

KAMAMI

KAmoM41T82



Rev. 20200923090249

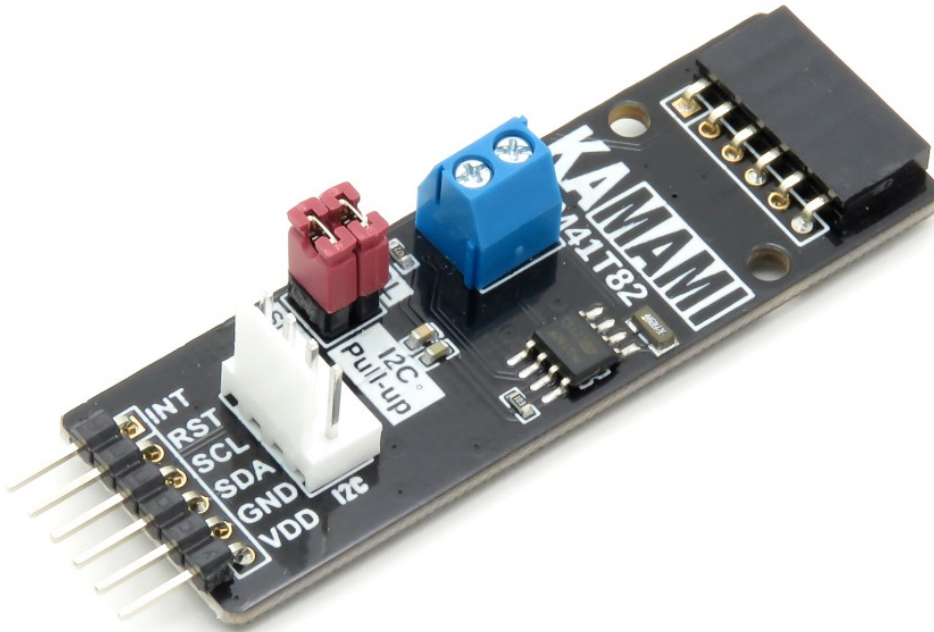
Źródło: <https://wiki.kamamilabs.com/index.php/KAmoM41T82>

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Description

[KAmoM41T82](#) is a module with with the STMicroelectronics M41T82 RTC clock. The board is equipped with a Pmod I2C standard connector and a KAMAMI connector, that allows easy connection of the module to the evaluation kits. Due to its small dimensions, the product can be used in many development projects, while the Pmod loop connector allows to connect the boards in the series.



