# 1. Description

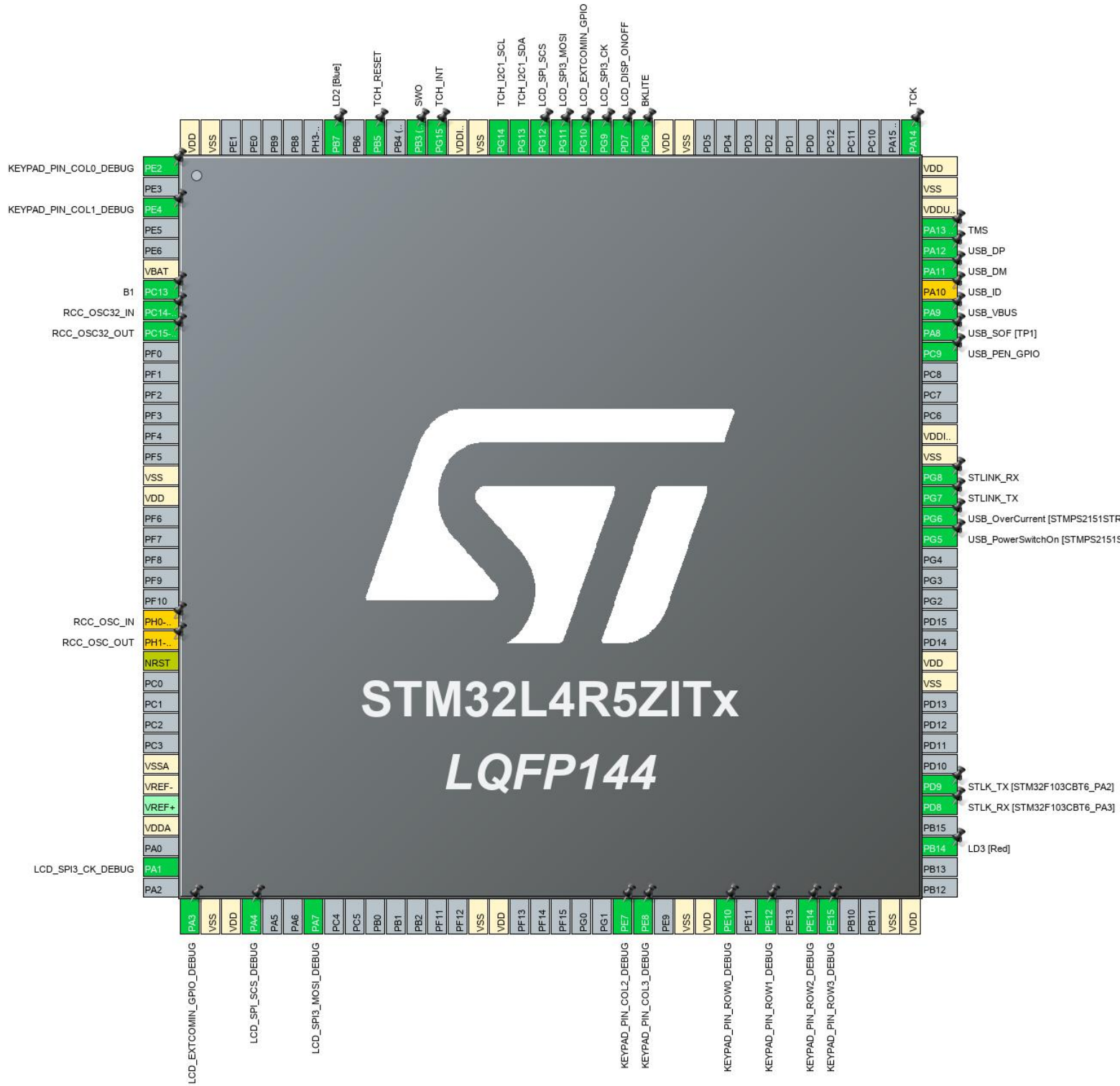
## 1.1. Project

| | |
|---|---|
| Project Name | DK0492 |
| Board Name | NUCLEO-L4R5ZI |
| Generated with: | STM32CubeMX 5.6.0 |
| Date | 06/17/2020 |

## 1.2. MCU

| | |
|---|---|
| MCU Series | STM32L4 |
| MCU Line | STM32L4R5/S5 |
| MCU name | STM32L4R5ZITx |
| MCU Package | LQFP144 |
| MCU Pin number | 144 |

