

KAMAMI

KAmoPCAL6408



Rev. 20210715134316

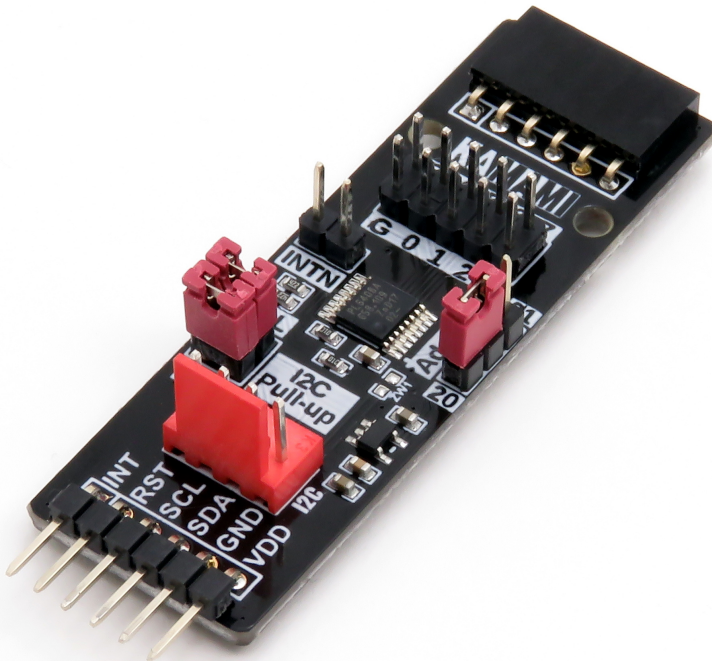
Źródło: <https://wiki.kamamilabs.com/index.php/KAmoPCAL6408>

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Description

[KAmodPCAL6408](#) is a module with the PCAL6408A chip from NXP. The module has 8 programmable inputs / outputs and is controlled by the I2C bus. Thanks to the programmable outputs of the interrupt generator, it is possible, for example, to wake up the microcontroller after detecting a change in the input state. The board is equipped with a standard Pmod connector and a KAMAMI connector, allowing for easy attachment of the module to development kits. Thanks to its small dimensions, the product can be used in many development projects, while the Pmod straight-through connector allows you to connect boards in rows.



