Getting started with the EVL9962 evaluation board based on L9962 device for battery managements system

Introduction

This document introduces the hardware board and its key features. The L9962 evaluation kit consists of an expansion board containing the L9962 IC for battery pack monitoring solutions, along with an emulation board and the NUCLEO-G071RB STM32 Nucleo-64 development board. The kit demonstrates the performance and ease of integration with STMicroelectronics technology for battery management system (BMS) applications.

The tool is designed to allow users to both evaluate the product through the graphical user interface (GUI) and to perform prototyping and software development for their applications. It already supports charge and discharge currents up to 30 A and provides access to all the functionalities of the L9962 device.

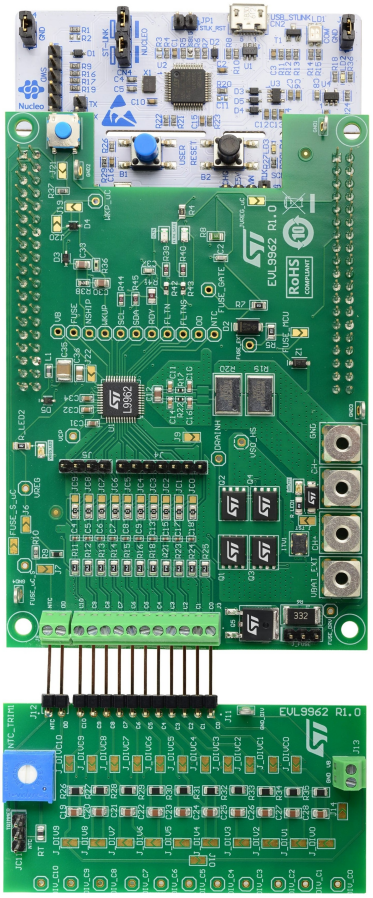
The kit shows features of the L9962, which can monitor up to 10 lithium-ion (Li-ion) battery cells in series configuration. It communicates with the STM32G071RB microcontroller via the I²C interface.

The expansion board is specifically designed to stack on the NUCLEO-G071RB development board using ST morpho connectors.

The board provides the necessary **VB** (battery voltage) and **GND** (ground) connections for proper power supply and measurement, ensuring accurate monitoring and operation of the battery management system.

The kit also consists of an emulation board designed to emulate the behavior of cells and for testing and validation purposes.

Figure 1. STEVAL-L9962 evaluation kit



1 Getting started

1.1 Overview

The EVL9962 features are:

- Measurement of cell voltages, up to 10 cells with over, under and delta detections
- Measurement of stack voltage, with over/undervoltage detection and plausibility check vs. sum of cells
- Measurement of battery pack temperature through external NTC (located on the emulation board).
- The possibility to interface the device through I²C signals from the MCU

The L9962 evaluation kit

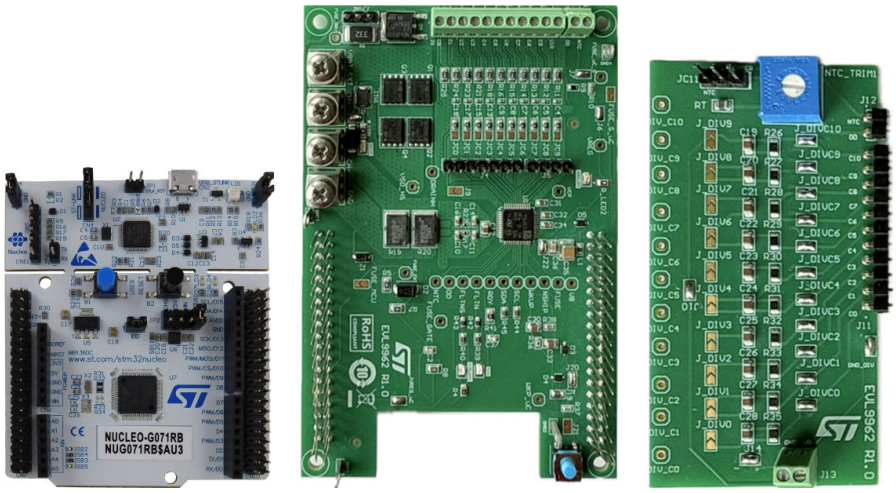
- Nucleo STM32G071RB
- EVL9962 IC board + emulation board (supplied together)

2 System architecture

The STEVAL-L9962 evaluation kit consists of two subsystems:

- The Nucleo-STM32G071RB board embedding the STM32G071RBT6
- The IC board embedding the L9962 that monitors the battery pack and emulation board to emulate cells voltages.

Figure 2. NUCLEO-G071RB (left) - L9962 IC board (middle) - Emulation board (right)



2.1 NUCLEO-G071RB board

The NUCLEO-G071RB STM32 Nucleo-64 development board is based on the high-performance Arm® Cortex®-M0+ 32-bit RISC core operating at up to 64 MHz frequency, with 128 KB flash memory and 16 KB SRAM.

The ST morpho headers allow expanding the functionality of the STM32 Nucleo open development platform with a wide choice of specific shields.

The STM32 Nucleo-64 boards do not require any separate probe as they integrate the ST-LINK/V2-1 debugger/programmer. They embed comprehensive, free STM32 software libraries, and examples available with the STM32CubeG0 MCU package.

Related links

Refer to the related ST web page NUCLEO-G071RB bill of materials and schematic diagrams NUCLEO-G071RB | Product - STMicroelectronics

2.2 L9962 evaluation board – IC board

The IC board integrates the L9962 BMS device, a comprehensive solution for monitoring, balancing, and protecting battery packs composed of 10 series-connected Li-Ion or Li-Polymer cells. Equipped with a high-precision ADC, the device continuously measures individual cell voltages, total stack voltage, and temperature via an external NTC sensor. These voltage measurements are performed cyclically with a configurable timing loop.

Current sensing is handled by a highly accurate current sense amplifier (CSA), which operates continuously and supports Coulomb counting for precise tracking of battery charge and discharge.

Cell balancing functionality is included, allowing a maximum balancing current of 70 mA.

The communication and configuration of the device, as well as all the cell parameters necessary to evaluate SoC and SOH, are acquired by the MCU through the I^2C communication protocol.

The L9962 also features a predriver stage, programmable for high-side operation only, enabling efficient control of pack relays. Additionally, it incorporates fuse protection circuitry to enhance safety by preventing fire or explosion risks.

A robust 3.3 V regulator is integrated to supply the pack controller and other external components.

This regulator ensures supply voltage for the MCU and supports additional circuitry required for battery management and system control.

The device provides comprehensive protection mechanisms including overvoltage and undervoltage detection, temperature monitoring (over/undertemperature), and overcurrent protection in both charge and discharge directions, as well as short-circuit protection during discharge events.

To enhance reliability, critical safety parameters and configurations can be stored in internal nonvolatile memory (NVM), eliminating the need for reconfiguration after each power cycle or wake-up.

While FAULTN is an open-drain fault output signal that indicates when a failure is detected, it is mapped to a microcontroller pin so that it can be monitored by the user.

FAULTN_SAFE is a fault output signal designed for critical fault and it is mapped both to a GPIO pin for firmware monitoring and, via a jumper, to the microcontroller reset pin to automatically reset the MCU in case of critical faults.

By opening or closing jumpers (J_DIV0 to J_DIV10), allows enabling or disabling bypass the filtering stage if a related cell is not used.

