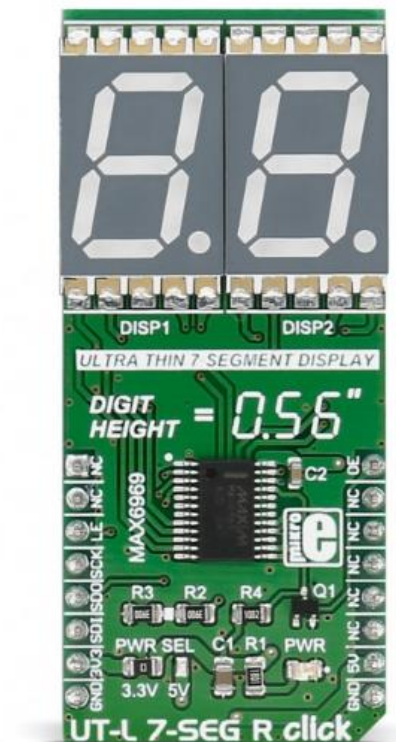


## UT-L 7-SEG R click

PID: MIKROE-2743

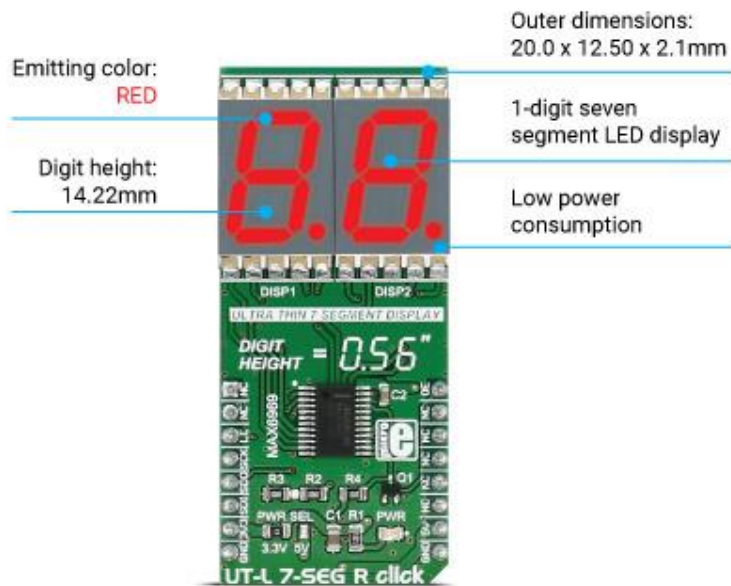
Add a double 7 segment display to your next project.

**UT-L 7-SEG R click** carries two SMD ultra-thin LED 7-SEG [displays](#) and the [MAX6969](#) constant-current LED driver from Maxim Integrated. The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over SPI interface.



## Display features

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## How the click works

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The 7 segment displays are interfaced to the MCU over the [MAX6969](#) 16-port, constant-current LED driver IC.

It uses the common 4-wire serial bus for communication with MCU itself (LE, SCK, SDO, SDI on mikroBUS™ pin socket).

There is an additional OE (output enable) pin which is used to control the output driver state (enabled/disabled). Since it is the PWM output pin on the mikroBUS™ by default, the LED segments light intensity could be controlled by software too.

# MAX6969 driver features

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The MAX6969 uses the industry-standard, shift-register-plus-latch-type serial interface.

The driver accepts data shifted into a 16-bit shift register using data input DIN and clock input CLK. Input data appears at the DOUT output 16 clock cycles later to allow **cascading of multiple MAX6969s**. So, the IC allows you to connect multiple click boards™ - for applications that require more than two seven segment displays, such as digital clocks, temperature sensors, etc.


## Specifications

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<b>Type</b>	LED Segment
<b>Applications</b>	Displaying digits and letters on two 7 segment displays
<b>Displays</b>	DSM Series Ultra-Thin Surface Mount Single Digit 7-Segment LED Display
<b>On-board modules</b>	MAX6969 6-Port, 5.5V Constant-Current LED Driver
<b>Key Features</b>	Excellent character appearance, low power consumption
<b>Interface</b>	GPIO,SPI
<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 **UT-L 7-SEG R click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin					Pin	Notes
		1	AN	PWM	16		
	NC	1	AN	PWM	16	OE	PWM control of light intensity
	NC	2	RST	INT	15	NC	
Load-Enable input	LE	3	CS	TX	14	NC	
Clock input	SCK	4	SCK	RX	13	NC	
Serial Data Output	SDO	5	MISO	SCL	12	NC	
Serial Data Input	SDI	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

## 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	PRW.SEL.	Down	3V3	Power Supply Voltage Selection 3V3/5V, down position 3V3, up position 5V