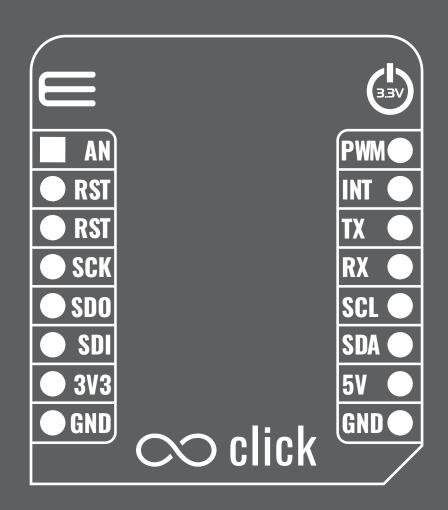




THE BIGGEST **ADD-ON BOARD COLLECTION IN** THE WORLD.



## Table of contents

From one man's idea to a dominant New Click boards™ release per yea World's biggest add-on board colle

Wireless connectivity Sensors Interface Display & LED НМI Storage Miscellaneous Motor Control Audio & Voice Mixed Signal Power Management Clock & Timing Everything under one roof Growing with our partners Clicking on all platforms  $\sim$ 

All the information and images shown in this catalog are for illustration purposes only, and may not be the exact representation of the products. Actual products may vary due to products enhancement. Mikroe reserves the right to change product images and specifications at any time without notice.

Shape the future of the embedded world with our time-saving development tools.



t add-on board standard	C
	6
	12
ection – Click boards™	14
	15
	29
	67
	81
	89
	97
	103
	109
	117
	123
	133
	143
	151
	154
	156
	158
	150

## From one man's idea to a dominant add-on board standard

The entire company works towards a shared vision - to save time of our fellow engineers. Click boards<sup>™</sup> product line constitutes a key component of the future we have envisioned.

Development boards are substantially similar: they integrate a microcontroller, power supply, tact switches, LEDs, pins. The features that differentiate development boards are the peripherals such as UART, 7-seg digits, RTC, Relay, ADC, EPROM, and the like. Different projects, however, require that a different peripheral be used each time. If peripherals on a single board could be changed, its functionality would improve significantly.

Presented with the problem, I started looking for a solution: how to change peripherals easily and what to add to a board to be able to do so.

I remember the very moment when I hit upon the idea of the mikroBUS<sup>™</sup> standard - the very first drawing of it I made in the sand and later on a piece of paper. In fact, my family was on holiday in a hotel - Hillside -Su - in Antalya (Turkey), and the hotel played a key role in the story of mikroBUS™ standard: there was a play area for children and an even better one – in the shade and roomy - for babies and for my papers and data-sheet. Amid the papers and babies, as I was keeping an eye on my five-year-old daughter Lena, mikroBUS<sup>™</sup> standard came to life.

The name was chosen by one of my colleagues a long time ago: 'click' is what you hear when you place the Click board<sup>™</sup> onto the development board. 'It just Clicks' is a marketing message we wish to convey.