## 2. Pinout Configuration



# 3. Pins Configuration

| Pin Number LQFP144 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|---|---|---|---|---|
| 1 | PE2 * | I/O | GPIO_Output | KEYPAD_PIN_COL0_DEBUG |
| 3 | PE4 * | I/O | GPIO_Output | KEYPAD_PIN_COL1_DEBUG |
| 6 | VBAT | Power | | |
| 7 | PC13 | I/O | GPIO_EXTI13 | B1 |
| 8 | PC14-OSC32_IN (PC14) | I/O | RCC_OSC32_IN | |
| 9 | PC15-OSC32_OUT (PC15) | I/O | RCC_OSC32_OUT | |
| 16 | VSS | Power | | |
| 17 | VDD | Power | | |
| 23 | PH0-OSC_IN (PH0) ** | I/O | RCC_OSC_IN | |
| 24 | PH1-OSC_OUT (PH1) ** | I/O | RCC_OSC_OUT | |
| 25 | NRST | Reset | | |
| 30 | VSSA | Power | | |
| 31 | VREF- | Power | | |
| 33 | VDDA | Power | | |
| 35 | PA1 | I/O | SPI1_SCK | LCD_SPI3_CK_DEBUG |
| 37 | PA3 * | I/O | GPIO_Output | LCD_EXTCOMIN_GPIO_DEBUG |
| 38 | VSS | Power | | |
| 39 | VDD | Power | | |
| 40 | PA4 * | I/O | GPIO_Output | LCD_SPI_SCS_DEBUG |
| 43 | PA7 | I/O | SPI1_MOSI | LCD_SPI3_MOSI_DEBUG |
| 51 | VSS | Power | | |
| 52 | VDD | Power | | |
| 58 | PE7 * | I/O | GPIO_Output | KEYPAD_PIN_COL2_DEBUG |
| 59 | PE8 * | I/O | GPIO_Output | KEYPAD_PIN_COL3_DEBUG |
| 61 | VSS | Power | | |
| 62 | VDD | Power | | |
| 63 | PE10 * | I/O | GPIO_Input | KEYPAD_PIN_ROW0_DEBUG |
| 65 | PE12 * | I/O | GPIO_Input | KEYPAD_PIN_ROW1_DEBUG |
| 67 | PE14 * | I/O | GPIO_Input | KEYPAD_PIN_ROW2_DEBUG |

