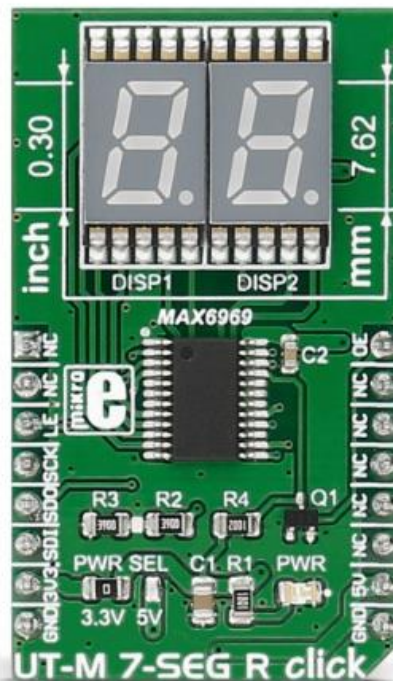


UT-M 7-SEG R click

PID: MIKROE-2746

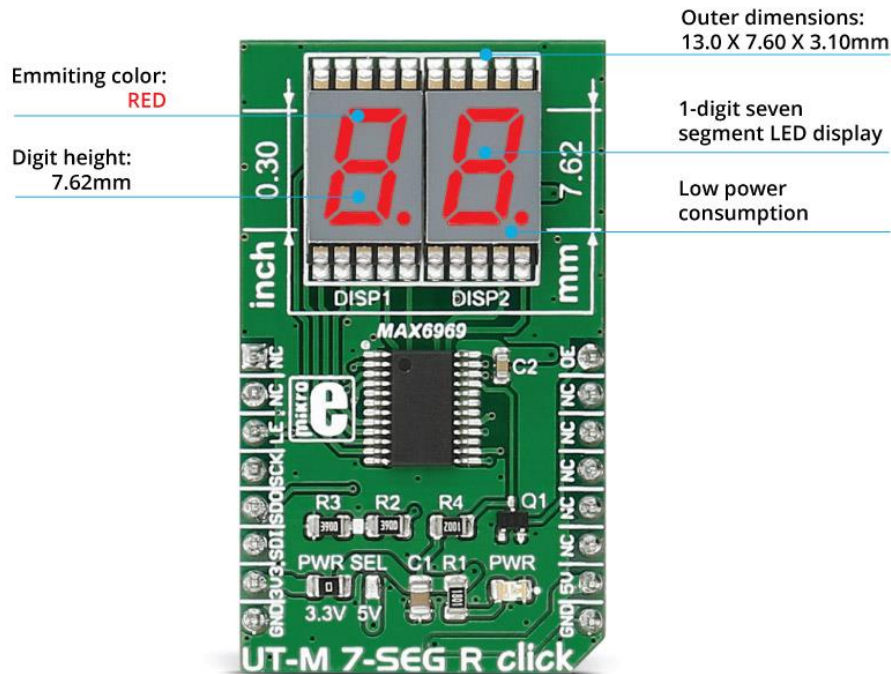
Add a **double 7 segment display** to your next project.

UT-M 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.



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Display features



How the click works

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 the 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

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

Type	LED Segment
Applications	Displaying digits and letters on two 7 segment displays
Displays	Ultra thin (3.1mm) LED 7-SEG displays in RED emitting color
On-board modules	MAX6969 6-Port, 5.5V Constant-Current LED Driver
Key Features	Excellent character appearance, low power consumption
Interface	SPI
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 **UT-M 7-SEG R 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	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

Designator	Name	Default Position	Default Option	Description
JP1	PRW.SEL.	Left	3V3	Power Supply Voltage Selection 3V3/5V, left position 3V3, right position 5V