Figure 3. **EVAL-L9962 evaluation kit**

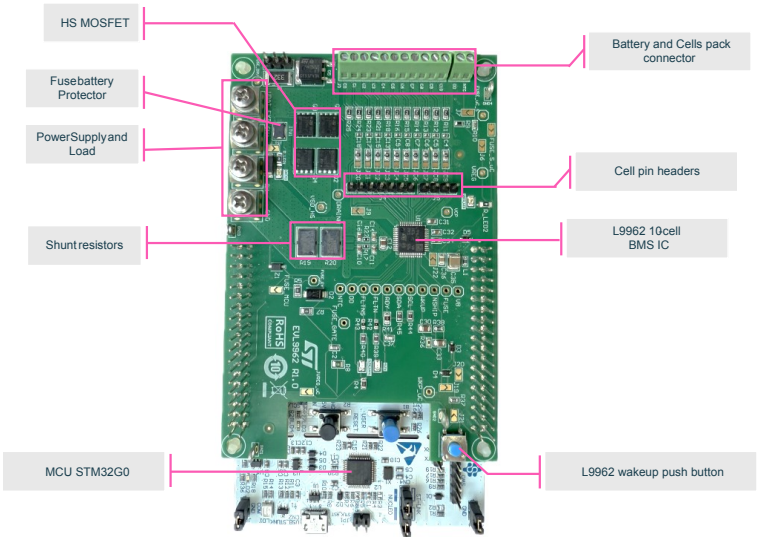
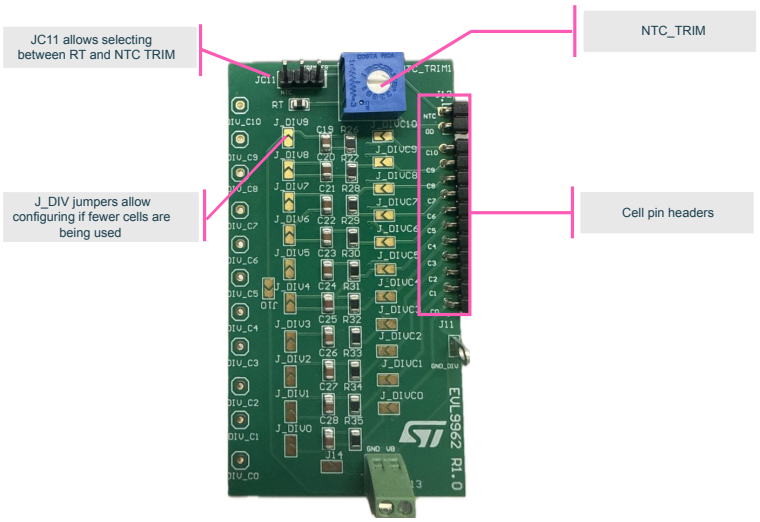
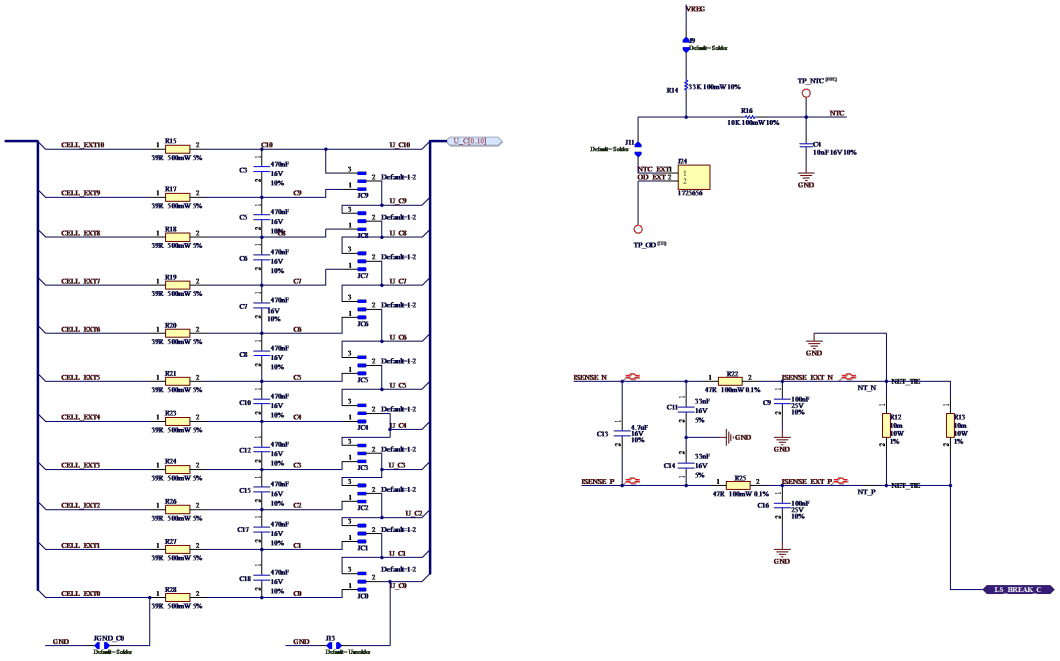


Figure 4. **EVAL-L9962 evaluation kit - divider board**



2.2.1 Cell current monitor section

Figure 5. **EVAL-L9962 evaluation kit - cell current monitor**



- **Cell inputs (CELL_EXT0 to CELL_EXT10):**
- These are external cell voltage measurement inputs, from individual battery cells in a battery pack.
- **Series resistors (R15, R17, R18, ...):**
- Each cell input passes through a 39 Ω resistor. This resistor limits current and provides some protection against transient spikes.
- **Capacitors (C3, C5, C6, ...)**: Each cell input line is connected to the ground through a 470 nF capacitor. These capacitors form a low-pass filter with series resistors, helping to filter out high-frequency noise and stabilize the voltage measurement.
- **Jumpers (JC0 to JC9):**
- Each cell input line has a jumper connected in parallel with the capacitor. The jumper default position is 1-2 closed, which means the capacitor is connected. Opening the jumper would disconnect the capacitor, possibly for testing or configuration purposes.
- **Output lines (U_C0 to U_C10)**: After the filtering stage, the signals are sent out to the next stage or device input for voltage measurement.
- By closing the jumper between C10 and VBEXT, and between C0 and GND, the device board can be supplied directly through the cell terminals C10 and C0. This setup is typically used during user firmware development.
- When a real load (up to 30 A) is connected, C10 and C0 must be used exclusively for voltage sensing. In this case, the board should be powered via dedicated connectors VBEXT and GND to ensure correct operation and safety.

Note: See L9962 datasheet for further details.

2.2.2 Circuit breaker section

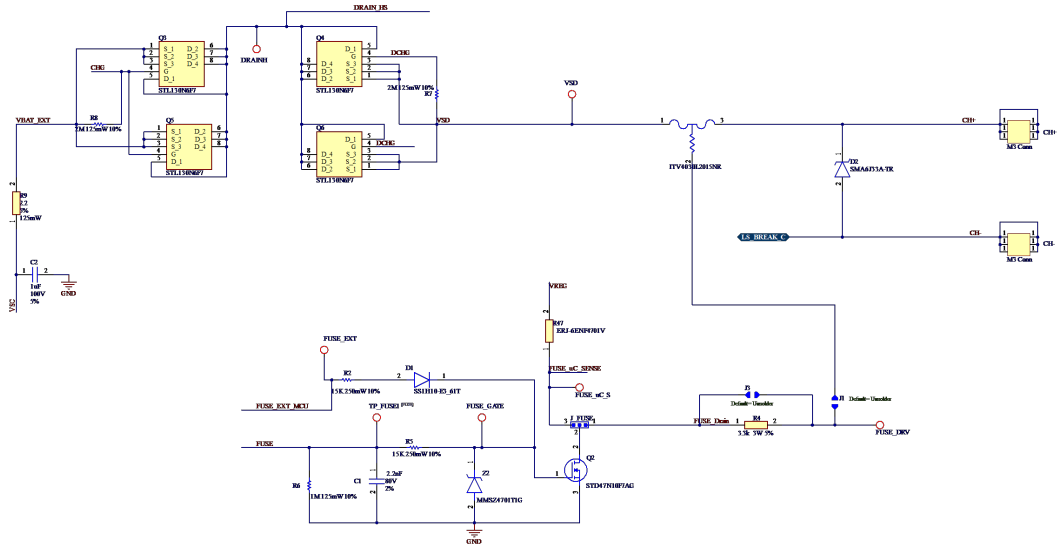
L9962 uses a dual predriver stage to manage the external charge (CHG) and discharge (DCHG) switches.