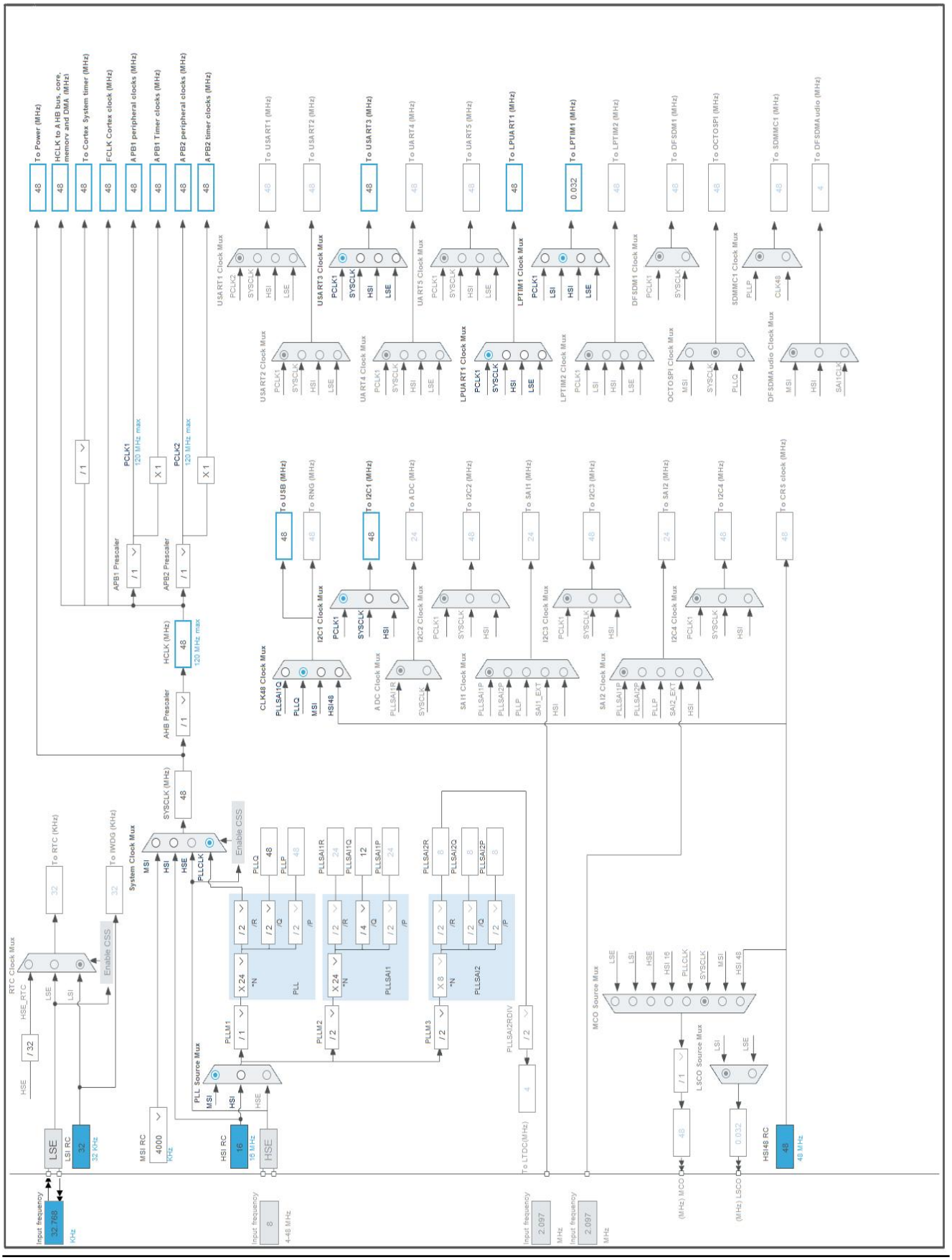
| Pin Number LQFP144 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|---|---|---|---|---|
| 68 | PE15 * | I/O | GPIO_Input | KEYPAD_PIN_ROW3_DEBUG |
| 71 | VSS | Power | | |
| 72 | VDD | Power | | |
| 75 | PB14 * | I/O | GPIO_Output | LD3 [Red] |
| 77 | PD8 | I/O | USART3_TX | STLK_RX [STM32F103CBT6_PA3] |
| 78 | PD9 | I/O | USART3_RX | STLK_TX [STM32F103CBT6_PA2] |
| 83 | VSS | Power | | |
| 84 | VDD | Power | | |
| 90 | PG5 * | I/O | GPIO_Output | USB_PowerSwitchOn [STMPS2151STR_EN] |
| 91 | PG6 * | I/O | GPIO_Input | USB_OverCurrent [STMPS2151STR_FAULT] |
| 92 | PG7 | I/O | LPUART1_TX | STLINK_TX |
| 93 | PG8 | I/O | LPUART1_RX | STLINK_RX |
| 94 | VSS | Power | | |
| 95 | VDDIO2 | Power | | |
| 99 | PC9 * | I/O | GPIO_Output | USB_PEN_GPIO |
| 100 | PA8 | I/O | USB_OTG_FS_SOF | USB_SOF [TP1] |
| 101 | PA9 | I/O | USB_OTG_FS_VBUS | USB_VBUS |
| 102 | PA10 ** | I/O | USB_OTG_FS_ID | USB_ID |
| 103 | PA11 | I/O | USB_OTG_FS_DM | USB_DM |
| 104 | PA12 | I/O | USB_OTG_FS_DP | USB_DP |
| 105 | PA13 (JTMS/SWDIO) | I/O | SYS_JTMS-SWDIO | TMS |
| 106 | VDDUSB | Power | | |
| 107 | VSS | Power | | |
| 108 | VDD | Power | | |
| 109 | PA14 (JTCK/SWCLK) | I/O | SYS_JTCK-SWCLK | TCK |
| 120 | VSS | Power | | |
| 121 | VDD | Power | | |
| 122 | PD6 * | I/O | GPIO_Output | BKLITE |
| 123 | PD7 * | I/O | GPIO_Output | LCD_DISP_ONOFF |
| 124 | PG9 | I/O | SPI3_SCK | LCD_SPI3_CK |
| 125 | PG10 * | I/O | GPIO_Output | LCD_EXTCOMIN_GPIO |
| 126 | PG11 | I/O | SPI3_MOSI | LCD_SPI3_MOSI |
| 127 | PG12 * | I/O | GPIO_Output | LCD_SPI_SCS |
| 128 | PG13 | I/O | I2C1_SDA | TCH_I2C1_SDA |
| 129 | PG14 | I/O | I2C1_SCL | TCH_I2C1_SCL |

| Pin Number LQFP144 | Pin Name (function after reset) | Pin Type | Alternate Function(s) | Label |
|---|---|---|---|---|
| 130 | VSS | Power | | |
| 131 | VDDIO2 | Power | | |
| 132 | PG15 | I/O | GPIO_EXTI15 | TCH_INT |
| 133 | PB3 (JTDO/TRACESWO) | I/O | SYS_JTDO-SWO | SWO |
| 135 | PB5 * | I/O | GPIO_Output | TCH_RESET |
| 137 | PB7 * | I/O | GPIO_Output | LD2 [Blue] |
| 143 | VSS | Power | | |
| 144 | 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 | DK0492 |
| Project Folder | C:\Simon\DPI610E\Basic\DK0492 |
| Toolchain / IDE | EWARM V8.32 |
| Firmware Package Name and Version | STM32Cube FW_L4 V1.15.1 |

