32
CubeMX

1. Description

1.1. Project

Project Name	l4-disco-tc-agent-test
Board Name	STM32L476G-DISCO
Generated with:	STM32CubeMX 6.11.0
Date	04/20/2024

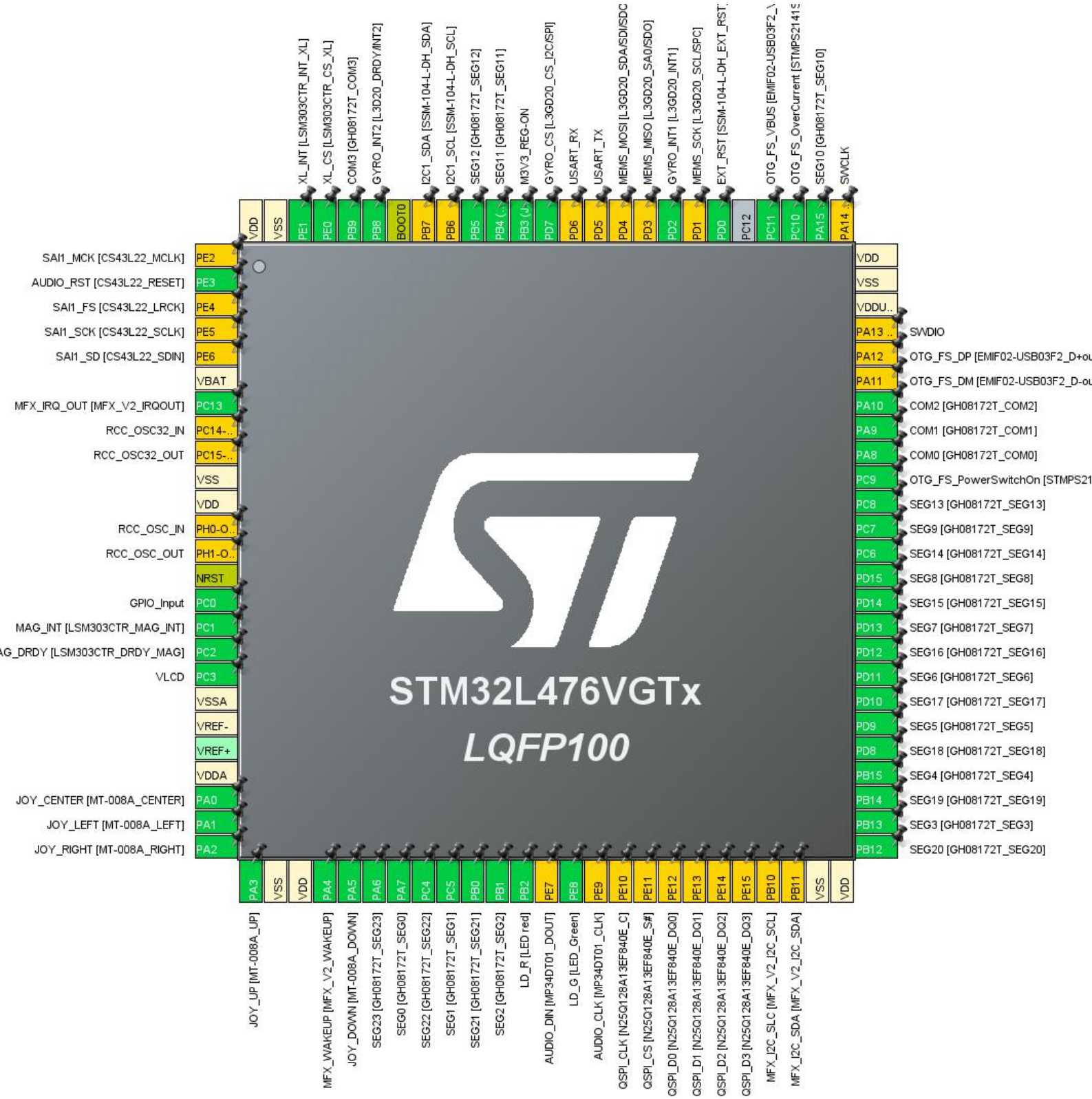
1.2. MCU

MCU Series	STM32L4
MCU Line	STM32L4x6
MCU name	STM32L476VGTx
MCU Package	LQFP100
MCU Pin number	100

