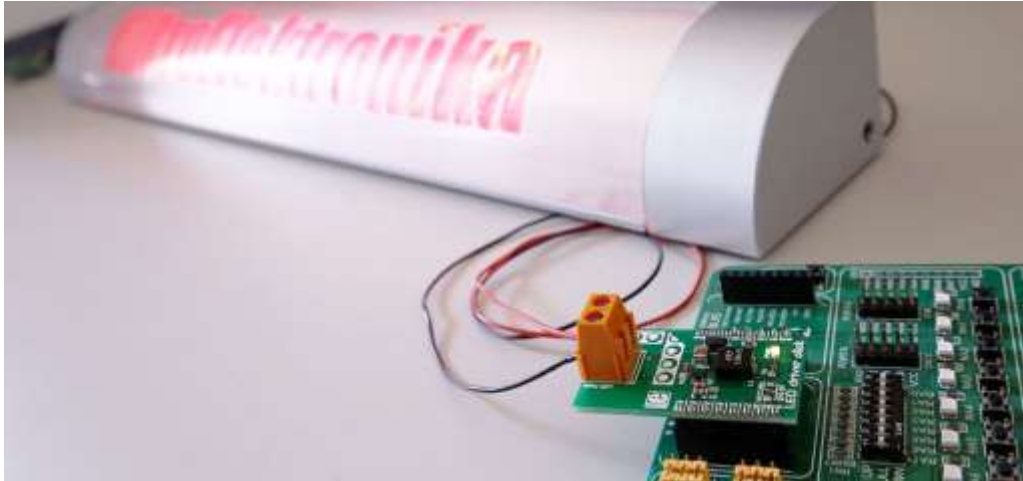


LED driver click

PID: MIKROE-2676

LED driver click carries the [MCP1662](#) high-voltage step-up voltage driver from Microchip. The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over PWM pin on the mikroBUS™ line.





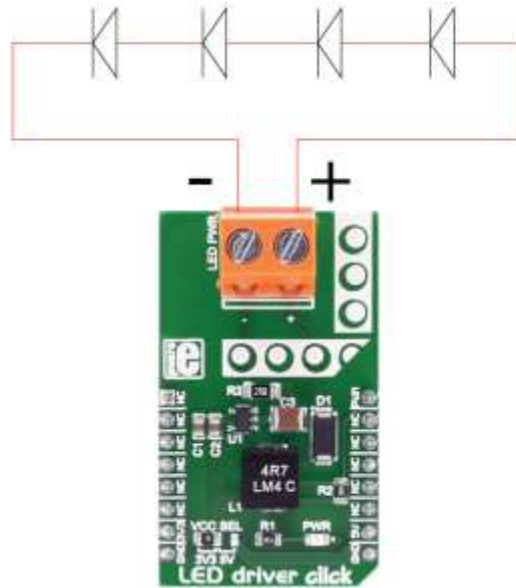
MCP1662 MCU features

The MCP1662 device is a compact, space-efficient, fixed-frequency, non-synchronous step-up converter optimized to drive LED strings with a constant current from a two- or three-cell alkaline or lithium Energizer®, or NiMH/NiCd, or one-cell Lithium-Ion or Li-Polymer batteries.

The device integrates a 36V, 800 mW low-side switch, which is protected by the 1.3A cycle-by-cycle inductor peak current limit operation.

How it works

LED driver click has a power input and a PWM input, so the LED lights can be dimmed. It's a great choice for driving LED strips.




Specifications

Type	Boost
On-board modules	MCP1662 High-Voltage Step-Up LED Driver
Key Features	Open Load Protection, Overtemperature Protection, Input Voltage Range: 2.4V to 5.5V
Interface	PWM
Input Voltage	3.3V or 5V
Click board size	M (42.9 x 25.4 mm)

Pinout diagram

This table shows how the pinout on **LED driver 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	PWM	PWM input
	NC	2	RST	INT	15	NC	
	NC	3	CS	TX	14	NC	
	NC	4	SCK	RX	13	NC	
	NC	5	MISO	SCL	12	NC	
	NC	6	MOSI	SDA	11	NC	
Power supply	+3.3V	7	3.3V	5V	10	+5V	Power supply
Ground	GND	8	GND	GND	9	GND	Ground

Maximum ratings

Description	Min	Typ	Max	Unit
Supply Voltage	2.4		5.5	V
Max Out Voltage			32	V
Max Out Current 4.2V Vin 8 LEDs	100			mA
Max Out Current 3.3V Vin 4 LEDs	125			mA
Max Out Current 5.0V Vin 4 LEDs	200			mA