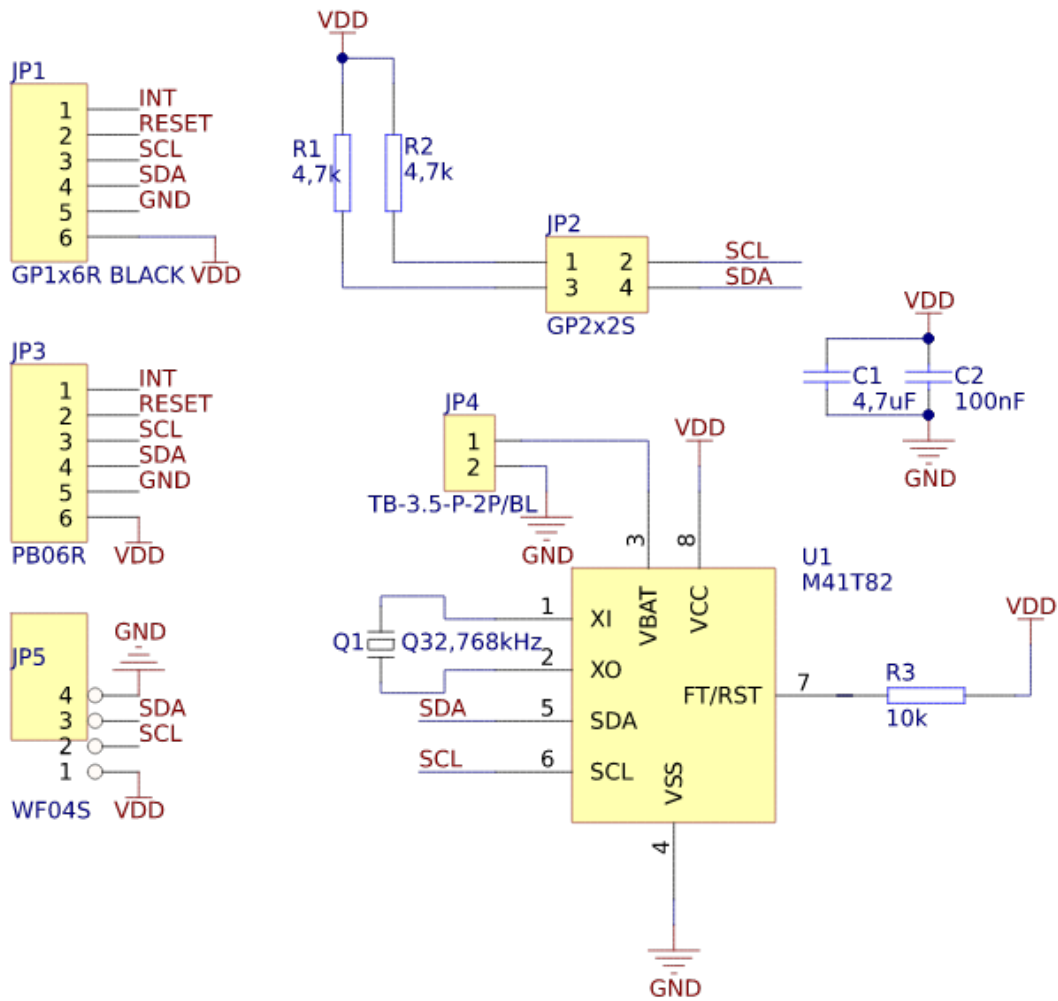
Basic features and parameters

- M41T82 chip from STMicroelectronics
 - Precise timing (tenth/hundredth of a second, seconds, minutes, hours, days, date, month, year and century)
 - Ultra-low battery supply current of 365 nA
 - Programmable 8-bit counter
 - 7 bytes of SRAM memory with battery backup
 - Detection of the oscillator stop
 - I2C bus
 - Chip address 0xD0
- Connector compatible with the Pmod standard, allows serial connection of Pmod I2C modules
- The connector complies with the KAMAMI standard
- Embedded jumpers activating pull-up on I2C bus lines
- Embedded jumper connecting the INT line of the chip to the INT line of Pmod connectors
- Possibility to supply voltage from 1.95-3.5V
- Mounting holes with a diameter of 2.5mm
- Dimensions: 61.2mm x 20.3mm x 10mm


Standard equipment

Code	Description
KAmoM41T82	• Assembled and launched module

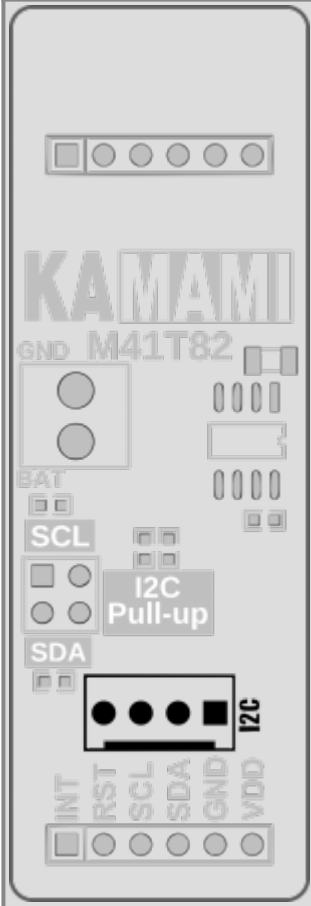


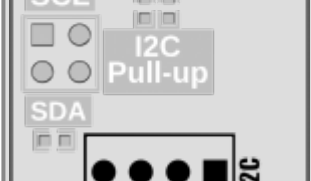

Electrical schematics



Output description - Pmod standard connector

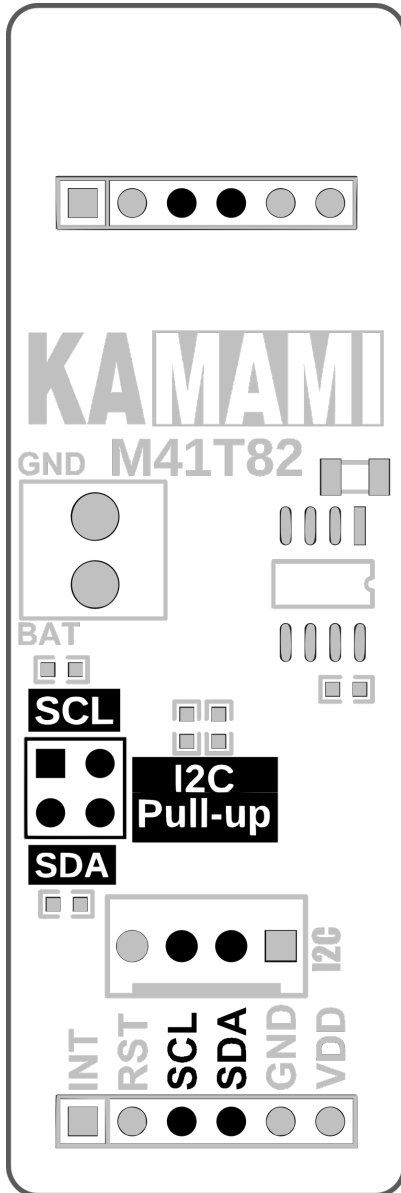
	JP1 male connector)	JP2 (female connector)	Function
	VDD	VDD	Power supply of module (max. 5.5V)
	GND	GND	
	SDA	SDA	Data line of I2C bus
	SCL	SCL	Clock line of I2C bus
	RST	RST	-
	INT	INT	-