## 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 |
| Delete previously generated files when not re-generated | Yes |
| Set all free pins as analog (to optimize the power consumption) | No |

# 6. Power Consumption Calculator report

6.1. Microcontroller Selection

| | |
|---|---|
| Series | STM32L4 |
| Line | STM32L4R5/S5 |
| MCU | STM32L4R5ZITx |
| Datasheet | 030321_Rev0 |

6.2. Parameter Selection

| | |
|---|---|
| Temperature | 25 |
| Vdd | 3.0 |

6.3. 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 |

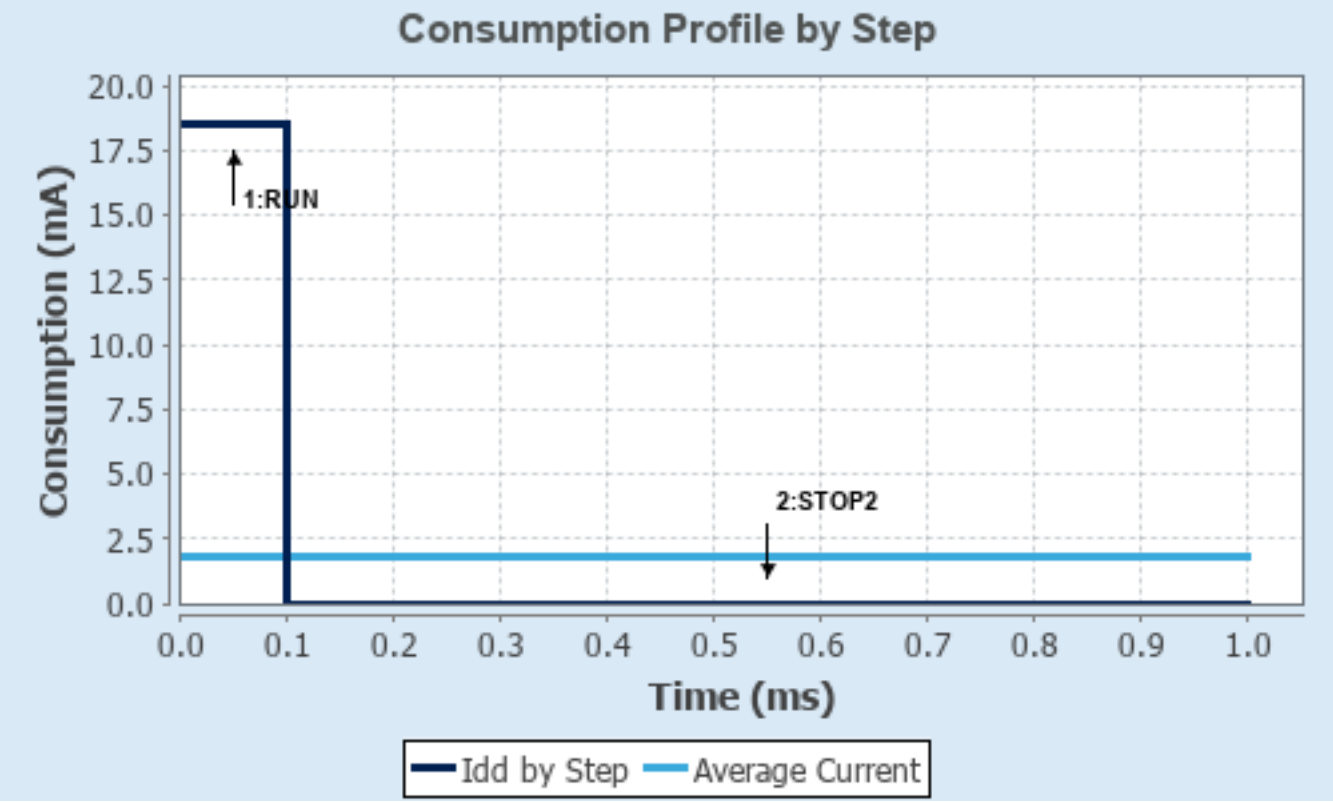
6.4. Sequence

| ***Step*** | Step1 | Step2 |
|---|---|---|
| ***Mode*** | RUN | STOP2 |
| ***Vdd*** | 3.0 | 3.0 |
| ***Voltage Source*** | Battery | Battery |
| ***Range*** | Range1-Boost | NoRange |
| ***Fetch Type*** | FLASH-SingleBank | n/a |
| ***CPU Frequency*** | 120 MHz | 0 Hz |
| ***Clock Configuration*** | HSE BYP PLL ART | ALL CLOCKS OFF |
| ***Clock Source Frequency*** | 4 MHz | 0 Hz |
| ***Peripherals*** | | |
| ***Additional Cons.*** | 0 mA | 0 mA |
| ***Average Current*** | 18.5 mA | 2.55 µA |
| ***Duration*** | 0.1 ms | 0.9 ms |
| ***DMIPS*** | 150.0 | 0.0 |
| ***Ta Max*** | 103.22 | 105 |
| ***Category*** | In DS Table | In DS Table |

## 6.5. RESULTS

| Sequence Time | 1 ms | Average Current | 1.85 mA |
|---|---|---|---|
| Battery Life | 2 months, 15 days, 11 hours | Average DMIPS | 150.0 DMIPS |

## 6.6. Chart


Consumption Profile by Step
Consumption (mA)
20.0
17.5
15.0
12.5
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

# 7. IPs and Middleware Configuration

## 7.1. CRC

**mode: Activated**

### 7.1.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| Default Polynomial State | Enable |
| Default Init Value State | Enable |

**Advanced Parameters:**

| | |
|---|---|
| Input Data Inversion Mode | None |
| Output Data Inversion Mode | Disable |
| Input Data Format | Bytes |

## 7.2. GPIO

## 7.3. I2C1

**I2C: I2C**

### 7.3.1. Parameter Settings:

**Timing configuration:**

| | |
|---|---|
| Custom Timing | Disabled |
| I2C Speed Mode | Standard Mode |
| I2C Speed Frequency (KHz) | 100 |
| Rise Time (ns) | 0 |
| Fall Time (ns) | 0 |
| Coefficient of Digital Filter | 0 |
| Analog Filter | Enabled |
| Timing | **0x20303E5D *** |