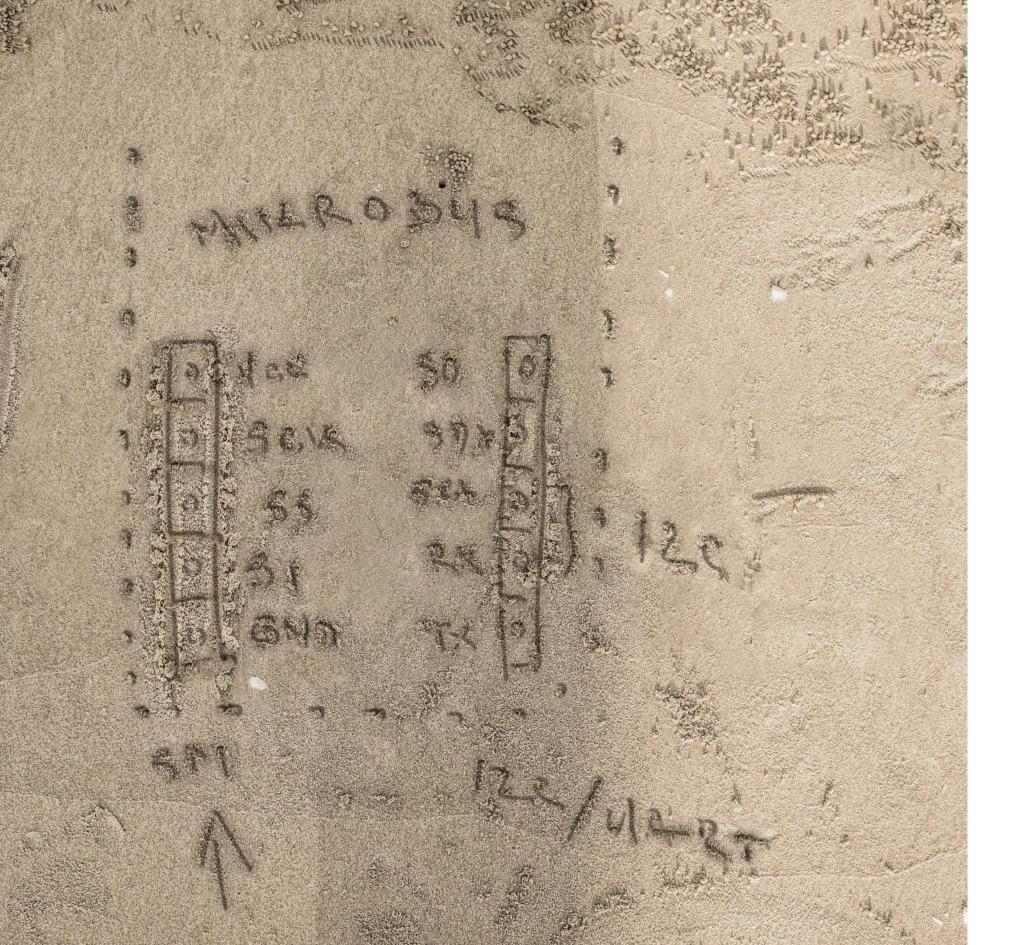
The shape and end-dimension of the Click board<sup>™</sup> posed a great challenge. Now that we have made 1000 Click boards<sup>™</sup>, it is easy to notice that all WiFi, LTE, BLE, GSM, GPS modules, OLED screen, and 7-seg digits fit Click boards<sup>™</sup> perfectly, and that the size is right. However, dimension check requires created.

that the components and modules classification on a single Click board<sup>™</sup> be reviewed and several hundred datasheets be opened. I take pride in our solution: this part of the Click boards<sup>™</sup> story looks like a simple task; however, without it, there would be a great decrease in the number of Click boards<sup>™</sup>

Back at work, I called a meeting and presented my idea: I spoke about the pins I chose and why I chose those very pins; I explained what the overarching goal was and provided other relevant information. It was in that meeting that we revised the statement and increased the functionality of the mikroBUS<sup>™</sup> standard by adding a few more pins, so that there was a total of 16 pins - 8 in each row. We now know that this is by far the smallest number of the pins one can use and which account for most chips, modules, and other components you could place on Click board<sup>™</sup>.

1000 Click boards<sup>™</sup> is a huge milestone since not a single company in our industry has that number of peripheral boards.. We made history in reaching that number. More importantly, the mikroBUS<sup>™</sup> standard has proven to be very usable: if you can design 1000 different Click boards<sup>™</sup> on one standard and create another thousand and then another thousand, that means that the standard is guite exceptional.

Nebojsa Matic CEO



## What is the minimum number of pins that can cover the greatest number of peripherals?

The first sketch of the mikroBUS<sup>m</sup> standard drawn in 2011.