1.3. Core(s) information

Core(s)	Arm Cortex-M4

2. Pinout Configuration



3. Pins Configuration

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
1	PE2 *	I/O	SAI1_MCLK_A	SAI1_MCK [CS43L22_MCLK]
2	PE3 **	I/O	GPIO_Output	AUDIO_RST [CS43L22_RESET]
3	PE4 *	I/O	SAI1_FS_A	SAI1_FS [CS43L22_LRCK]
4	PE5 *	I/O	SAI1_SCK_A	SAI1_SCK [CS43L22_SCLK]
5	PE6 *	I/O	SAI1_SD_A	SAI1_SD [CS43L22_SDIN]
6	VBAT	Power		
7	PC13	I/O	GPIO_EXTI13	MFX_IRQ_OUT [MFX_V2_IRQOUT]
8	PC14-OSC32_IN (PC14) *	I/O	RCC_OSC32_IN	
9	PC15-OSC32_OUT (PC15) *	I/O	RCC_OSC32_OUT	
10	VSS	Power		
11	VDD	Power		
12	PH0-OSC_IN (PH0) *	I/O	RCC_OSC_IN	
13	PH1-OSC_OUT (PH1) *	I/O	RCC_OSC_OUT	
14	NRST	Reset		
15	PC0 **	I/O	GPIO_Input	
16	PC1 **	I/O	GPIO_Input	MAG_INT [LSM303CTR_MAG_INT]
17	PC2 **	I/O	GPIO_Input	MAG_DRDY [LSM303CTR_DRDY_MAG]
18	PC3	I/O	LCD_VLCD	VLCD
19	VSSA	Power		
20	VREF-	Power		
22	VDDA	Power		
23	PA0 **	I/O	GPIO_Input	JOY_CENTER [MT-008A_CENTER]
24	PA1 **	I/O	GPIO_Input	JOY_LEFT [MT-008A_LEFT]
25	PA2 **	I/O	GPIO_Input	JOY_RIGHT [MT-008A_RIGHT]
26	PA3 **	I/O	GPIO_Input	JOY_UP [MT-008A_UP]
27	VSS	Power		
28	VDD	Power		

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
29	PA4	I/O	GPIO_EXTI4	MFX_WAKEUP [MFX_V2_WAKEUP]
30	PA5 **	I/O	GPIO_Input	JOY_DOWN [MT-008A_DOWN]
31	PA6	I/O	LCD_SEG3	SEG23 [GH08172T_SEG23]
32	PA7	I/O	LCD_SEG4	SEG0 [GH08172T_SEG0]
33	PC4	I/O	LCD_SEG22	SEG22 [GH08172T_SEG22]
34	PC5	I/O	LCD_SEG23	SEG1 [GH08172T_SEG1]
35	PB0	I/O	LCD_SEG5	SEG21 [GH08172T_SEG21]
36	PB1	I/O	LCD_SEG6	SEG2 [GH08172T_SEG2]
37	PB2 **	I/O	GPIO_Output	LD_R [LED red]
38	PE7 *	I/O	SAI1_SD_B	AUDIO_DIN [MP34DT01_DOUT]
39	PE8 **	I/O	GPIO_Output	LD_G [LED_Green]
40	PE9 *	I/O	SAI1_FS_B	AUDIO_CLK [MP34DT01_CLK]
41	PE10 *	I/O	QUADSPI_CLK	QSPI_CLK [N25Q128A13EF840E_C]
42	PE11 *	I/O	QUADSPI_NCS	QSPI_CS [N25Q128A13EF840E_S#]
43	PE12 *	I/O	QUADSPI_BK1_IO0	QSPI_D0 [N25Q128A13EF840E_DQ0]
44	PE13 *	I/O	QUADSPI_BK1_IO1	QSPI_D1 [N25Q128A13EF840E_DQ1]
45	PE14 *	I/O	QUADSPI_BK1_IO2	QSPI_D2 [N25Q128A13EF840E_DQ2]
46	PE15 *	I/O	QUADSPI_BK1_IO3	QSPI_D3 [N25Q128A13EF840E_DQ3]
47	PB10 *	I/O	I2C2_SCL	MFX_I2C_SLC [MFX_V2_I2C_SCL]
48	PB11 *	I/O	I2C2_SDA	MFX_I2C_SDA [MFX_V2_I2C_SDA]
49	VSS	Power		
50	VDD	Power		
51	PB12	I/O	LCD_SEG12	SEG20 [GH08172T_SEG20]
52	PB13	I/O	LCD_SEG13	SEG3 [GH08172T_SEG3]
53	PB14	I/O	LCD_SEG14	SEG19 [GH08172T_SEG19]
54	PB15	I/O	LCD_SEG15	SEG4 [GH08172T_SEG4]