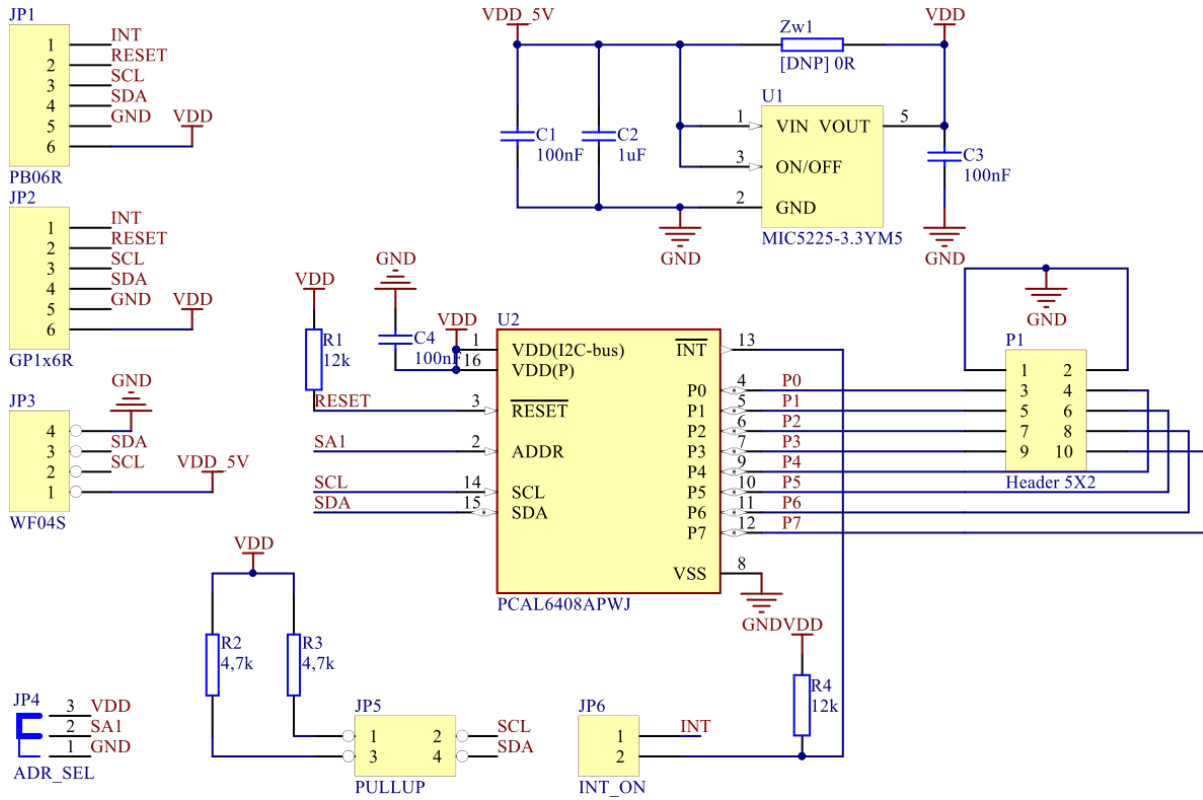
Basic Features and Parameters

- NXP PCAL6408A chip
 - 8 programmable inputs / outputs
 - I2C bus
 - Programmable interrupt output
 - System address selectable (0x20 or 0x21)
- Pass-through connector compatible with the Pmod standard, allows for serial connection of Pmod I2C modules
- Connector compatible with the KAMAMI standard
- Built-in pull-up jumpers on the I2C bus lines
- Built-in jumper for connecting INT line of the system to INT line of Pmod connectors
- Built-in I2C address selector
- Possibility to power supply with voltage in the range 1.7-5.5 V through the Pmod connector and 1.8-5.5 V through the KAMAMI connector
- Mounting holes with a diameter of 2.5 mm
- Dimensions: 61.2 x 20.3 x 10 mm

Standard Equipment

Code	Description
KAmoPCAL6408	• Assembled and running module

Electronic Schematics



Pinout description - Pmod standard straight connector

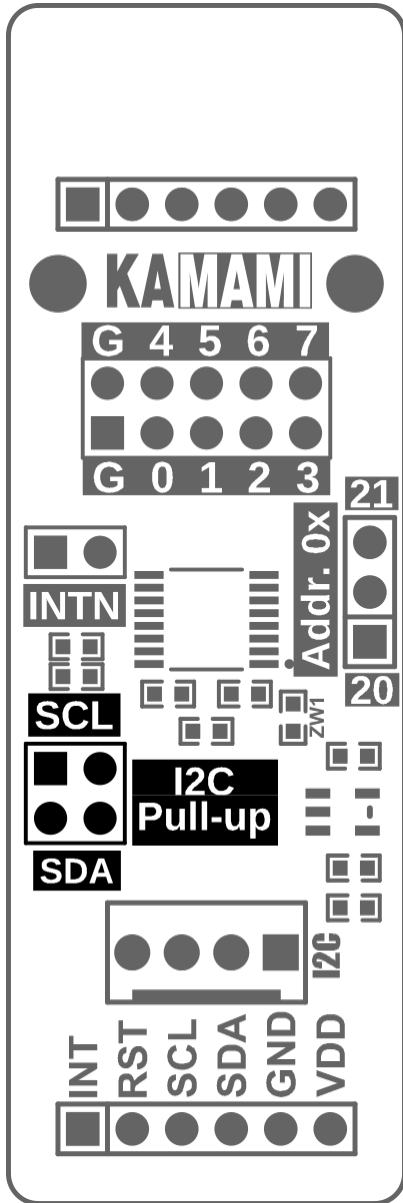
JP1 (male connector)	JP2 (female connector)	I2C
VDD	VDD	Module power supply (max. 3.6 V)
GND	GND	
SDA	SDA	The data line of the I2C bus
SCL	SCL	I2C bus clock line
RST	RST	-
INT	INT	INT2 breakline

Pinout description - KAMAMI standard connector

	Contact number	I2C
1 (VCC)	1 (VCC)	Module power supply (max. 5.5 V)
2 (SCL)	2 (SCL)	I2C bus clock line
3 (SDA)	3 (SDA)	The data line of the I2C bus
4 (GND)	4 (GND)	Power ground

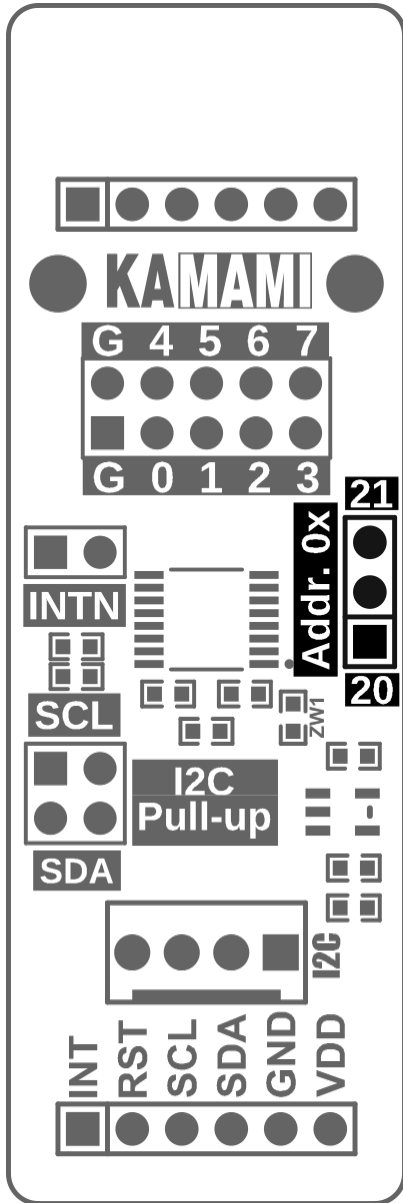
I2C bus lines

The KAmoPCAL6408 module is equipped with jumpers that allow to connect the pull-up resistors to the positive power supply pole to the I2C bus line. Jumpers make it possible to independently turn on the pull-up for SDA and SCL lines.