# st

### **GPS** Click

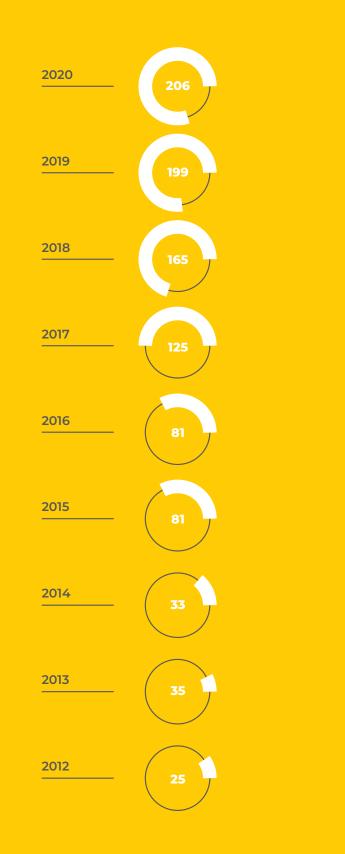
It carries LEA-6S highperformance position engine from u-blox.

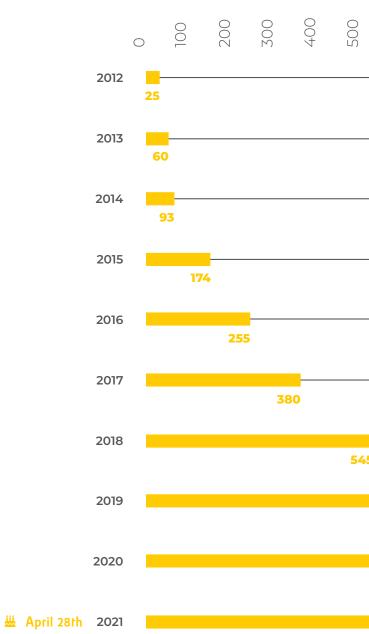
MSRP – \$49<sup>00</sup> MIKROE-1032

The first-ever mikroBUS<sup>™</sup> compatible add-on board was made in 2011. With this board, we presented a new product line called Click boards<sup>™</sup>.



# New Click boards™ release per year





# 545 744 **950** 1000 Number of Click boards<sup>™</sup> at the end of the year

1000

006

800

700

600

World's biggest add-on board collection - Click boards<sup>™</sup>

**WIRELESS** CONNECTIVITY





3G Click (EU/AUS) UG95 3G UMTS/HSPA With UMTS/HSPA module. With SIM card cellular modem – slot, Audio/Mic jack, the u-blox U201, from micro USB port. the SARA series. MSRP - \$8900 MIKROE-2226

MSRP – \$99<sup>00</sup> MIKROE-2244



3G Click (USA) UG95 3G UMTS/HSPA module. With SIM card slot, Audio/Mic jack, micro USB port.

E NA

MSRP – \$89<sup>00</sup> MIKROE-2296



**BLE 2 Click** With RN4020 Bluetooth 4.1 module. Can be set up both as a



R2 10

It features NI-NA-B1 Bluetooth 4.2 module from u-blox.

> MSRP - \$2500 MIKROE-1597

B



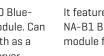
\*







client or a server.



MIKROE-2471







4G LTE-E Click With the LARA-R211 multi-mode cellular module from u-blox.

MSRP - \$115<sup>00</sup> MIKROE-2527



**4G LTE-NA Click** 

It features the LARA-R204 multi-mode cellular module from u-blox.

MSRP - \$11500 MIKROE-2535

RoHS

00

BLE P clic

**BLE P Click** 

With nRF8001 Bluetooth 4.0 peripheral device. Open source Android app available.



**Bluetooth Click** It features the RN-41 low power, class 1 Bluetooth radio module.

MSRP - \$3900 MIKROE-958



**BT Audio Click** With RN52 Bluetooth audio module and onboard 3.5mm jacks for a mic and a speaker.

MSRP - \$4900 MIKROE-2399



Page 17





TI's CC2520, 2.4GHz ZiqBee®/IEEE 802.15.4 RF transceiver.

MSRP – \$2600 MIKROE-2219

 $(\circ)$ 



ccRF Click With CC2500 low-power 2.4 GHz RF transceiver and PCB trace antenna.