**Slave Features:**

| | |
|---|---|
| Clock No Stretch Mode | Disabled |
| General Call Address Detection | Disabled |
| Primary Address Length selection | 7-bit |
| Dual Address Acknowledged | Disabled |
| Primary slave address | 0 |

## 7.4. LPTIM1

### Mode: Counts internal clock events

### 7.4.1. Parameter Settings:

**Clock:**

| | |
|---|---|
| Clock Prescaler | Prescaler Div1 |

**Preload:**

| | |
|---|---|
| Update Mode | Update Immediate |

**Trigger:**

| | |
|---|---|
| Trigger Source | Software Trigger |

## 7.5. LPUART1

### Mode: Asynchronous

### 7.5.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| Baud Rate | 209700 |
| Word Length | 7 Bits (including Parity) |
| Parity | None |
| Stop Bits | 1 |

**Advanced Parameters:**

| | |
|---|---|
| Data Direction | Receive and Transmit |
| Single Sample | Disable |
| Prescaler | clock /1 |
| Fifo Mode | Disable |
| Txfifo Threshold | 1 eighth full configuration |
| Rxfifo Threshold | 1 eighth full configuration |

**Advanced Features:**

| | |
|---|---|
| Auto Baudrate Mode | Disable |
| TX Pin Active Level Inversion | Disable |
| RX Pin Active Level Inversion | Disable |
| Data Inversion | Disable |
| TX and RX pins Swapping | Disable |
| Overrun | Enable |
| DMA on RX Error | Enable |
| MSB First | Disable |

## 7.6. RCC

### Low Speed Clock (LSE) : Crystal/Ceramic Resonator

### 7.6.1. Parameter Settings:

**System Parameters:**

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

**RCC Parameters:**

| | |
|---|---|
| HSI Calibration Value | 64 |
| MSI Calibration Value | 0 |
| MSI Auto Calibration | Enabled |
| HSE Startup Timout Value (ms) | 100 |
| LSE Startup Timout Value (ms) | 5000 |
| LSE Drive Capability | LSE oscillator low drive capability |

**Power Parameters:**

| | |
|---|---|
| Power Regulator Voltage Scale | Power Regulator Voltage Scale 1 |

## 7.7. SPI1

### Mode: Transmit Only Master

### 7.7.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| Frame Format | Motorola |
| Data Size | **8 Bits *** |
| First Bit | MSB First |

**Clock Parameters:**

| | |
|---|---|
| Prescaler (for Baud Rate) | **16 *** |
| Baud Rate | **3.0 MBits/s *** |
| Clock Polarity (CPOL) | Low |
| Clock Phase (CPHA) | 1 Edge |