In this schematic, only the **high-side configuration** is implemented for both the charge and discharge MOSFETs.

- The predriver stage is configured to drive the MOSFETs on the **high side** only.
- The gate drivers are connected to the high-side MOSFETs (for example, Q5, Q3 for CHG and Q4, Q6 for DCHG).]

Under certain conditions classified as permanent failures, L9962 can be programmed to activate the FUSE predriver. An external NMOS can be driven to blow up a fuse connected in series to the battery pack positive terminal.

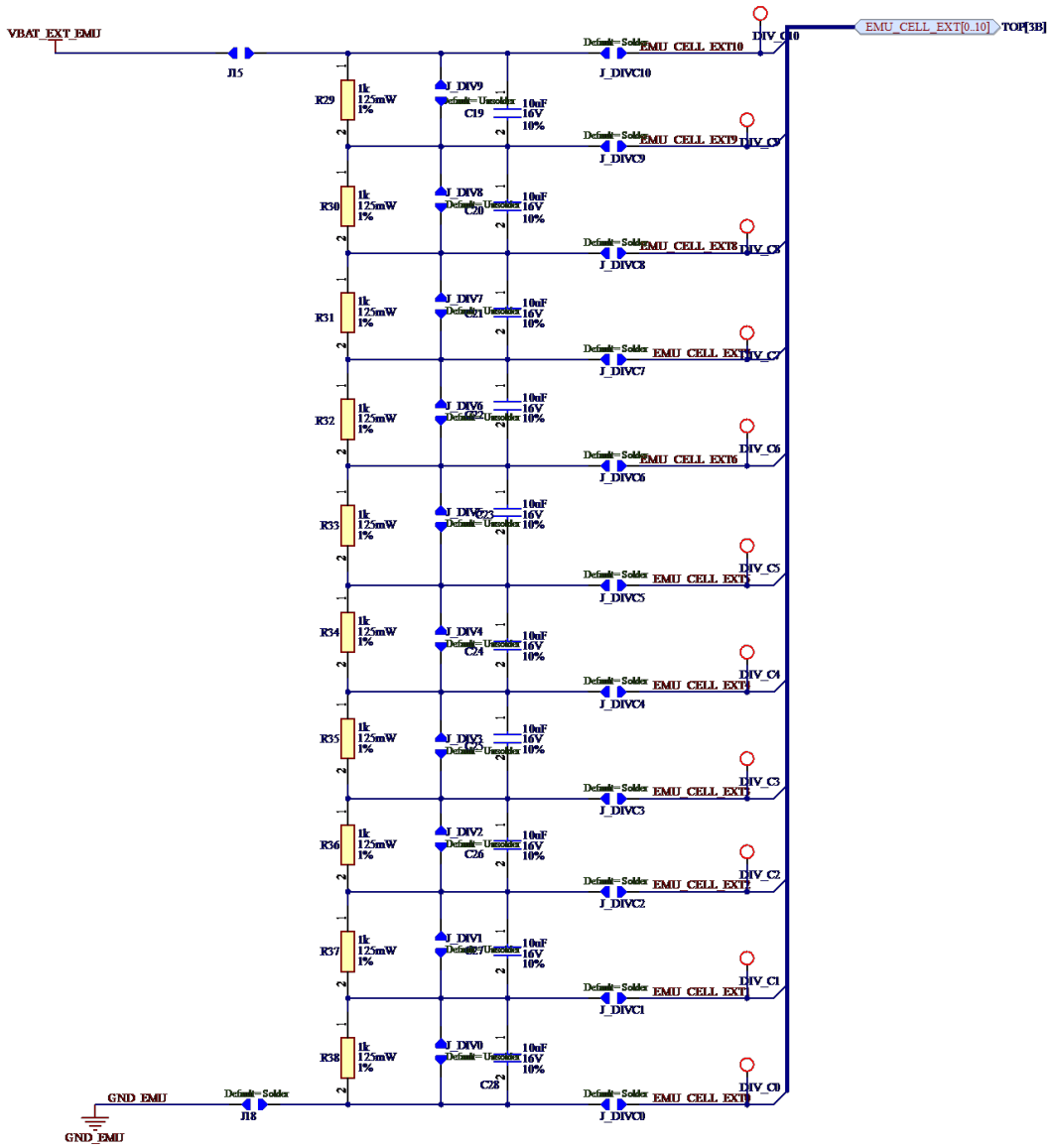
Figure 6. EVAL-L9962 evaluation kit - emulation section



2.3 L9962 evaluation board – emulation board

This emulation board section allows developers and testers to simulate different battery cell voltages by applying a controlled voltage source and selectively enabling/disabling cells via jumpers.

Figure 7. EVAL-L9962 evaluation kit - emulation section



The 3.3 V regulator output of the device can be configured on the board to supply power to the microcontroller (MCU), or it can be disabled if an external power source is used to power the MCU. This flexibility allows the user to choose the most suitable power scheme for their application.

3 Jumpers and connectors

3.1 L9962 promo board jumpers and connectors description

Table 1. EVL9962 jumpers and connectors

Name	Description	Default configuration	Type
JDIVC0-JDIVC10	Emulation section cells jumpers	Closed	Soldered jumper/Pin header
JDIV0-JDIV9	Used to short unused cell	Open	Soldered jumper
J10, J14	Jumper for control or reset function to be verified	Closed	Soldered jumper
JC11	Jumper selector between NTC_EXT, OD_EXT	Closed	Pin header jumper
J6	Used to connect NTC pin to VREG	Closed	Soldered jumper
J7	Used to connect NTC EXT connector J24 to NTC circuit	Closed	Soldered jumper
J9	used to connect C0 pin to GND	Open	Soldered jumper
JGND_C0	Jumper to connect C0 to GND	Closed	Soldered jumper
J14	Cells test point header	-	Pin header
JVREG	Used to supply MCU with VREG	Closed	Soldered jumper
J1	Used to exclude current limitation resistor that avoids fuse blow up	Open	Soldered jumper
J_FUSE	Select to sense the FUSE pin (2-3) activation or drive the fuse (1-2)	1-2	Pin header
J19	Used to drive WKP pin by NSHIP signal	Closed	Soldered jumper
J20	Drive WKP pin by MCU	Open	Soldered jumper
J21	Used to connect NSHIP to VBAT	Open	Soldered jumper
J22	Connect to VB_EXT	Closed	Soldered jumper
CN7, CN10	ST morpho connector: used to place L9962 demo boards on top of the NUCLEO-G071RB microboard		
J_CAN_1-4		Open	Soldered jumper
uC_RST	Used to connect MCU reset with FAULTN_SAFE	Open	Soldered jumper
FUSE_S_uC	Used to monitor the FUSE pin state using MCU	Open	Soldered jumper
Fuse_MCU	Used to drive the fuse by the MCU	Open	Soldered jumper
SDA_uC, SCL_uc	Jumper to connect I^2C signals to MCU	Closed	Soldered jumper
FAULTN_uC	Jumper to connect FAULTN signal to MCU	Open	Soldered jumper
FAULTN_SAFE_uC	Jumper to connect FAULTN_SAFE signal to MCU	Open	Soldered jumper
RDY_uC	Jumper to connect RDY signal to MCU	Open	Soldered jumper
J_NSHIP_uC	Jumper to connect NSHIP device pin to NSHIP MCU	Open	Soldered jumper
J_DRAIN_HS	Jumper to connect VB pin to DRAIN_HS	Closed	Soldered jumper
JVBAT_CELL10	Jumper to connect cell 10 to VBATT	Closed	Soldered jumper
FAULTN	Jumper to connect FAULTN MCU	Closed 1-2	Soldered jumper
FAULTN_SAFE	Jumper to connect FAULTN_SAFE MCU	Closed 1-2	Soldered jumper
J_NSHIP	Jumper to connect NSHIP MCU	Closed 2-3	Soldered jumper
J_TST	Jumper to connect LED test between CH+ and CH-	Closed	Soldered jumper
JC0-JC10	Jumper on cell monitor	Closed 1-2	Soldered jumper