MSRP - \$2200 MIKROE-1435



ccRF 2 Click With CC1120, high performance radio transceiver for ISRM and SRD bands.

MSRP - \$36° MIKROE-1716



**6LoWPAN T Click BEE Click** 

40MA 2.4 GHz IEEE

ceiver module.

Microchip's MRF24J-TI's CC2520, 2.4GHz ZiqBee®/IEEE 802.15. RF trans-802.15.4 radio trans-

VPAN TI G

ceiver.

MSRP - \$2600

MIKROE-2218

MSRP - \$2900 MIKROE-987

ō

.

433 MHz

CCRF E click

Carries the CC1120

high-performance RF

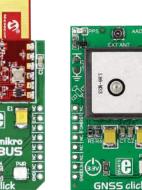
transceiver for narrow-

band systems from TI.

ccRF 3 Click

MSRP - \$3600

MIKROE-2389



**GNSS** Click

Quectel's L86 GNSS module with a patch antenna and an external antenna connector.

MSRP - \$4600 MIKROE-1850

356308040476

**GSM Click** 

MSRP - \$49<sup>0</sup>

MIKROE-1298

With guad-band GL865-

QUAD GSM/ GPRS module,

onboard antenna connec-

tor and SIM card socket.

₩ 6880 > )



**GNSS 2 Click** 

Quectel's L76 module and SMA antenna connector. GPS + GLONASS.

MSRP – \$39<sup>0</sup> MIKROE-1887



With Quectel's M95 FA quad-band GSM/GPRS module. 85.6 kbps GPRS data transfer.

MSRP - \$44<sup>0</sup> MIKROE-1375





**GSM 2 Click** 



Carries SIM33ELAGNSS module with an integrated antenna and an external

ASESS anten

MSRP - \$44<sup>00</sup> MIKROE-2045



**GSM/GNSS** Click

MSRP - \$790 MIKROE-2439

Quectel's MC60 quadband GSM/GPRS/GNSS module. GPS/GNASS location tracking with GSM.

GPS/GNASS location tracking with GSM. MSRP - \$690 MIKROE-2440

With SIM868 quad-

**GNSS 5 Click** It features NEO-M8N GNSS receiver module from u-blox.

GNSS E cli

2222 1

8 8 8 8

1651 1300 39 • E) obs/10

MSRP - \$41<sup>00</sup> MIKROE-2670







INEL





blox

GNSS 4 a

0

FWR R







With SIM800H guad-

band GSM/GPRS

module. 85.6 kbps

GPRS data transfer.

MSRP - \$5700 MIKROE-1720





**GPS** Click

It carries LEA-6S high-performance position engine from u-blox.

MSRP - \$4900 MIKROE-1032



**GPS 3 Click** 

With Quectel's L80, high-sensitivity GPS module with a patch antenna.

MSRP - \$4400 MIKROE-1714

 $\widehat{}$ 

0 Page

**GSM/GNSS 2 Click** 

band GSM/GPRS module.

**IQRF** Click With DCTR-76DA RF transceiver, operating in the 868/916 MHz frequency.

ILEO P

100

12 100

۵

MSRP - \$4300 MIKR0E-2586



With DCTR-72DAT RF transceiver, operating in the 868/916 MHz frequency.

MSRP - \$49<sup>0</sup> MIKROE-2587





E

B RST . £100

NC

313

GND

LR 2 Click

MSRP - \$3900 MIKROE-4615

RI PWR

With RN2903 915 MHz

Radio Modem compliant

with regulations for use

in the USA, CA, AU, NZ.

NC

GND



With RN2483 LoRa Sub-GHz, 433/868 MHz European R&TTE Directive Assessed Radio Modem.





### **GSM-GPS** Click

With SIM808, GSM/ GPRS and GPS module. 2 antenna conn. SIM card slot, a micro USB conn.





### nRF C Click

With nRF24L01P 2.4 GHz transceiver. Air data rates of 250 Kbps, 1

MSRP - \$1900 MIKROE-1304

Mbps and 2 Mbps.