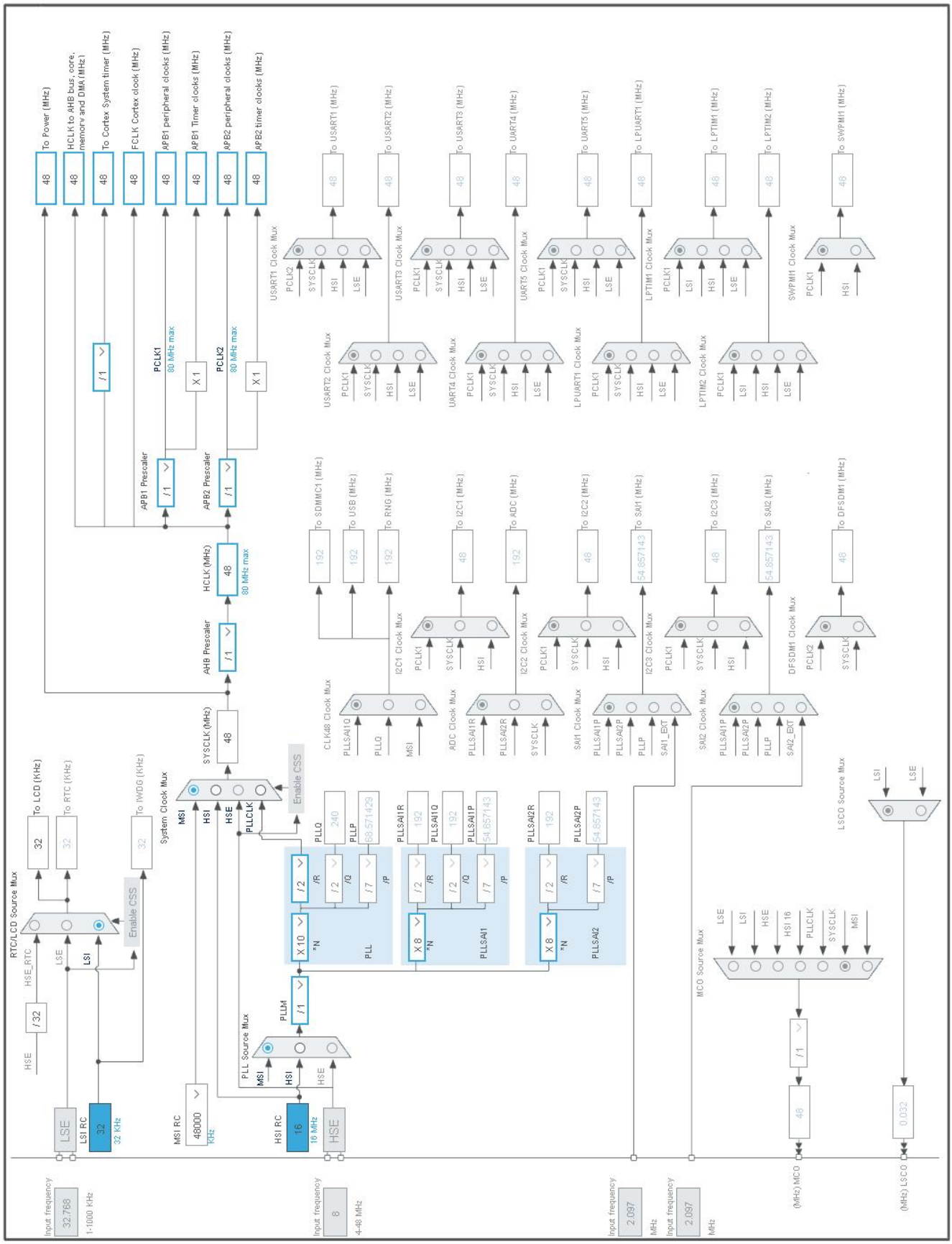
Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
55	PD8	I/O	LCD_SEG28	SEG18 [GH08172T_SEG18]
56	PD9	I/O	LCD_SEG29	SEG5 [GH08172T_SEG5]
57	PD10	I/O	LCD_SEG30	SEG17 [GH08172T_SEG17]
58	PD11	I/O	LCD_SEG31	SEG6 [GH08172T_SEG6]
59	PD12	I/O	LCD_SEG32	SEG16 [GH08172T_SEG16]
60	PD13	I/O	LCD_SEG33	SEG7 [GH08172T_SEG7]
61	PD14	I/O	LCD_SEG34	SEG15 [GH08172T_SEG15]
62	PD15	I/O	LCD_SEG35	SEG8 [GH08172T_SEG8]
63	PC6	I/O	LCD_SEG24	SEG14 [GH08172T_SEG14]
64	PC7	I/O	LCD_SEG25	SEG9 [GH08172T_SEG9]
65	PC8	I/O	LCD_SEG26	SEG13 [GH08172T_SEG13]
66	PC9 **	I/O	GPIO_Output	OTG_FS_PowerSwitchOn [STMPS2141STR_EN]
67	PA8	I/O	LCD_COM0	COM0 [GH08172T_COM0]
68	PA9	I/O	LCD_COM1	COM1 [GH08172T_COM1]
69	PA10	I/O	LCD_COM2	COM2 [GH08172T_COM2]
70	PA11 *	I/O	USB_OTG_FS_DM	OTG_FS_DM [EMIF02-USB03F2_D-out]
71	PA12 *	I/O	USB_OTG_FS_DP	OTG_FS_DP [EMIF02-USB03F2_D+out]
72	PA13 (JTMS-SWDIO) *	I/O	SYS_JTMS-SWDIO	SWDIO
73	VDDUSB	Power		
74	VSS	Power		
75	VDD	Power		
76	PA14 (JTCK-SWCLK) *	I/O	SYS_JTCK-SWCLK	SWCLK
77	PA15 (JTDI)	I/O	LCD_SEG17	SEG10 [GH08172T_SEG10]
78	PC10	I/O	GPIO_EXTI10	OTG_FS_OverCurrent [STMPS2141STR_FAULT]
79	PC11 **	I/O	GPIO_Output	OTG_FS_VBUS [EMIF02-USB03F2_Vbus]
81	PD0	I/O	GPIO_EXTI0	EXT_RST [SSM-104-L-DH_EXT_RST]
82	PD1 *	I/O	SPI2_SCK	MEMS_SCK [L3GD20_SCL/SPC]
83	PD2	I/O	GPIO_EXTI2	GYRO_INT1 [L3GD20_INT1]
84	PD3 *	I/O	SPI2_MISO	MEMS_MISO [L3GD20_SA0/SDO]
85	PD4 *	I/O	SPI2_MOSI	MEMS_MOSI [L3GD20_SDA/SDI/SDO]
86	PD5 *	I/O	USART2_TX	USART_TX