Table 2. Nucleo STM32G0 jumpers and connectors

Name	Description	Configuration	Type
CN2	STLINK USB connector - USB micro-B	-	Connector
CN7, CN10	ST morpho connector: used to place L9962 demo board on top of NUCLEO-G071RB microboard	-	Connector
JP2	5 V jumper selection (1)	OPEN: no 5 V power 1-2 CLOSED: 5 V from STLINK 3-4 CLOSED: 5 V from VIN 7 V to 12 V 5-6 CLOSED: 5 V from E5V 7-8 CLOSED: 5 V from USB_CHG	Jumper
JP3	STM32 VDD current measurement	Opened when micro is powered from VREG	Jumper

1. *See UM2324 for further details.*

4 Application setup

4.1 System requirements

To set up the demo and run the application with the evaluation kit, the following items are required:

- EVAL-L9962 kit
- USB Type-A to Micro-B cable
- A portable power supply (up to 40 V, 1 A) to feed the EVAL-L9962 kit (in case a real battery is not available)
- The evaluation GUI contained in the STSW-L9962
- A laptop to install the evaluation GUI contained in STSW-L9962

4.2 How to run the application demo

To run the application demo, in voltage and NTC temperature acquisition mode, follow the procedure below:

Step 1. Verify that the setting of STEVAL-L9962 jumpers respects the configuration reported in Table 1.

Figure 8. EVL-L9962 jumpers setting

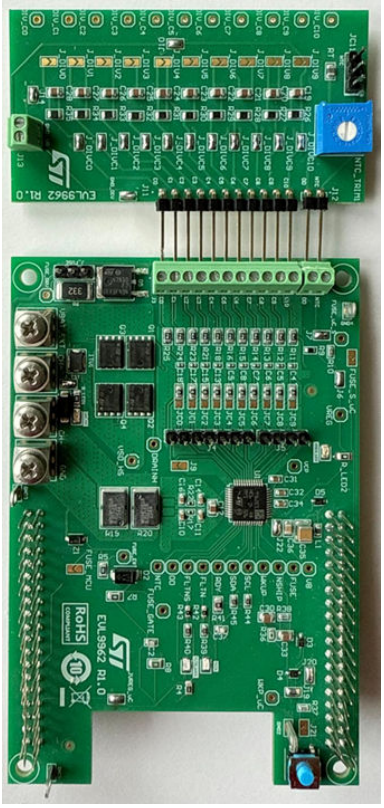


Table 3. Jumper settings

Name	Board	Description	Configuration
JC0-JC9	EXP. BOARD	Connect CELL_EXT to the U[C0...C10] in the device section	Position 1-2
JDIVC0-JDIVC10	EMULATION BOARD	Connect emulation board to evaluation board	Closed
J19	EXP. BOARD	Connect NSHIP to the wake-up circuitry	Closed
J22	EXP. BOARD	Connect VB to device pin	Closed
J15-J18	EMULATION BOARD	Connect to VBAT_EXT_EMU and GND	Closed

Name	Board	Description	Configuration
J11	EXP. BOARD	If user want to use NTC can close J11	Closed
FAULTN, FAULTN_SAFE_uC, J_NSHIP	EXP. BOARD	Connect signals to the microcontroller GPIO to make it compatible, otherwise with the CAN	Position 1-2
JCAN1...JCAN4, FUSE_S_uC, JVREG; FUSE_MCU	EXP. BOARD	Compatible with CAN	Open
J_DRAIN_HS	EXP. BOARD	Connect VB from device pin to the circuit breaker section HS predriver	Closed
RDY_uC, SDA_uC, SCL_uC, FAULTN_uC, FAULTN_SAFE_uC	EXP. BOARD	Connect signals to the microcontroller GPIO	Closed
J_VBAT_CELL10	EXP. BOARD	Connect cell 10 to VBAT	Closed
JGND_C0	EXP. BOARD	Connect C0 to GND	Closed

Step 2. After installing the GUI and confirming that the Nucleo board kit is programmed with the firmware binary contained in the same software package, the MCU board must be connected to the laptop through the USB cable

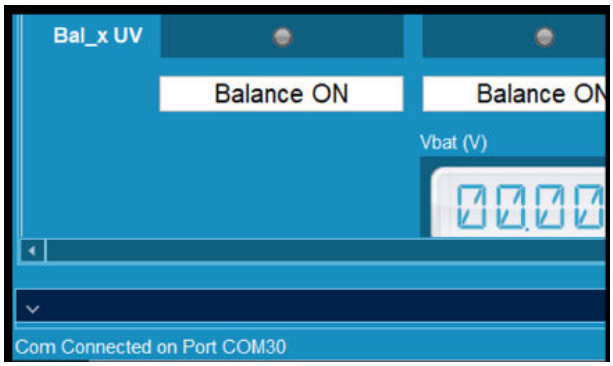
Note: In the case of Nucleo programming, refer to the STM32CubeProgrammer user manual for firmware uploading.

Step 3. Connect the power supply to VBAT_EXT and GND or through the J2 connector

Step 4. Launch the GUI on the laptop and verify that the COM used by the evaluation board is recognized by the laptop

operative system (WINDOWS in the described case) in the device manager. If recognized, the GUI releases a message on the left part of the bottom side of its template, referring to the connected COM number used.