### **nRFS** Click

With nRF24L01P 2.4 GHz transceiver. 250 Kbps, 1 Mbps and 2 Mbps air data rates. MSRP - \$19<sup>0</sup> MIKROE-1836

E

n Si

Ma

111111

NC

GND

E 3V3

GND

MSRP - \$4500

MIKROE-2934

RI PWR

A LoRa technology-based

SRD transceiver, oper-

ates at a sub-gigahertz

frequency of 868MHz.

NC

LR 3 Click

MSRP - \$4500

MIKROE-4616



۲O

0



### **nRFT Click**

With nRF24L01P 2.4 GHz transceiver module. Air data rates of 250 Kbps, 1 Mbps and 2 Mbps.





M 30



### LR 5 Click

SRD transceiver which operates at a sub-GHz frequency of 902-928 MHz SRD Band.

RFÌÀ

**RFid Click** 

antenna.

MSRP - \$290 MIKROE-1434

With CR95HF 13.56

MHz contactless RFid

transceiver, and trace

MSRP - \$4500 MIKROE-4618





With M24SR64 NFC/RFID tag IC with a dual interface and 8KB of high-reliability EEPROM built-in. MSRP - \$1200

MIKROE-1726

NFC)

. .

PWR

Type 2 Tag from NXP. MSRP - \$1200 MIKROE-2462

LOHS IS VS

RN4678

TITT

RN4678 click

JP1

RN4678 Click

NFC)

61

# **2** 2

NFC Tag Clic

Carries NT3H1101

NTAG I2C energy

1

(in

0000



### NFC Click

With near field communications controller PN7120 IC from NXP.







### It carries RN4870 Blue-

It carries RN4678 Bluetooth® 4.2 dual mode tooth® 4.2 low energy module from Microchip.

> MSRP - \$3300 MIKROE-2543

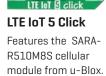
MSRP - \$3400 MIKROE-2395



MIKROE-2545







ġ.

1111

言い言言

GRD TX PWR STAT

WCO SEL

T NE

ID NC

MSRP - \$7900 MIKROE-4325



LTE IoT 6 Click

The SARA-R412M, a cellular module for Low Power Wide Area solutions from u-Blox.

MSRP - \$7900 MIKROE-4388

 $\widehat{\phantom{a}}$ 

2 Page



.... GPI02 STAT (EBCI TTR2 2.11 ie 📽 🔂 RN4871 click

RN4871 Click

It carries RN4871 Bluetooth® 4.2 low energy module from Microchip.

MSRP - \$3300 MIKROE-2544



**WiFi PLUS Click** 

With MRF24WB-OMA 2.4GHz, IEEE std. 802.11 module and MCW1001 controller

MSRP - \$4500 MIKROE-1135



(

Page 22

6

UI BERRARSE

with either a static or

WiFi 2 Click

With HLK-M30

MSRP - \$2900

MIKROE-1768



**WiFly Click** With RN-131 embedded wireless LAN module. Qualified 2.4-GHz IEEE 802.11 b/g transceiver.

MSRP - \$69° MIKROE-1937





module. TCP/IP stack. Supports Wi-Fi Direct (p2p). 6 GPIO pins.

dynamic IP address.



WiFi 4 Click With SPWF01SA standalone WiFi module. Built-in 2.45 GHz ISM band antenna.

> MSRP - \$4900 MIKROE-1913

tatis antenova

Wi E

100

- 100

6

M Ĩ

WiFi 4 click

.....



WiFi 5 Click

((19))

232819171-08 (CE

Eng I

(1) 2 (

With Gainspan's GS1500M 802.11b/g/n Low Power Wi-Fi module with a PCB trace antenna.

MSRP - \$2900 MIKROE-2274



WiFi 6 Click With WF121-A self-contained WiFi module. 2.4GHz band IEEE 802.11 b/g/n radio.

MSRP - \$6900 MIKROE-2043





WiFi7clic

WiFi 7 Click

MR210PB IEEE

20MHz solution.