**Advanced Parameters:**

| | |
|---|---|
| CRC Calculation | Disabled |
| NSSP Mode | Enabled |
| NSS Signal Type | Software |

## 7.8. SPI3

**Mode: Transmit Only Master**

### 7.8.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| Frame Format | Motorola |
| Data Size | **8 Bits *** |
| First Bit | MSB First |

**Clock Parameters:**

| | |
|---|---|
| Prescaler (for Baud Rate) | **8 *** |
| Baud Rate | **6.0 MBits/s *** |
| Clock Polarity (CPOL) | Low |
| Clock Phase (CPHA) | 1 Edge |

**Advanced Parameters:**

| | |
|---|---|
| CRC Calculation | Disabled |
| NSSP Mode | Enabled |
| NSS Signal Type | Software |

## 7.9. SYS

**Debug: Trace Asynchronous Sw**

**Timebase Source: SysTick**

## 7.10. TIM3

**Clock Source : Internal Clock**

**mode: One Pulse Mode**

### 7.10.1. Parameter Settings:

**Counter Settings:**

| | |
|---|---|
| Prescaler (PSC - 16 bits value) | **4800-1 *** |
| Counter Mode | Up |
| Counter Period (AutoReload Register - 16 bits value ) | **10000-1 *** |
| Internal Clock Division (CKD) | No Division |
| auto-reload preload | Disable |

**Trigger Output (TRGO) Parameters:**

| | |
|---|---|
| Master/Slave Mode (MSM bit) | Disable (Trigger input effect not delayed) |
| Trigger Event Selection TRGO | Reset (UG bit from TIMx_EGR) |

## 7.11. USART3

### Mode: Asynchronous

### 7.11.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| Baud Rate | 115200 |
| Word Length | 8 Bits (including Parity) |
| Parity | None |
| Stop Bits | 1 |

**Advanced Parameters:**

| | |
|---|---|
| Data Direction | Receive and Transmit |
| Over Sampling | 16 Samples |
| Single Sample | Disable |
| ClockPrescaler | clock /1 |
| Fifo Mode | Disable |
| Txfifo Threshold | 1 eighth full configuration |
| Rxfifo Threshold | 1 eighth full configuration |

**Advanced Features:**

| | |
|---|---|
| Auto Baudrate | Disable |
| TX Pin Active Level Inversion | Disable |
| RX Pin Active Level Inversion | Disable |
| Data Inversion | Disable |
| TX and RX Pins Swapping | Disable |
| Overrun | Enable |
| DMA on RX Error | Enable |
| MSB First | Disable |

## 7.12. USB_OTG_FS

### Mode: Device_Only

### Activate_VBUS: VBUS sensing

### mode: Activate_SOF

### 7.12.1. Parameter Settings:

| | |
|---|---|
| Speed | Full Speed 12MBit/s |

| | |
|---|---|
| Low power | Disabled |
| Battery charging | Enabled |
| Link Power Management | Disabled |
| VBUS sensing | Enabled |
| Use dedicated end point 1 interrupt | Disabled |
| Signal start of frame | Enabled |

## *7.13. USB_DEVICE*

### Class For FS IP: Communication Device Class (Virtual Port Com)

### 7.13.1. Parameter Settings:

**Basic Parameters:**

| | |
|---|---|
| USBD_MAX_NUM_INTERFACES (Maximum number of supported interfaces) | 1 |
| USBD_MAX_NUM_CONFIGURATION (Maximum number of supported configuration) | 1 |
| USBD_MAX_STR_DESC_SIZ (Maximum size for the string descriptors) | 512 |
| USBD_SELF_POWERED (Enabled self power) | Enabled |
| USBD_DEBUG_LEVEL (USBD Debug Level) | 0: No debug message |
| USBD_LPM_ENABLED (Link Power Management) | 1: Link Power Management supported |

**Class Parameters:**

| | |
|---|---|
| USB CDC Rx Buffer Size | 2048 |
| USB CDC Tx Buffer Size | 2048 |

### 7.13.2. Device Descriptor:

**Device Descriptor:**

| | |
|---|---|
| VID (Vendor IDentifier) | 1155 |
| LANGID_STRING (Language Identifier) | English(United States) |
| MANUFACTURER_STRING (Manufacturer Identifier) | STMicroelectronics |

**Device Descriptor FS:**

| | |
|---|---|
| PID (Product IDentifier) | 22336 |
| PRODUCT_STRING (Product Identifier) | STM32 Virtual ComPort |
| CONFIGURATION_STRING (Configuration Identifier) | CDC Config |
| INTERFACE_STRING (Interface Identifier) | CDC Interface |

