

## 16x12 G click

PID: MIKROE-2758

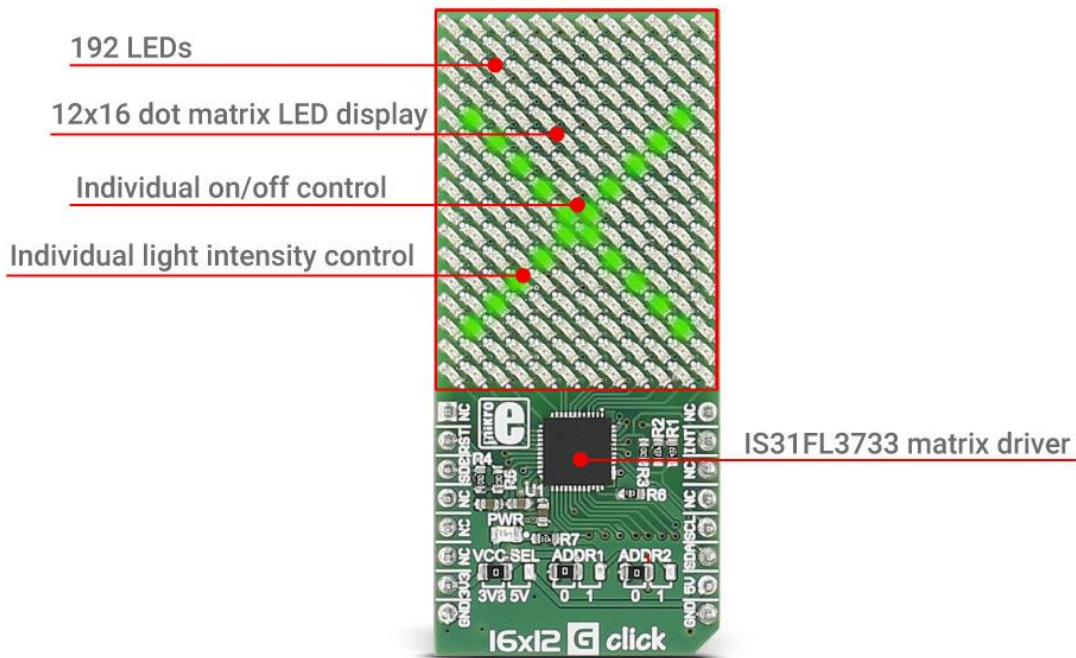
### Add a green LED display to your design.

16x12 G click carries a 16x12 LED display and the [IS31FL3733](#) matrix driver. The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over I2C interface, and the following pins on the mikroBUS™ line: INT, RST, CS.



# IS31FL3733 driver features

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The IS31FL3733 is a general purpose 12×16 LEDs matrix driver with 1/12 cycle rate.

Each of the 192 LEDs can be dimmed individually with 8-bit PWM data, which allows 256 steps of linear dimming.

The driver has selectable 3 Auto Breath Modes for each LED ( ABM-1, ABM-2, and ABM-3).

# Specifications

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<b>Type</b>	LED Matrix
<b>Applications</b>	Gaming devices, small handheld devices, home appliances, IoT devices, etc.
<b>On-board modules</b>	IS31FL3733 matrix driver
<b>Key Features</b>	Selectable 3 Auto Breath Modes for each dot, Individual 256 PWM control steps
<b>Key Benefits</b>	Each of the 192 LEDs can be dimmed individually
<b>Interface</b>	GPIO,I2C
<b>Input Voltage</b>	3.3V or 5V
<b>Click board size</b>	L (57.15 x 25.4 mm)

## Pinout diagram

This table shows how the pinout on **16x12 G click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin					Pin	Notes
	NC	1	AN	PWM	16	NC	
Reset	<b>RST</b>	2	RST	INT	15	<b>INT</b>	Interrupt pin
Standby	<b>SDB</b>	3	CS	TX	14	NC	
	NC	4	SCK	RX	13	NC	
	NC	5	MISO	SCL	12	<b>SCL</b>	I2C clock
	NC	6	MOSI	SDA	11	<b>SDA</b>	I2C data
Power supply	<b>+3.3V</b>	7	3.3V	5V	10	<b>+5V</b>	Power supply
Ground	<b>GND</b>	8	GND	GND	9	<b>GND</b>	Ground

## Jumpers and settings

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<b>Designator</b>	<b>Name</b>	<b>Default Position</b>	<b>Default Option</b>	<b>Description</b>
JP1	PWR.SEL.	Left	3V3	Power Supply Voltage Selection 3V3/5V, left position 3V3, right position 5V
JP2	ADDR. 1	Left	0	The last two bits of the I2C address
JP2	ADDR. 2	Left	0	The last two bits of the I2C address