Pin Number LQFP100	Pin Name (function after reset)	Pin Type	Alternate Function(s)	Label
87	PD6 *	I/O	USART2_RX	USART_RX
88	PD7 **	I/O	GPIO_Output	GYRO_CS [L3GD20_CS_I2C/SPI]
89	PB3 (JTDO-TRACESWO) **	I/O	GPIO_Output	M3V3_REG-ON
90	PB4 (NJTRST)	I/O	LCD_SEG8	SEG11 [GH08172T_SEG11]
91	PB5	I/O	LCD_SEG9	SEG12 [GH08172T_SEG12]
92	PB6 *	I/O	I2C1_SCL	I2C1_SCL [SSM-104-L-DH_SCL]
93	PB7 *	I/O	I2C1_SDA	I2C1_SDA [SSM-104-L-DH_SDA]
94	BOOT0	Boot		
95	PB8	I/O	GPIO_EXTI8	GYRO_INT2 [L3D20_DRDY/INT2]
96	PB9	I/O	LCD_COM3	COM3 [GH08172T_COM3]
97	PE0 **	I/O	GPIO_Output	XL_CS [LSM303CTR_CS_XL]
98	PE1	I/O	GPIO_EXTI1	XL_INT [LSM303CTR_INT_XL]
99	VSS	Power		
100	VDD	Power		

** The pin is affected with an I/O function

* The pin is affected with a peripheral function but no peripheral mode is activated

4. Clock Tree Configuration



5. Software Project

5.1. Project Settings

Name	Value
Project Name	l4-disco-tc-agent-test
Project Folder	D:\work\l4-disco-tc-agent-test
Toolchain / IDE	CMake
Firmware Package Name and Version	STM32Cube FW_L4 V1.18.0
Application Structure	Advanced
Generate Under Root	No
Do not generate the main()	No
Minimum Heap Size	0x200
Minimum Stack Size	0x400

5.2. Code Generation Settings

Name	Value
STM32Cube MCU packages and embedded software	Copy all used libraries into the project folder
Generate peripheral initialization as a pair of '.c/.h' files	No
Backup previously generated files when re-generating	No
Keep User Code when re-generating	Yes
Delete previously generated files when not re-generated	Yes
Set all free pins as analog (to optimize the power consumption)	No
Enable Full Assert	No