Figure 9. GUI view and focus on connected COM



Step 5. On the GUI tab "L9962 demo", select the correct folder path

Figure 10. GUI tab "Register load" – open

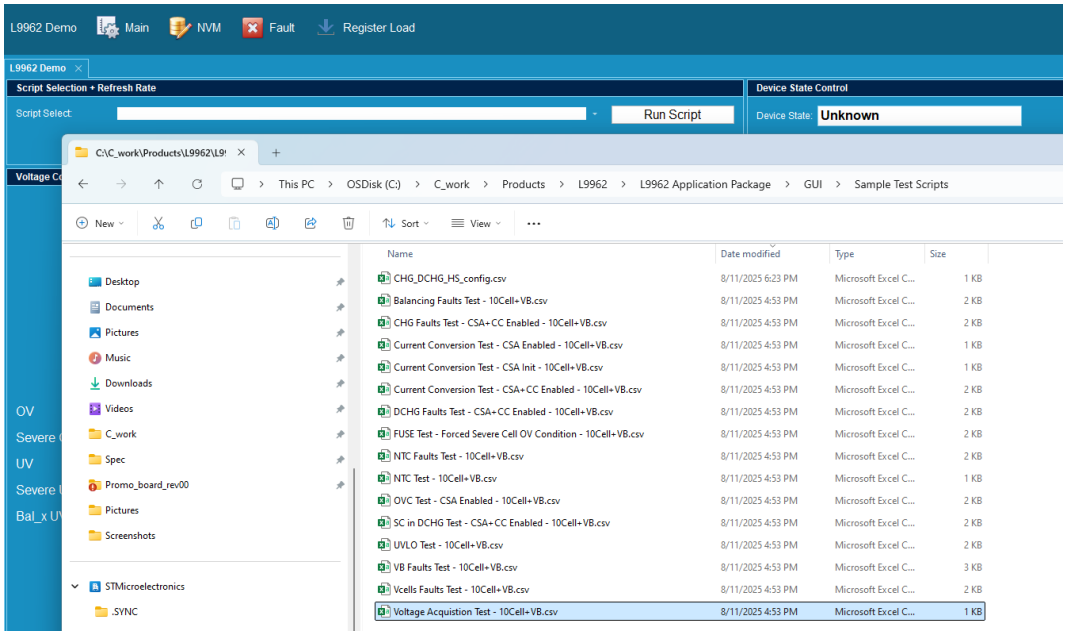
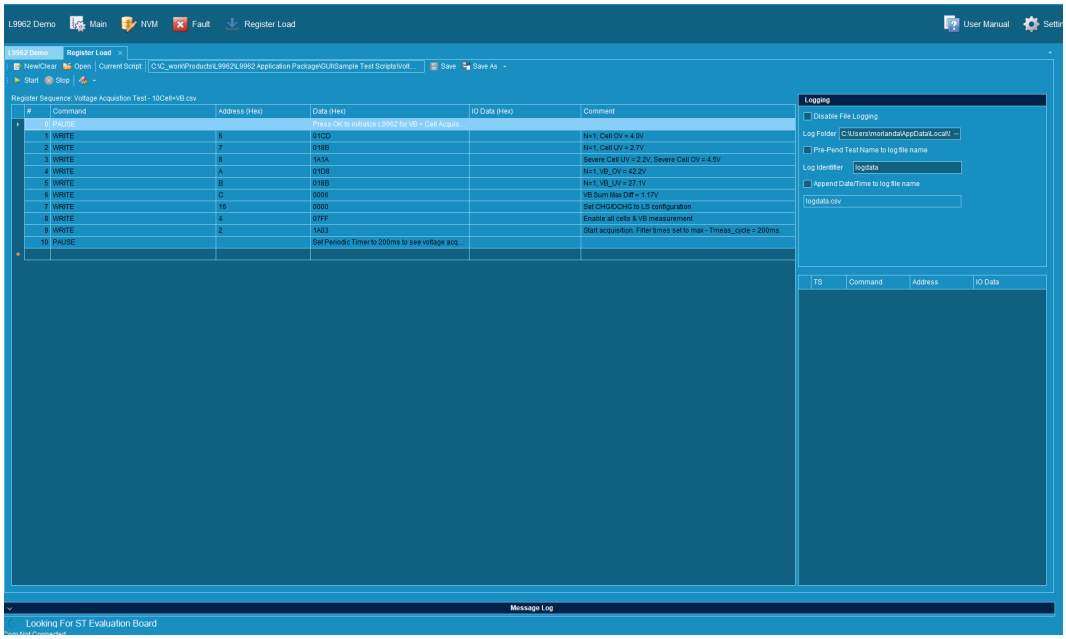


Figure 11. **Register load: csv commands loaded**



Step 6. Then, open the "L9962 demo" tab, and set the periodic timer (for example to 250 ms), it is possible to observe the direct acquisition of the voltages on each cell:

5 Board schematics

Note: The schematic diagrams below refer to the expansion board included in the EVAL-L9962 evaluation kit. For the schematic diagrams of the NUCLEO-G071RB development board, see the related web page.