MSRP - \$2900

MIKROE-2046

With ATWINC1510-

802.11 b/g/n module,

0000

C2 F2 R3 R4 R5 R6 ESP-WROOM-02 4 Wi Fi RI PW WIFI ESP clic

**WiFi ESP Click** With ESP-WR00M-02 module that integrates ESP8266EX. In AP WiFi and WiFi client mode.

MSRP - \$1500 MIKROE-2542

MSRP - \$1700 MIKROE-2924

P

PWR

MiWi clic

**MiWi Click** 



A wireless transmitter that operates at the frequency of 433MHz (sub-GHz).

MSRP - \$1900 MIKROE-2903



**WiFi NINA Click** A standalone WiFi module, with the stateof-the-art NINA-W132 module from u-blox.

I I

NB IoT Click Allows LTE Cat NB1 connectivity by utilizing Quectel BC95-G

MSRP - \$5200 MIKROE-3294

**AnyNet 2G Click** WiFi module with integrated IPv4 TCP/ IP stack and built-in network protocols. MSRP - \$6900

MIKROE-2747

Quectel UG95 3G module. MSRP - \$8900 MIKROE-2975



A secure connection

with the AWS over the

air (OTA), by utilizing the

### CC3100 Click

Carries low power, high security Wi-Fi CC3100 module. Support for 802.11n.

MSRP - \$4900 MIKROE-2336



A wireless receiver that operates at the frequency of 433MHz (sub-GHz). MSRP - \$1900 MIKROE-2902









A subgigahertz radio transceiver which offers a reliable FSK or OOK communication solution.

----

H



P

n

communication solution. MSRP - \$1700

MIKROE-2925



**M-BUS RF Click** 

With ME70-169 RF wireless module. Unlicensed ISM frequency band 169.400-169.475 MHz.

MSRP - \$5400 MIKROE-2048





Page 23



LTE IoT Click Compact quad-band GSM solution, featuring the quad-band SARA-R410M-02B LTE/2G module.

MSRP - \$7900 MIKROE-3072



LTE IoT 2 Click Allows connection to the LTE networks, featuring Quectel BG96 LTE module.

MSRP - \$6900 MIKROE-3144



(D)R4

e

**SPIRIT Click** 

LOGIC SEL 3.3V SV

RXTX RXTX R2 (m)

SPIRIT clic

With SP1ML 868MHz

module. Memory: 16 kB

RAM and 128 kB Flash.

ultra low-power RF

MSRP – \$3900 MIKROE-2568

Page 24

(





6=0 R2





XBee,

00000

6

XBEE

**XBEE Click** 

Xbee® and Zig-

MSRP - \$5900 MIKROE-1599

bee-compliant XB-

with a PCB antenna.

24CZ7PIS-004 module

(ECA

KB24CZ7PI8 HANN OF 04-rev 013A200 0C73630

@10215369

SARAR

### SigFox 2 Click Carries the SN10-12,

a fully integrated Sigfox<sup>™</sup> certified module by InnoComm.

MSRP - \$2500 MIKROE-3039



SigFox 3 Click Carries the SN10-13, a fully integrated Sigfox™ certified module by InnoComm.

RI

MSRP - \$2500 MIKROE-3163



MSRP - \$39° MIKROE-3637



40 HI C

MIMI

PWR

2 (111)

1

4113 UI PWR SEL 2 113 2 111 UP WR SEL 2 113 2 111 UP WR SEL 2 113 2 111 UP WR SEL

GPS & click

C7 C6

y e × te

202

310

VBAT CS

¥:

Double St

10012

02 Emb 2 111

2 100 2 📩

**GPS 4 Click** 

MSRP - \$3400 MIKROE-2704

GPS 4 click carries

the L70 compact GPS

module from Quectel,

with external antenna.

02 U N 0 E1

1012

09 10 10 5

Nano GPS clic

NANO GPS Click

With Nano Hornet,

world's smallest GPS

module with an inte-

grated antenna.