*** User modified value**

# 8. System Configuration

## 8.1. GPIO configuration

| IP | Pin | Signal | GPIO mode | GPIO pull/up pull down | Max Speed | User Label |
|---|---|---|---|---|---|---|
| I2C1 | PG13 | I2C1_SDA | Alternate Function Open Drain | Pull-up | **Very High *** | TCH_I2C1_SDA |
| | PG14 | I2C1_SCL | Alternate Function Open Drain | Pull-up | **Very High *** | TCH_I2C1_SCL |
| LPUART1 | PG7 | LPUART1_TX | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | STLINK_TX |
| | PG8 | LPUART1_RX | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | STLINK_RX |
| RCC | 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 | |
| SPI1 | PA1 | SPI1_SCK | Alternate Function Push Pull | **Pull-up *** | **Very High *** | LCD_SPI3_CK_DEBUG |
| | PA7 | SPI1_MOSI | Alternate Function Push Pull | **Pull-up *** | **Very High *** | LCD_SPI3_MOSI_DEBUG |
| SPI3 | PG9 | SPI3_SCK | Alternate Function Push Pull | **Pull-up *** | **Very High *** | LCD_SPI3_CK |
| | PG11 | SPI3_MOSI | Alternate Function Push Pull | **Pull-up *** | **Very High *** | LCD_SPI3_MOSI |
| SYS | PA13 (JTMS/SWDIO) | SYS_JTMS-SWDIO | n/a | n/a | n/a | TMS |
| | PA14 (JTCK/SWCLK) | SYS_JTCK-SWCLK | n/a | n/a | n/a | TCK |
| | PB3 (JTDO/TRACESWO) | SYS_JTDO-SWO | n/a | n/a | n/a | SWO |
| USART3 | PD8 | USART3_TX | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | STLK_RX [STM32F103CBT6_PA3] |
| | PD9 | USART3_RX | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | STLK_TX [STM32F103CBT6_PA2] |
| USB_OTG_ | PA8 | USB_OTG_FS_ | Alternate Function Push Pull | No pull-up and no pull-down | **Very High** | USB_SOF [TP1] |

| IP | Pin | Signal | GPIO mode | GPIO pull/up pull down | Max Speed | User Label |
|---|---|---|---|---|---|---|
| FS | | SOF | | | * | |
| | PA9 | USB_OTG_FS_VBUS | Input mode | No pull-up and no pull-down | **n/a** | USB_VBUS |
| | PA11 | USB_OTG_FS_DM | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | USB_DM |
| | PA12 | USB_OTG_FS_DP | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | USB_DP |
| Single Mapped Signals | 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 | |
| | PA10 | USB_OTG_FS_ID | Alternate Function Push Pull | No pull-up and no pull-down | **Very High *** | USB_ID |
| GPIO | PE2 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | KEYPAD_PIN_COL0_DEBUG |
| | PE4 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | KEYPAD_PIN_COL1_DEBUG |
| | PC13 | GPIO_EXTI13 | External Interrupt Mode with Rising edge trigger detection | No pull-up and no pull-down | n/a | B1 |
| | PA3 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LCD_EXTCOMIN_GPIO_DEBUG |
| | PA4 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LCD_SPI_SCS_DEBUG |
| | PE7 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | KEYPAD_PIN_COL2_DEBUG |
| | PE8 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | KEYPAD_PIN_COL3_DEBUG |
| | PE10 | GPIO_Input | Input mode | **Pull-down *** | n/a | KEYPAD_PIN_ROW0_DEBUG |
| | PE12 | GPIO_Input | Input mode | **Pull-down *** | n/a | KEYPAD_PIN_ROW1_DEBUG |
| | PE14 | GPIO_Input | Input mode | **Pull-down *** | n/a | KEYPAD_PIN_ROW2_DEBUG |
| | PE15 | GPIO_Input | Input mode | **Pull-down *** | n/a | KEYPAD_PIN_ROW3_DEBUG |
| | PB14 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LD3 [Red] |
| | PG5 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | USB_PowerSwitchOn [STMPS2151STR_EN] |
| | PG6 | GPIO_Input | Input mode | No pull-up and no pull-down | n/a | USB_OverCurrent [STMPS2151STR_FAULT] |
| | PC9 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | USB_PEN_GPIO |
| | PD6 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | BKLITE |

| IP | Pin | Signal | GPIO mode | GPIO pull/up pull down | Max Speed | User Label |
|---|---|---|---|---|---|---|
| | PD7 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LCD_DISP_ONOFF |
| | PG10 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LCD_EXTCOMIN_GPIO |
| | PG12 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LCD_SPI_SCS |
| | PG15 | GPIO_EXTI15 | External Interrupt Mode with Rising edge trigger detection | No pull-up and no pull-down | n/a | TCH_INT |
| | PB5 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | TCH_RESET |
| | PB7 | GPIO_Output | Output Push Pull | No pull-up and no pull-down | Low | LD2 [Blue] |