Figure 12. EVAL-L9962 expansion board - TOP

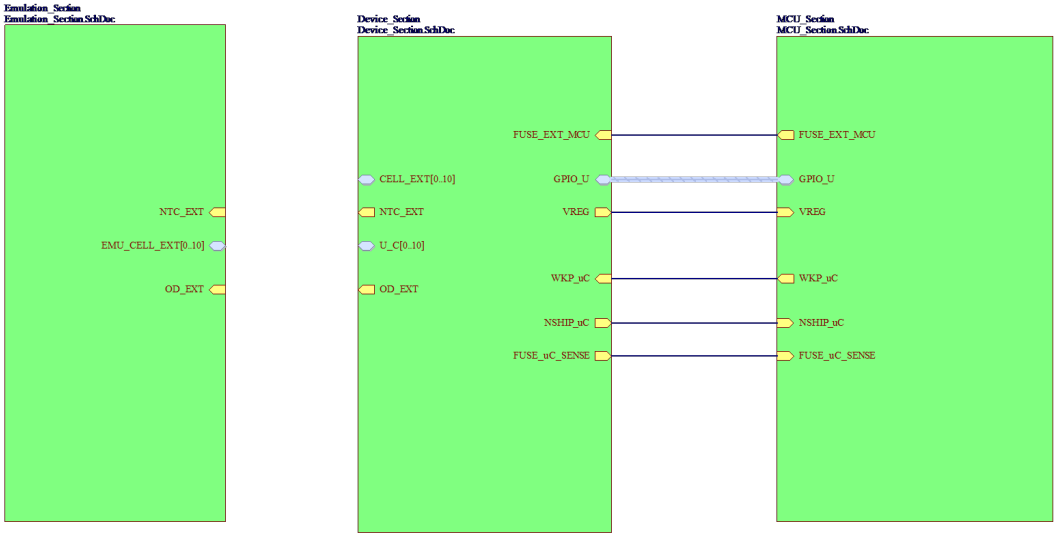


Figure 13. EVAL-L9962 expansion board - device

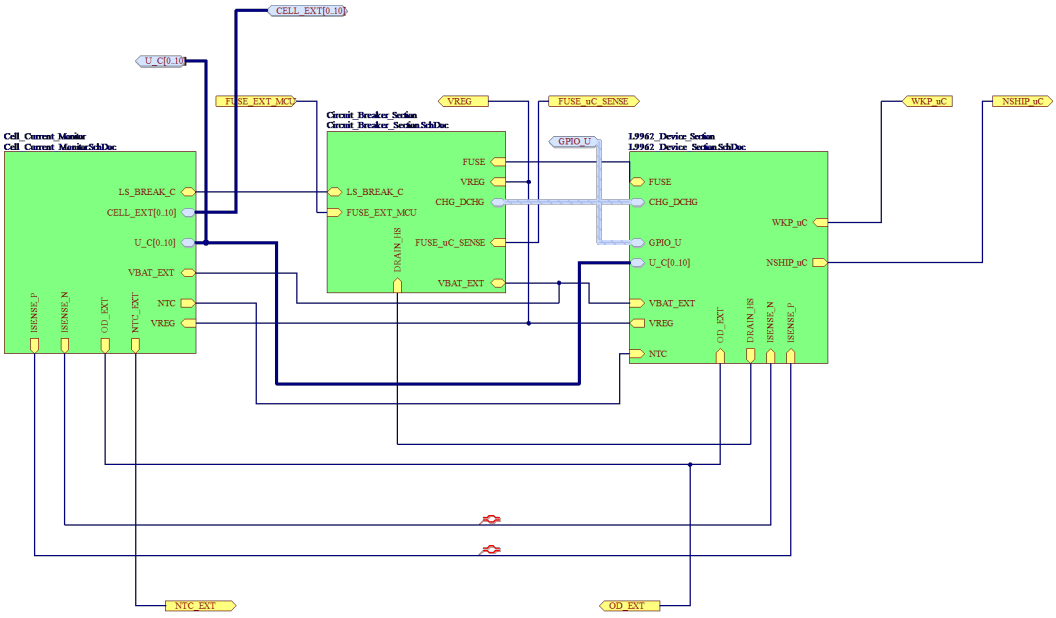


Figure 14. **EVAL-L9962 expansion board - circuit breaker section**

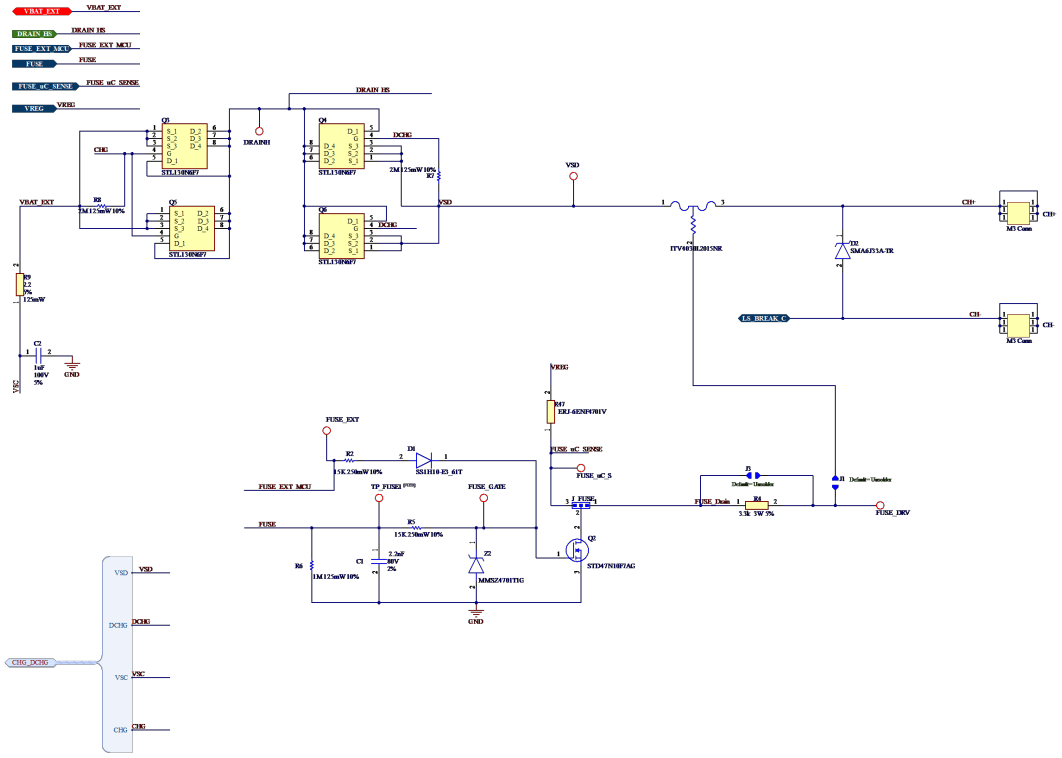


Figure 15. **EVAL-L9962 expansion board - cell current monitor**

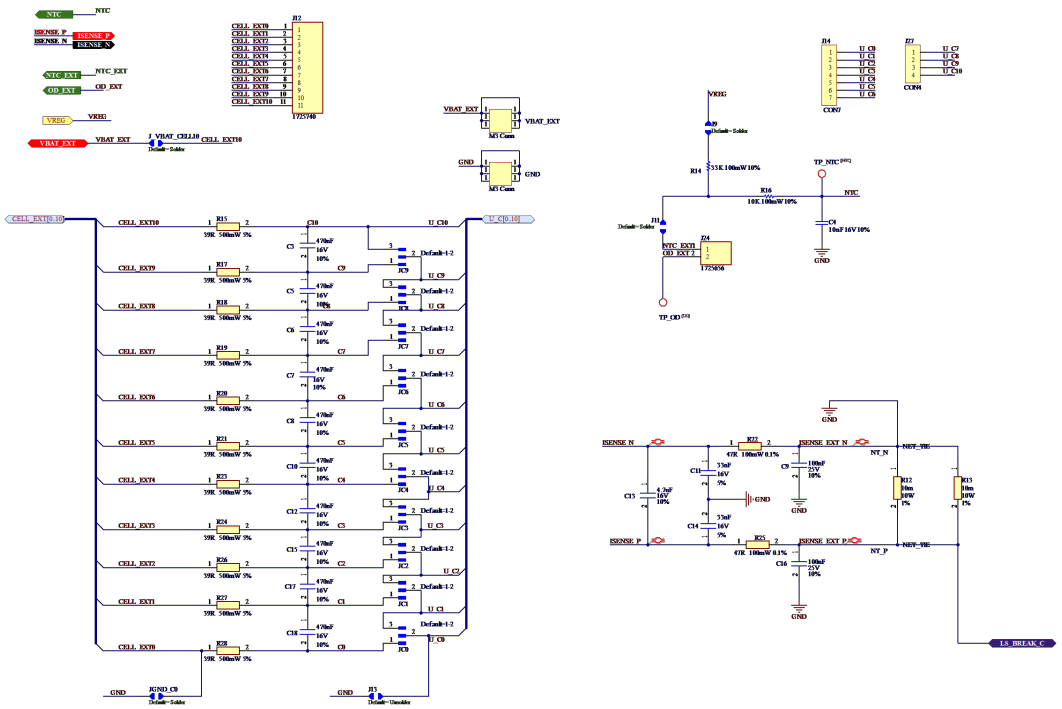


Figure 16. **EVAL-L9962 expansion board - device section**

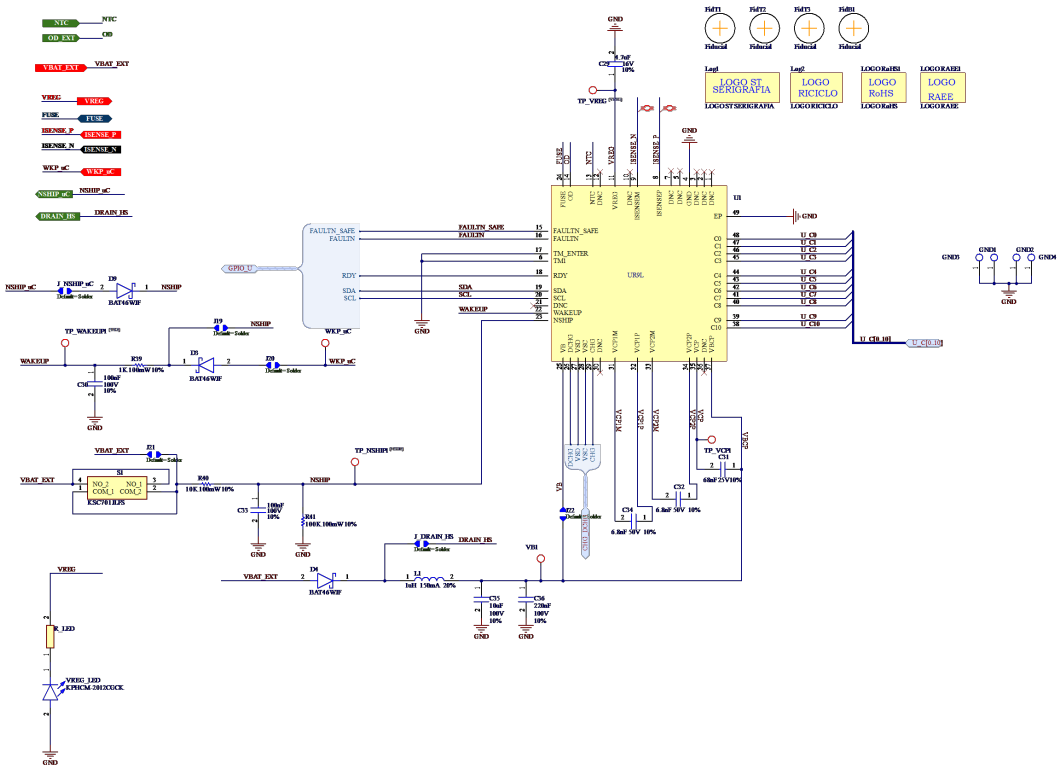


Figure 17. ***EVAL-L9962 expansion board - emulation section***

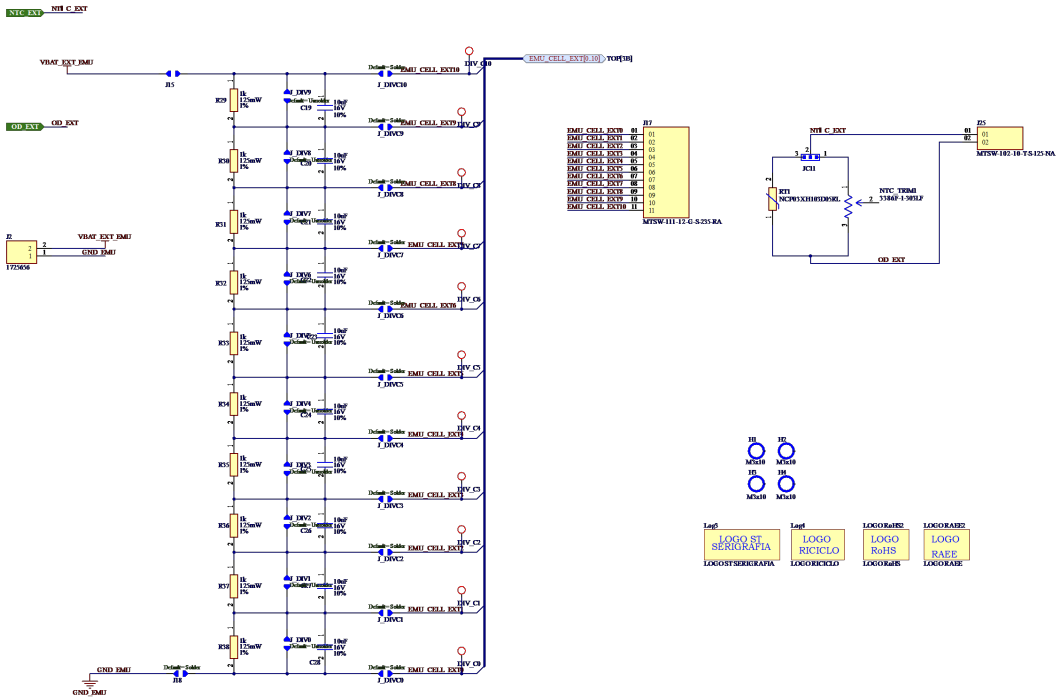
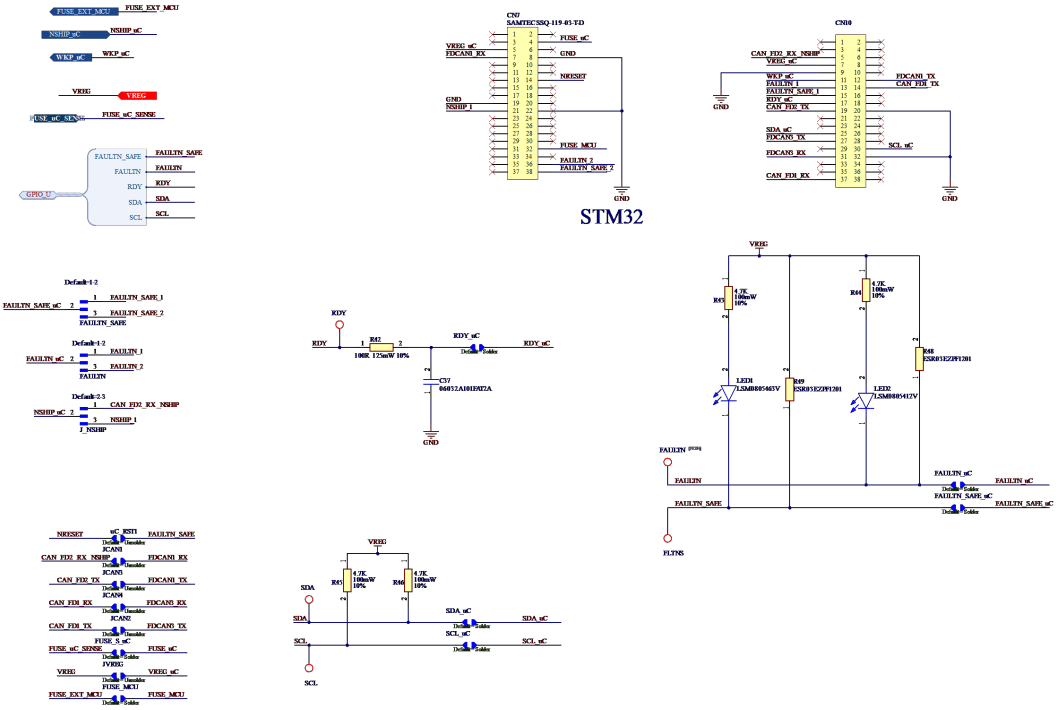


Figure 18. **EVAL-L9962 expansion board - MCU section**



6 Bill of materials

Note: The BOM below refers to the expansion board included in the EVAL-L9962 evaluation kit. For the BOM of the NUCLEO-G071RB development board, see the related web page.

Table 4. Expansion board bill of materials

Part number	Component type	Reference	Package	Manufacturer part number	Quantity
Test point			DIV_C0, DIV_C1, DIV_C2, DIV_C3, DIV_C4, DIV_C5, DIV_C6, DIV_C7, DIV_C8, DIV_C9, DIV_C10, DRAINH, FLTN, FLTNS, FUSE, FUSE_DRV, FUSE_EXT, FUSE_GATE, FUSE_uC_S, NTC, OD, RDY, SCL, SDA, VB, VCP, VREG, VSD_HS, WKP_uC, WKUP	TEST POINT - SIP1	Test point