MSRP – \$4500 MIKROE-1912

**EnOcean 4 Click** With ultra-low power TC-M515U transceiver gateway module uses the UART module which operates at 920MHz radio band.





1909

UB BE

11111

- 1 - T

e

**GSM 4 Click** 

GSM 4 click

Compact quad-band

GSM solution, featur-

ing the guad-band

MSRP – \$74<sup>00</sup> MIKROE-2388

SARA-G350 module.

**DeviceDrive Click** The WRF01-M24A interface (with JSON command format)

MSRP - \$1900 MIKROE-3663







### Nano LR Click

The EMB-LR1276S, a sub-1GHz wireless module that supports the LoRaWANTM®.





ALCONOM COMP.

.....

0.0.0.0.0

PWR CONN STAT US8

G2C click

A gateway Click board™

which provides a simple

the Click Cloud platform.

and reliable connection to

will think

**G2C Click** 

MSRP - \$1900

MIKROE-3291



# LTE click

**4G LTE-APJ Click** LTE Cat 1 / UMTS multimodecellular network solution, with the compact LARA-R2 series modem from u-blox.

MSRP - \$115° MIKROE-3351

module.

MIKROE-3666







With ultra-low power TCM515 transceiver gate-

way module and operates at 868MHz radio band. MSRP – \$39<sup>00</sup> MIKROE-3653















WiFi 10 Click Based on the SX-

ULPAN-SB-2401, an integrated wireless LAN module.

MSRP – \$2500 MIKROE-3432



4G LTE-AT&T Click LTE Cat 1 / UMTS multimodecellular network solution, with the compact LARA-R2 series modem from u-blox.

MSRP - \$1150 MIKROE-3350



**WiFi BLE Click** 

The ESP32-WROOM-32 module itself is based on the ESP32-DOWDQ6 chip, a powerful 32-bit SOIC.

MSRP - \$2100 MIKROE-3542



**GNSS 7 Click** It carries the NEO-M9N GNSS receiver module from u-blox.

MSRP - \$3900 MIKROE-1887



Page 25





**GNSS ZOE Click** 

An evaluation board for ultra small ZOE-M8Q GNSS SiP receiver from u-blox.

MSRP – \$3900 MIKROE-3660

(







Allows connection to the feature-rich Click Cloud platform, over the 3.75G UMTS/HSPA network.

MSRP - \$69° MIKROE-3888



MIKROE

NC II INT -NC -SCL -SDA -SV

GND

HC

NC NC NC SV3 GHD

R3 HILL

VCC SEL

RI PWR

NFC tag device, offering

erasable programmable

16 Kbit of electrically

memory (EEPROM).

MSRP - \$1200 MIKROE-3659

NFC Tag 4 Click

LTE Cat. 1-EU Click Carries the ELS61 Cat 1 LTE connectivity module with 2G and

3G fall back. MSRP - \$105°C MIKROE-3757

100 R

finit.

PWR TXIRN

SPIRIT 2 Click

LOGIC SEL

1000 R1 R2 0000

SPIRIT 2 click

With the SP1ML-915,

an ultra-low power RF

at 915 MHz ISM band.

MSRP – \$3900 MIKROE-3598

module, which operates



6

RX -

SEL

MSRP - \$1050 MIKROE-3885



DIR RST

Th CTS

O NC

T NC

1 343

M GND

STATUS

**BLE 4 Click** 

It features the

NINA-B312, an

MSRP – \$29<sup>0</sup> MIKROE-3773

integrated wireless

connectivity solution.

### **BLE 5 Click**

Based on the PA-N1760A, a Bluetooth 4.2 low energy module from Panasonic.

MSRP - \$2600 MIKROE-4120



YL

 $\overline{\odot}$ 

R1 FWR

**BLE 7 Click** 

Based on the BGX-

low energy module

from Silicon Labs.