Output description - KAMAMI standard connector

	Pin number	Function
	1 (VDD_5V)	Power supply of module (max. 5,5 V)
	2 (SCL)	Clock line of I2C bus
	3 (SDA)	Data line of I2C bus
	4 (GND)	Ground

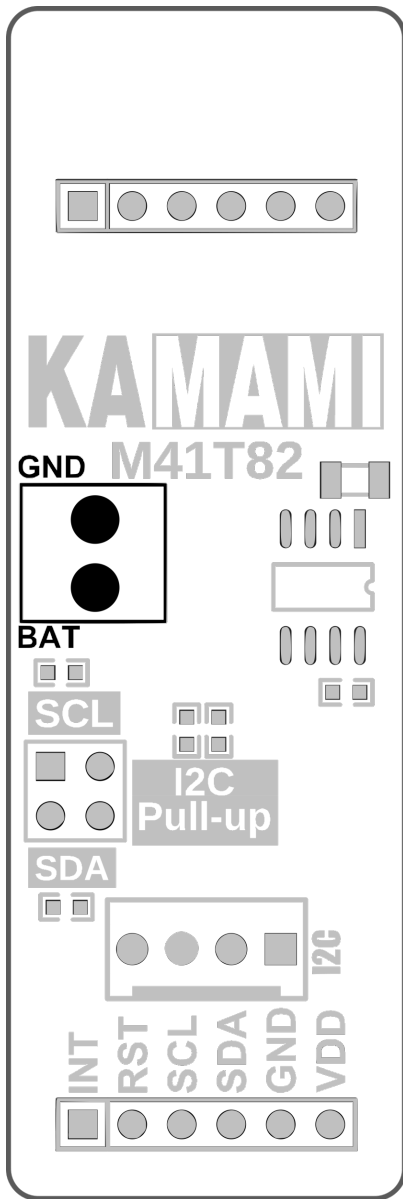
I2C bus lines

The KAmoMMA8653FC module is equipped with jumpers allowing to connect pull-up resistors to the positive power pole to the I2C bus line. The jumpers give the possibility of independent enabled of the pull-up for the SDA and SCL lines.

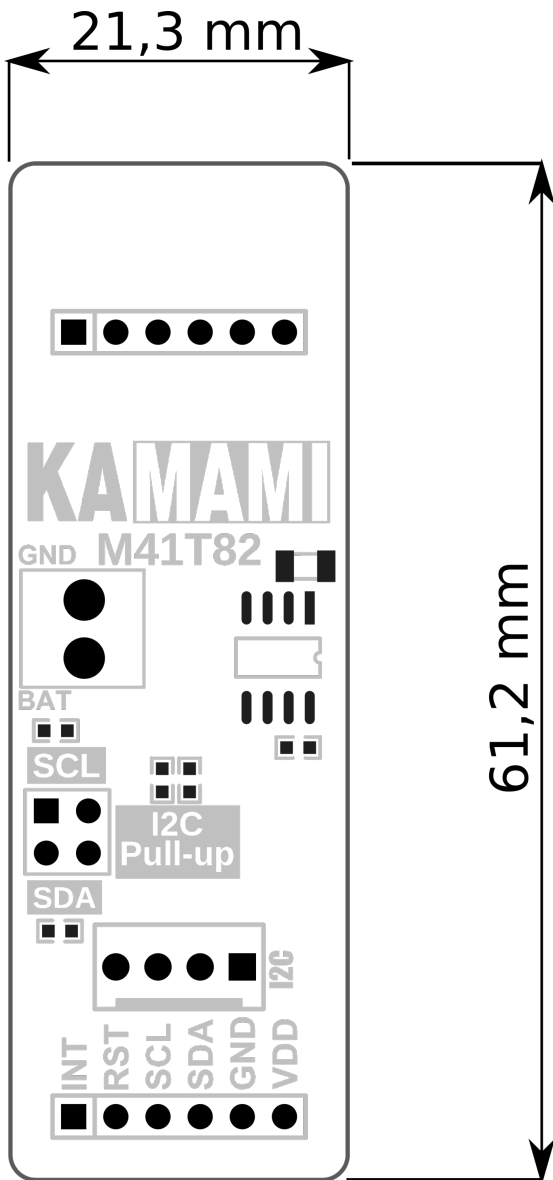


Battery connector

The KAmoM41T82 module has been equipped with a connector enabling the connection of a battery supporting the power supply in the event of a main power failure. Thanks to this, the module will not lose data regarding the time measured and will allow for uninterrupted work. A battery with a voltage between 2-5,5V may be connected to the connector.



Dimensions



External links

- [Datasheet of KAmoM41T82 chip from STMicroelectronics](#)



Zastrzegamy prawo do wprowadzania zmian bez uprzedzenia.

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