## *8.2. DMA configuration*

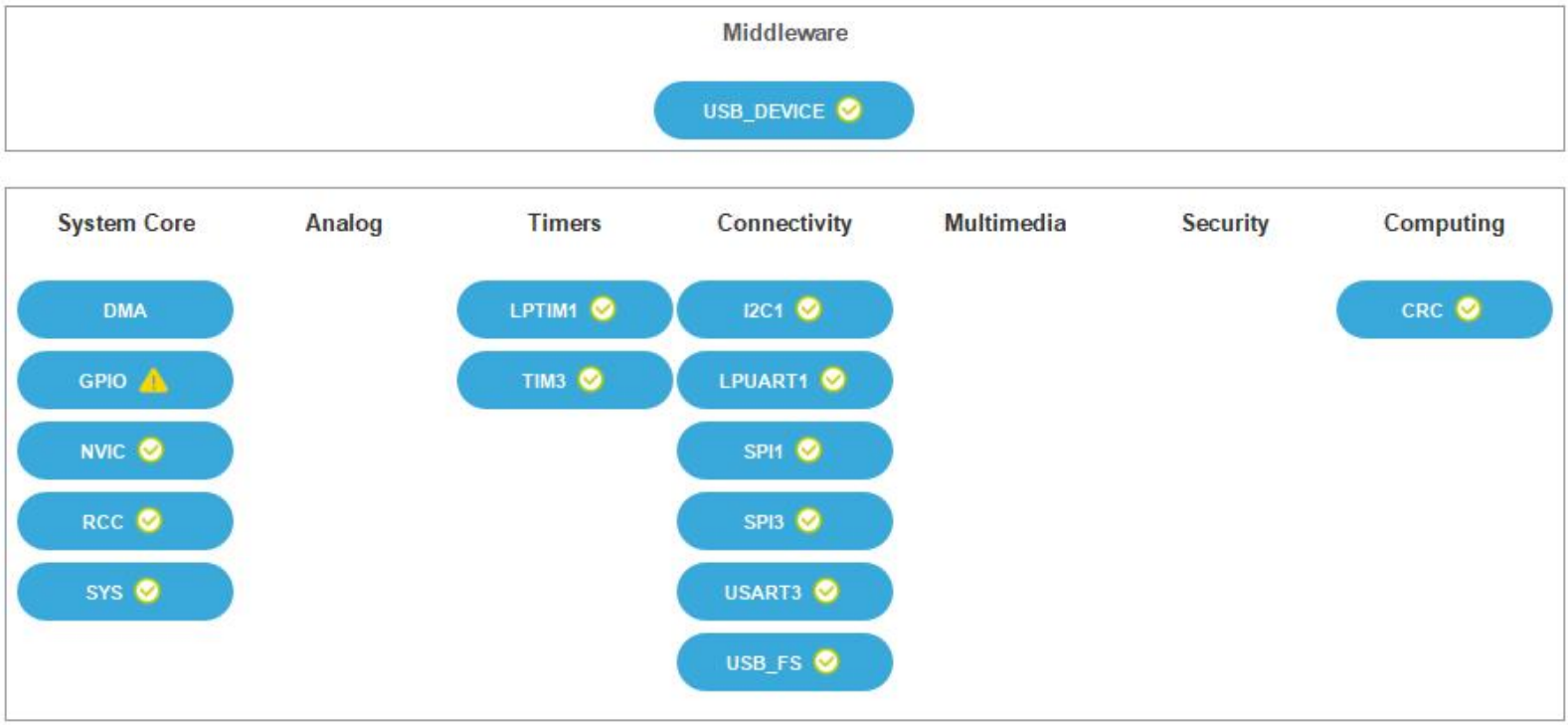
nothing configured in DMA service

## 8.3. NVIC configuration

| 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 | 1 | 0 |
| TIM3 global interrupt | true | 3 | 0 |
| LPTIM1 global interrupt | true | 4 | 0 |
| USB OTG FS global interrupt | 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 | | |
| I2C1 event interrupt | unused | | |
| I2C1 error interrupt | unused | | |
| SPI1 global interrupt | unused | | |
| USART3 global interrupt | unused | | |
| EXTI line[15:10] interrupts | unused | | |
| SPI3 global interrupt | unused | | |
| LPUART1 global interrupt | unused | | |
| FPU global interrupt | unused | | |

*** User modified value**

# 9. Predefined Views - Category view : Current



# 10. Software Pack Report