5.3. Advanced Settings - Generated Function Calls

Rank	Function Name	Peripheral Instance Name
1	SystemClock_Config	RCC
2	MX_GPIO_Init	GPIO
3	MX_LCD_Init	LCD

1. Power Consumption Calculator report

1.1. Microcontroller Selection

Series	STM32L4
Line	STM32L4x6
MCU	STM32L476VGTx
Datasheet	DS10198_Rev4

1.2. Parameter Selection

Temperature	25
Vdd	3.0

1.3. Battery Selection

Battery	Li-SOCL2(A3400)
Capacity	3400.0 mAh
Self Discharge	0.08 %/month
Nominal Voltage	3.6 V
Max Cont Current	100.0 mA
Max Pulse Current	200.0 mA
Cells in series	1
Cells in parallel	1

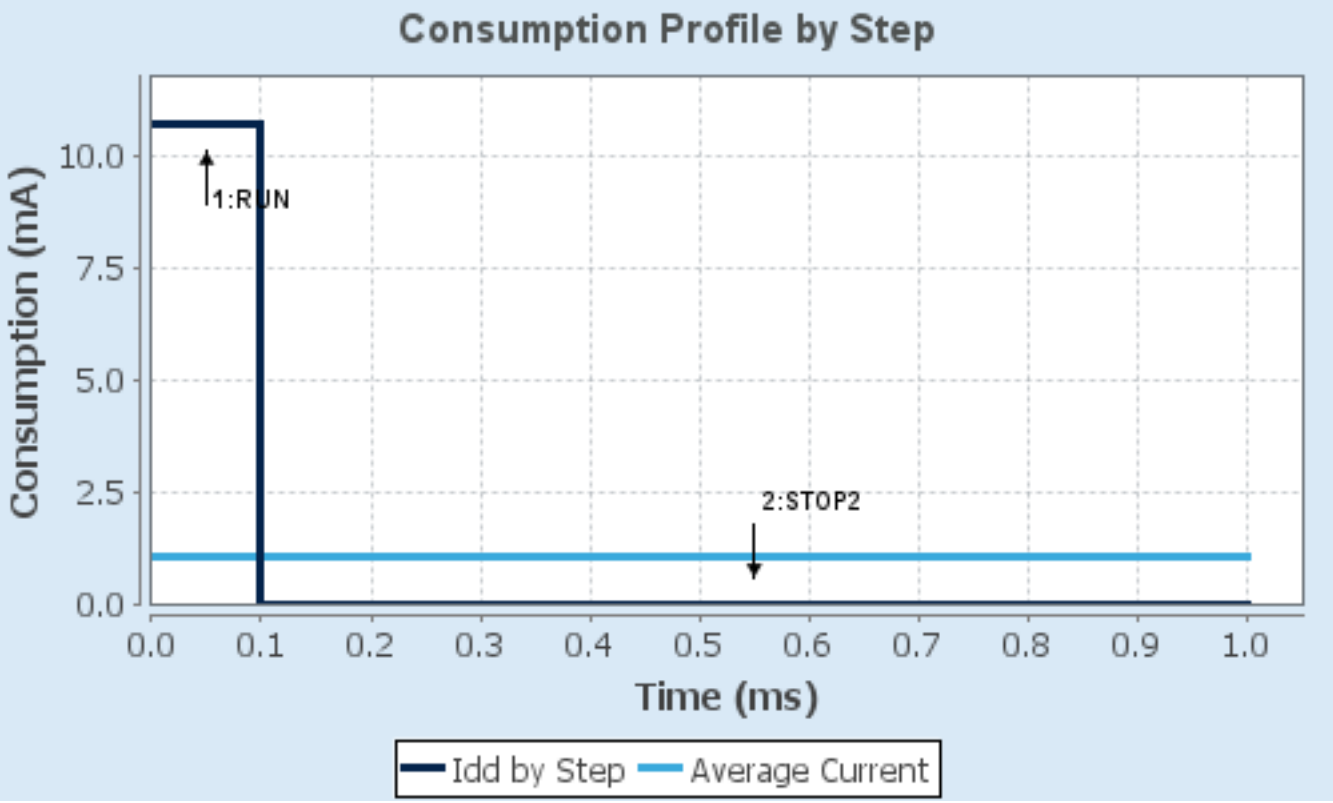
1.4. Sequence

Step	Step1	Step2
Mode	RUN	STOP2
Vdd	3.0	3.0
Voltage Source	Battery	Battery
Range	Range1-High	NoRange
Fetch Type	SRAM2	n/a
CPU Frequency	80 MHz	0 Hz
Clock Configuration	HSE PLL	ALL CLOCKS OFF
Clock Source Frequency	4 MHz	0 Hz
Peripherals		
Additional Cons.	0 mA	0 mA
Average Current	10.7 mA	1.18 µA
Duration	0.1 ms	0.9 ms
DMIPS	100.0	0.0
Ta Max	103.65	105
Category	In DS Table	In DS Table