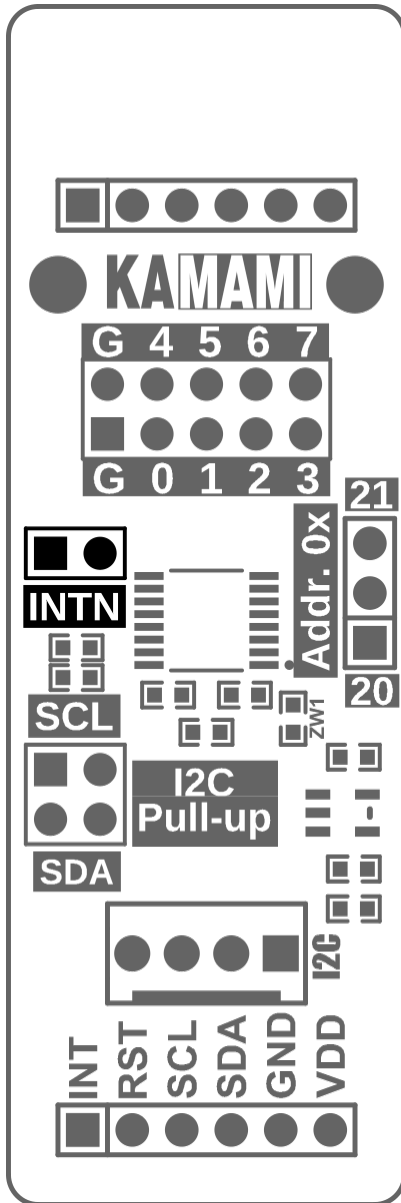
I2C bus address

The KAmoPCAL6408 module is equipped with a jumper that allows you to change the address of the I2C bus. The jumper enables the address to be switched between 0x20 and 0x21.



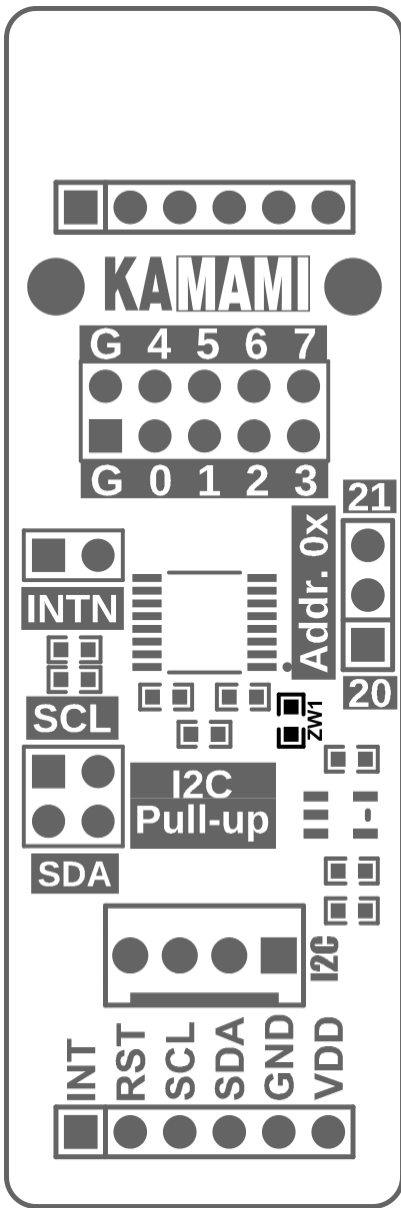
INT interrupt line

The KAmoPCAL6408 module has a jumper for connecting the INT interrupt output line to a connector compatible with the Pmod standard. Thanks to the possibility of disconnecting the KAmoLIS35DE interrupt line from the Pmod connectors, the user does not have to worry about the consequences of possible conflicts resulting from connecting modules compatible with Pmod with different logical states.



Supply voltage jumper

The KAmoPCAL6408 module has a jumper that allows the module to be powered with the voltage supplied to the KAMAMI connector, omitting the 3.3V stabilizer. To configure the module this way the ZW1 jumper located next to the stabilizer should be soldered.



External Links

- [NXP PCAL6408A datasheet](#)



Zastrzegamy prawo do wprowadzania zmian bez uprzedzenia.

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