C1206C105J1RACTU	Capacitor	C1	1206_C	C1206C105J1RACTU	1
GCM1885C1K222GA16D	Capacitor	C2	0603_C	GRM022R61C222KE01L	1
Capacitor	Capacitor	C3	0603_C	Capacitor	1
CGA2B1X7S1C474K050BE	Capacitor	C4, C5, C6, C7, C8, C9, C13, C15, C17, C18	0402_C	CGA2B1X7S1C474K050BE	10
CGA3E2X8R1E104K080AA	Capacitor	C10, C16	0603_C	CGA3E2X8R1E104K080AA	2
C0603C333J4REC7411	Capacitor	C11, C14	0603_C	C0603C333J4REC7411	2
CGA4J1X8L1C475K125AC	Capacitor	C12, C29	0805_C	CGA4J1X8L1C475K125AC	2
CGA4J1X7S1C106K125AC	Capacitor	C19, C20, C21, C22, C23, C24, C25, C26, C27, C28	0805_C	CGA4J1X7S1C106K125AC	10
CGA4J2X7R2A104K125AE	Capacitor	C30, C33	0805_C	CGA4J2X7R2A104K125AE	2
GCM188R91E683KA37D	Capacitor	C31	0603_C	GCM188R91E683KA37D	1
GCE188R71H682KA01D	Capacitor	C32, C34	0603_C	GCE188R71H682KA01D	2
GRM32EC72A106KE05K	Capacitor	C35	1210_C	GRM32EC72A106KE05K	1
GRM21AR72A224KAC5K	Capacitor	C36	0805_C	GRM21AR72A224KAC5K	1
06032A101FAT2A	Capacitor	C37	0603_C	06032A101FAT2A	1
M3 Conn		CH-, CH+, GND, VBAT_EXT	SCREW_TERMINAL_M3_100A_FEMALE	Header 3x2_neutral	4
SAMTEC SSQ-119-03-T-D	Header, 19-Pin, dual row (6+2.5+10 mm)	CN7	HEADER_FEMALE_2x19_2.54mm	Header 19X2	1
Header, 19-Pin, dual row (6+2.5+10 mm)	CN10	HEADER_FEMALE_2x19_2.54mm	Header 19X2	1	