1.5. Results

Sequence Time	1 ms	Average Current	1.07 mA
Battery Life	4 months, 10 days, 3 hours	Average DMIPS	100.0 DMIPS

1.6. Chart


Consumption Profile by Step
Consumption (mA)
10.0
7.5
5.0
2.5
0.0
1:RUN
2:STOP2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Time (ms)
Idd by Step
Average Current

2. Peripherals and Middlewares Configuration

2.1. LCD

Mode: 1/4 Duty Cycle

mode: SEG3

mode: SEG4

mode: SEG5

mode: SEG6

mode: SEG8

mode: SEG9

mode: SEG12

mode: SEG13

mode: SEG14

mode: SEG15

mode: SEG17

mode: SEG22

mode: SEG23

mode: SEG24

mode: SEG25

mode: SEG26

mode: SEG28

mode: SEG29

mode: SEG30

mode: SEG31

mode: SEG32

mode: SEG33

mode: SEG34

mode: SEG35

2.1.1. Parameter Settings:

Clock Parameters:

Clock Prescaler	1
Clock Divider	16

Basic Parameters:

Duty Selection	1/4
Bias Selector	1/4
Multiplex mode	Disable

Advanced Parameters:

Voltage Source Selection	Internal
Contrast Control	2.60V
Dead Time Duration	No dead Time
High Drive	Disable
Pulse ON Duration	0 pulse
Blink Mode	Disabled
Blink Frequency	fLCD/8

2.2. RCC

2.2.1. Parameter Settings:

System Parameters:

VDD voltage (V)	3.3
Instruction Cache	Enabled
Prefetch Buffer	**Enabled ***
Data Cache	Enabled
Flash Latency(WS)	2 WS (3 CPU cycle)

RCC Parameters:

HSI Calibration Value	16
MSI Calibration Value	0
MSI Auto Calibration	Disabled
HSE Startup Timout Value (ms)	100
LSE Startup Timout Value (ms)	5000

Power Parameters:

Power Regulator Voltage Scale	Power Regulator Voltage Scale 1

2.3. SYS

Timebase Source: SysTick

*** User modified value**

3. System Configuration

3.1. GPIO configuration

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
LCD	PC3	LCD_VLCD	Alternate Function Push Pull	No pull-up and no pull-down	Low	VLCD
	PA6	LCD_SEG3	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG23 [GH08172T_SEG23]
	PA7	LCD_SEG4	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG0 [GH08172T_SEG0]
	PC4	LCD_SEG22	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG22 [GH08172T_SEG22]
	PC5	LCD_SEG23	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG1 [GH08172T_SEG1]
	PB0	LCD_SEG5	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG21 [GH08172T_SEG21]
	PB1	LCD_SEG6	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG2 [GH08172T_SEG2]
	PB12	LCD_SEG12	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG20 [GH08172T_SEG20]
	PB13	LCD_SEG13	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG3 [GH08172T_SEG3]
	PB14	LCD_SEG14	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG19 [GH08172T_SEG19]
	PB15	LCD_SEG15	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG4 [GH08172T_SEG4]
	PD8	LCD_SEG28	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG18 [GH08172T_SEG18]
	PD9	LCD_SEG29	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG5 [GH08172T_SEG5]
	PD10	LCD_SEG30	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG17 [GH08172T_SEG17]
	PD11	LCD_SEG31	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG6 [GH08172T_SEG6]
	PD12	LCD_SEG32	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG16 [GH08172T_SEG16]
	PD13	LCD_SEG33	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG7 [GH08172T_SEG7]
	PD14	LCD_SEG34	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG15 [GH08172T_SEG15]
	PD15	LCD_SEG35	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG8 [GH08172T_SEG8]
	PC6	LCD_SEG24	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG14 [GH08172T_SEG14]
	PC7	LCD_SEG25	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG9 [GH08172T_SEG9]
	PC8	LCD_SEG26	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG13 [GH08172T_SEG13]
	PA8	LCD_COM0	Alternate Function Push Pull	No pull-up and no pull-down	Low	COM0 [GH08172T_COM0]
	PA9	LCD_COM1	Alternate Function Push Pull	No pull-up and no pull-down	Low	COM1 [GH08172T_COM1]
	PA10	LCD_COM2	Alternate Function Push Pull	No pull-up and no pull-down	Low	COM2 [GH08172T_COM2]
	PA15 (JTDI)	LCD_SEG17	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG10 [GH08172T_SEG10]
	PB4	LCD_SEG8	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG11

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	(NJTRST)					[GH08172T_SEG11]
	PB5	LCD_SEG9	Alternate Function Push Pull	No pull-up and no pull-down	Low	SEG12 [GH08172T_SEG12]
	PB9	LCD_COM3	Alternate Function Push Pull	No pull-up and no pull-down	Low	COM3 [GH08172T_COM3]
Single Mapped Signals	PE2	SAI1_MCLK_A	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	SAI1_MCK [CS43L22_MCLK]
	PE4	SAI1_FS_A	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	SAI1_FS [CS43L22_LRCK]
	PE5	SAI1_SCK_A	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	SAI1_SCK [CS43L22_SCLK]
	PE6	SAI1_SD_A	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	SAI1_SD [CS43L22_SDIN]
	PC14-OSC32_IN (PC14)	RCC_OSC32_IN	n/a	n/a	**n/a**	
	PC15-OSC32_OUT (PC15)	RCC_OSC32_OUT	n/a	n/a	**n/a**	
	PH0-OSC_IN (PH0)	RCC_OSC_IN	n/a	n/a	**n/a**	
	PH1-OSC_OUT (PH1)	RCC_OSC_OUT	n/a	n/a	**n/a**	
	PE7	SAI1_SD_B	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	AUDIO_DIN [MP34DT01_DOUT]
	PE9	SAI1_FS_B	Alternate Function Push Pull	No pull-up and no pull-down	Low	AUDIO_CLK [MP34DT01_CLK]
	PE10	QUADSPI_CLK	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	QSPI_CLK [N25Q128A13EF840E_C]
	PE11	QUADSPI_NCS	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	QSPI_CS [N25Q128A13EF840E_S#]
	PE12	QUADSPI_BK1_IO0	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	QSPI_D0 [N25Q128A13EF840E_DQ0]
	PE13	QUADSPI_BK1_IO1	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	QSPI_D1 [N25Q128A13EF840E_DQ1]
	PE14	QUADSPI_BK1_IO2	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	QSPI_D2 [N25Q128A13EF840E_DQ2]
	PE15	QUADSPI_BK1_I	Alternate Function Push Pull	No pull-up and no pull-down	**Very High**	QSPI_D3

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
		O3			*	[N25Q128A13EF840E_DQ3]
	PB10	I2C2_SCL	Alternate Function Open Drain	No pull-up and no pull-down	**Very High ***	MFX_I2C_SLC [MFX_V2_I2C_SCL]
	PB11	I2C2_SDA	Alternate Function Open Drain	No pull-up and no pull-down	**Very High ***	MFX_I2C_SDA [MFX_V2_I2C_SDA]
	PA11	USB_OTG_FS_DM	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	OTG_FS_DM [EMIF02-USB03F2_D-out]
	PA12	USB_OTG_FS_DP	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	OTG_FS_DP [EMIF02-USB03F2_D+out]
	PA13 (JTMS-SWDIO)	SYS_JTMS-SWDIO	n/a	n/a	**n/a**	SWDIO
	PA14 (JTCK-SWCLK)	SYS_JTCK-SWCLK	n/a	n/a	**n/a**	SWCLK
	PD1	SPI2_SCK	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	MEMS_SCK [L3GD20_SCL/SPC]
	PD3	SPI2_MISO	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	MEMS_MISO [L3GD20_SA0/SDO]
	PD4	SPI2_MOSI	Alternate Function Push Pull	No pull-up and no pull-down	**Very High ***	MEMS_MOSI [L3GD20_SDA/SDI/SDO]
	PD5	USART2_TX	Alternate Function Push Pull	**Pull-up ***	**Very High ***	USART_TX
	PD6	USART2_RX	Alternate Function Push Pull	**Pull-up ***	**Very High ***	USART_RX
	PB6	I2C1_SCL	Alternate Function Open Drain	No pull-up and no pull-down	**Very High ***	I2C1_SCL [SSM-104-L-DH_SCL]
	PB7	I2C1_SDA	Alternate Function Open Drain	No pull-up and no pull-down	**Very High ***	I2C1_SDA [SSM-104-L-DH_SDA]
GPIO	PE3	GPIO_Output	Output Push Pull	No pull-up and no pull-down	**High ***	AUDIO_RST [CS43L22_RESET]
	PC13	GPIO_EXTI13	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	**n/a**	MFX_IRQ_OUT [MFX_V2_IRQOUT]
	PC0	GPIO_Input	Input mode	No pull-up and no pull-down	**n/a**	
	PC1	GPIO_Input	Input mode	No pull-up and no pull-down	**n/a**	MAG_INT [LSM303CTR_MAG_INT]
	PC2	GPIO_Input	Input mode	No pull-up and no pull-down	**n/a**	MAG_DRDY [LSM303CTR_DRDY_MA