Part number	Component type	Reference	Package	Manufacturer part number	Quantity
SMA6J33A-TR	TVS diode (Uni-directional)	D1	DIOM5126X265N	SMA6J33A-TR	1
SS1H10-E3_61T	Diode	D2	SMA	SS1H10-E3_61T	1
BAT46WJF	Schottky diode	D3, D4, D5	SOD-323	BAT46WJF	3
GOUTTE CONTACT	Jumper_SMD MEDIUM - Leave OPEN	FAULTN_SAFE_uC, FAULTN_uC, FUSE_MCU, FUSE_S_uC, J1, J6, J7, J9, J10, J14, J19, J20, J21, J22, J_DIV0, J_DIV1, J_DIV2, J_DIV3, J_DIV4, J_DIV5, J_DIV6, J_DIV7, J_DIV8, J_DIV9, J_DIVC0, J_DIVC1, J_DIVC2, J_DIVC3, J_DIVC4, J_DIVC5, J_DIVC6, J_DIVC7, J_DIVC8, J_DIVC9, J_DIVC10, J_DRAIN_HS, J_NSHIP_uC, J_TST, J_VBAT_CELL 10, JCAN1, JCAN2, JCAN3, JCAN4, JGND_C0, JVREG_uC, RDY_uC, SCL_uC, SDA_uC, uC_RST	0805_Jumper	JUMPER_SMD	49
Solder Jumper_1	Resistor	FAULTN, FAULTN_SAFE, J_NSHIP1, JC0, JC1, JC2, JC3, JC4, JC5, JC6, JC7, JC8, JC9	JUMP A SALDARE TRIPLO - 0805	Solder Jumper_1	13
Fiducial	Fiducial 1 mm	FidB1, FidT1, FidT2, FidT3	Fiducial 1 mm	Fiducial	4
LSM0805412V	LED	FLTN	LEDC2012X90N	LSM0805412V	1
LSM0805463V	LED	FLTN_SAFE	LEDC2012X90N	LSM0805463V	1

Part number	Component type	Reference	Package	Manufacturer part number	Quantity
4952	Connector	GND1, GND2, GND3, GND4, GND_DIV	TEST POINT KEYSTONE_4952	4952	5
M3x10		Distanziale	H1, H2, H3, H4	Distanziale_M3x10_NYLON	Distanziale
ITV4030L2015NR		ITV1	FUSE_ITV4030	ITV4030L2015NR	1
1725740	Connector	J3	1725740	1725740	1
CON7		J4	SIP7 - MALE	CON7	1
CON4		J5	SIP4	CON4	1
1725656	Connector	J8, J13	1725656	1725656	2
MTSW-111-12-G-S-235-RA		J11	SAMTEC_MTSW-111-12-G-S-235-RA	MTSW-111-12-G-S-235-RA	1
MTSW-102-10-T-S-125-NA		J12	MTSW-102-10-T-S-125-NA	MTSW-102-10-T-S-125-NA	1
CONN HEADER VERT 3POS 2.54MM	3 positions header connector 0.100" (2.54 mm) Through Hole Gold	J_FUSE, JC11	Strip_1x3+jumper_2.54mm	Jumper 1x3 pin 100 mil	2
MLZ1608A1R0MT000	Inductor	L1	0603_F	MLZ1608A1R0MT000	1
KPHCM-2012CGCK	LED	LED_TST, VREG_LED	LEDC2012X50N	KPHCM-2012CGCK	2
NET_TIE_diffpair		NT_N1, NT_P1	NET_TIE_diffpair	NET_TIE_diffpair	2
3386F-1-303LF	TRIMMER 30 K OHM 0.5 W PC PIN TOP	NTC_TRIM1	PCBComponent_1 - duplicate	CMP-07234-000018-1	1
STL130N6F7	MOSFET (N-Channel)	Q1, Q2, Q3, Q4	PowerFlat_5x6	STL130N6F7	4
STD47N10F7AG	MOSFET (N-Channel)	Q5	DPAK	STD47N10F7AG	1
Resistor MR06X205 JTL	Resistor	R1	1206_R	Resistor	1
MR06X205 JTL	Resistor	R2	1206_R	Resistor	1
ERJ-6GEYJ2R2V	Resistor	R3	0805_R	ERJ-6GEYJ2R2V	1
ERJ-6ENF4701V	Resistor	R4	R0805-RS	ERJ-6ENF4701V	1
SG732ATTD153K	Resistor	R5, R7	0805_R	Resistor	2
35223K3JT	Resistor	R6	2512_R	35223K3JT	1
SG732ATTD105K	Resistor	R8	0805_R	Resistor	1
SG731JTTD333K	Resistor	R9	0603_R	Resistor	1
SG731JTTD102K	Resistor	R10, R37	0603_R	Resistor	2

Part number	Component type	Reference	Package	Manufacturer part number	Quantity
ERJ-P06F39R0V	Resistor	R11, R12, R13, R14, R15, R16, R18, R21, R23, R24, R25	0805_R	ERJ-P06F39R0V	11
ERA-2VEB47R0X	Resistor	R17, R22	0402_R	ERA-2VEB47R0X	2
WSHP2818R0100FEB	Resistor	R19, R20	2818_R	WSHP2818R0100FEB	2
CRCW08051K00FKEA	Resistor	R26, R27, R28, R29, R30, R31, R32, R33, R34, R35	0805_R	CRCW08051K00FKEA	10
TR0603KR-071KL	Resistor	R36	0603_R	Resistor	1
SR0603KR-07100KL	Resistor	R38	0603_R	Resistor	1
SG731JTTD472K	Resistor	R39, R40, R44, R45	0603_R	SG731JTTD472K	4
SG732ATTD101K	Resistor	R41	0805_R	SG732ATTD101K	1
ESR03EZPF1201	Resistor	R42, R43	RESC1608X55N	ESR03EZPF1201	2
ERJ-P06J332V	RES SMD 3.3 K OHM 5% 1/2W 0805	R_LED1, R_LED2	ERJP06D1000V	ERJ-P06J332V	2
NTCS0805E3103GHT	Thermistor	RT	0805_R	NTCS0805E3103GHT	1
KSC701JLFS	Switch	S1	SWITCH_4-PIN_SMD_KSC	KSC701JLFS	1
UR9L		U1	TQFP-48L	UR9L_2	1
MMSZ4701T1G	Zener diode	Z1	SOD-123	MMSZ4701T1G	1

7 Kit versions

Table 5. **STEVAL-L9962 versions**

Finished good	Schematic diagrams	Bill of materials
EVAL-L9962	EVAL-L9962 schematic diagrams AB silicon version	EVAL-L9962 bill of materials

This code identifies the EVAL-L9962 evaluation kit first version. The kit consists of an EVAL-L9962 whose version is identified by the code EVAL-L9962 and a NUCLEO-G071RB whose version is identified by the code NUG071RB.

8 Regulatory compliance information

Notice for US Federal Communication Commission (FCC)

For evaluation only; not FCC approved for resale.

FCC NOTICE - This kit is designed to allow:

(1) Product developers to evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and

(2) Software developers to write software applications for use with the end product.

This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product not cause harmful interference to licensed radio stations and that this product accepts harmful interference.

Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of this chapter, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under part 5 of this chapter 3.1.2.

Notice for innovation, science and economic development Canada (ISED)

For evaluation purposes only. This kit generates, uses, and can radiate radio frequency energy and has not been tested for compliance with the limits of computing devices pursuant to Industry Canada (IC) rules.

À des fins d'évaluation uniquement. Ce kit génère, utilise et peut émettre de l'énergie radiofréquence et n'a pas été testé pour sa conformité aux limites des appareils informatiques conformément aux règles d'Industrie Canada (IC).

Notice for the European Union

This device is in conformity with the essential requirements of the Directive 2014/30/EU (EMC) and of the Directive 2015/863/EU (RoHS).

Notice for the United Kingdom

This device is in compliance with the UK electromagnetic compatibility regulations 2016 (UK S.I. 2016 No. 1091) and with the restriction of the use of certain hazardous substances in electrical and electronic equipment regulations 2012 (UK S.I. 2012 No. 3032).

Revision history

Table 6. **Document revision history**

Date	Version	Changes
29-Jan-2026	1	Initial release.

Contents

List of tables

List of figures

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice.

In the event of any conflict between the provisions of this document and the provisions of any contractual arrangement in force between the purchasers and ST, the provisions of such contractual arrangement shall prevail.

The purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgment.

The purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of the purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

If the purchasers identify an ST product that meets their functional and performance requirements but that is not designated for the purchasers' market segment, the purchasers shall contact ST for more information.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.