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
						G]
	PA0	GPIO_Input	Input mode	**Pull-down ***	**n/a**	JOY_CENTER [MT-008A_CENTER]
	PA1	GPIO_Input	Input mode	**Pull-down ***	**n/a**	JOY_LEFT [MT-008A_LEFT]
	PA2	GPIO_Input	Input mode	**Pull-down ***	**n/a**	JOY_RIGHT [MT-008A_RIGHT]
	PA3	GPIO_Input	Input mode	**Pull-down ***	**n/a**	JOY_UP [MT-008A_UP]
	PA4	GPIO_EXTI4	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	**n/a**	MFX_WAKEUP [MFX_V2_WAKEUP]
	PA5	GPIO_Input	Input mode	**Pull-down ***	**n/a**	JOY_DOWN [MT-008A_DOWN]
	PB2	GPIO_Output	Output Push Pull	**Pull-up ***	**Very High ***	LD_R [LED red]
	PE8	GPIO_Output	Output Push Pull	**Pull-up ***	**Very High ***	LD_G [LED_Green]
	PC9	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OTG_FS_PowerSwitchOn [STMPS2141STR_EN]
	PC10	GPIO_EXTI10	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	n/a	OTG_FS_OverCurrent [STMPS2141STR_FAULT]
	PC11	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	OTG_FS_VBUS [EMIF02-USB03F2_Vbus]
	PD0	GPIO_EXTI0	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	n/a	EXT_RST [SSM-104-L-DH_EXT_RST]
	PD2	GPIO_EXTI2	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	n/a	GYRO_INT1 [L3GD20_INT1]
	PD7	GPIO_Output	Output Push Pull	No pull-up and no pull-down	**Very High ***	GYRO_CS [L3GD20_CS_I2C/SPI]
	PB3 (JTDO-TRACESWO)	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	M3V3_REG-ON
	PB8	GPIO_EXTI8	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	n/a	GYRO_INT2 [L3D20_DRDY/INT2]
	PE0	GPIO_Output	Output Push Pull	No pull-up and no pull-down	Low	XL_CS [LSM303CTR_CS_XL]

IP	Pin	Signal	GPIO mode	GPIO pull/up pull down	Max Speed	User Label
	PE1	GPIO_EXTI1	**External Event Mode with Rising edge trigger detection ***	No pull-up and no pull-down	n/a	XL_INT [LSM303CTR_INT_XL]

3.2. DMA configuration

nothing configured in DMA service

3.3. NVIC configuration

3.3.1. NVIC

Interrupt Table	Enable	Preenmption Priority	SubPriority
Non maskable interrupt	true	0	0
Hard fault interrupt	true	0	0
Memory management fault	true	0	0
Prefetch fault, memory access fault	true	0	0
Undefined instruction or illegal state	true	0	0
System service call via SWI instruction	true	0	0
Debug monitor	true	0	0
Pendable request for system service	true	0	0
System tick timer	true	0	0
PVD/PVM1/PVM2/PVM3/PVM4 interrupts through EXTI lines 16/35/36/37/38	unused		
Flash global interrupt	unused		
RCC global interrupt	unused		
LCD global interrupt	unused		
FPU global interrupt	unused		

3.3.2. NVIC Code generation

Enabled interrupt Table	Select for init sequence ordering	Generate IRQ handler	Call HAL handler
Non maskable interrupt	false	true	false
Hard fault interrupt	false	true	false
Memory management fault	false	true	false
Prefetch fault, memory access fault	false	true	false
Undefined instruction or illegal state	false	true	false
System service call via SWI instruction	false	true	false
Debug monitor	false	true	false
Pendable request for system service	false	true	false
System tick timer	false	true	true

*** User modified value**

4. System Views

4.1. Category view

4.1.1. Current

5. Docs & Resources

Type	Link