MSRP - \$2100 MIKROE-3872

13S22GA, a bluetooth

( and

GPG

GP1 CTS

NC GHD

GP4

CPO V RST

P RT

S HC

V NC

T 3¥3

**BT Audio 2 Click** Bluetooth audio stream add on board based on BM62 module from Microchip.

MSRP - \$4500 MIKROE-4117





Nano GPS 2 Click The smallest GPS module It's compliant with with an integrated patch antenna, the ORG1510-

MK05 by OriginGPS. MSRP - \$4500 MIKROE-4150



MSRP - \$2100

MIKROE-4170



SCL

SDA

band (UWB) transceiver. MSRP - \$6900 MIKROE-4199

NFC Extend Click Uses any shape and size external antenna, with 16 Kbit of EEPROM.

MSRP - \$54<sup>0</sup> MIKROE-3692

R2 R3 R4

RI PWR

M-BUS RF 4 Click

With a Telit ME70-169

RF wireless module.

M-BUS RF

SEL

RTS T

RX NC 1

GND /

........... a a a a a PWR NET.



**Thingstream Click** 

It is equipped with the SIM868, an 802.11b/q/n quad-band GPS/GLON-ASS/GSM module.

MSRP – \$600 MIKROE - 3971







### **UWB** Click

UWB clici The DWM1000 module based on Decawave's



**5G NB IoT Click** 

Based on Thales ENS22 NB-IoT Wireless Module that boosts highly efficient 5G conn. for the IoT.

MSRP – \$5900 MIKROE-4034



**BT-EZ Click** 

It features the CYBT-343026-01, module that supports BT 5.0 and BLE stack.

MSRP – \$2500 MIKROE-4038

 $\widehat{}$ 

Page 27



DW1000 Ultra-Wide-



LTE IoT 3 Click Features the EXS82-W, LTE-IoT Wireless Module from Thales

MSRP - \$7900 MIKROE-4118



**ZigBee Click** Features the ETRX357, 2.4 GHz Zigbee Radio module from Silicon Labs.

MSRP - \$4900 MIKROE-4277







The MAX41460, a

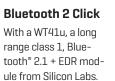
UHF sub-GHz ISM/

Maxim Integrated.

MSRP - \$1200

MIKROE-4242

SRD transmitter from







**ISM RX 2 Click** Features the Si4356, a standalone Sub-GHz RF receiver IC, from Silicon Labs.

MODE SEL

SM RY

NC

NC

NC

MSRP – \$15<sup>00</sup> MIKROE-4230



MSRP – \$22900 MIKROE-4456

### **GNSS RTK Click**

The ZED-F9P, a multi-band Features the GNSS module with integrated multi-band (RTK) technology from U-blox.

MSRP - \$6900 MIKROE-4465



### LTE IoT 9 Click

Innovations

The ID-12LA-SA, an ad-

vanced low-cost RFID

reader module with 38

- 6000 -- AL

**RFID 2 Click** 

different tags.

MSRP - \$7900

MIKROE-4208

12LA

NC NC

NC

EXS62-W, LTE-IoT Wireless Module from Thales.



dean such

The BT121. a du-

al-mode Bluetooth

from Silicon Labs.

MSRP - \$5900

MIKROE-4384

Smart Ready module

**BT Click** 

### **ISM RX Click**

Features the MAX1471, a low-power CMOS RF dual-channel receiver.

MSRP - \$6900 MIKROE-4499



### **BLE TINY Click**

Features the DA14531MOD, Smart-Bond TINY module.

MSRP - \$1500 MIKROE-4582



NFC

 $\leq$ 

1-1 6

NFC 2 Click

MHz from NXP.

MSRP - \$3400

MIKROE-4309

The PN7150, designed

for contactless com-

munication at 13.56

## SENSORS





IR Grid Click

Equipped with the

MLX90621BAD, a

from Melexis.

MSRP - \$6900

MIKROE-2622

16x4 IR array sensor,



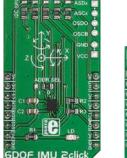
**Moisture Click** FDC2112 IC, a very precise 12bit capacitance to digital converter, from Texas Instruments.

MSRP - \$1900

MIKROE-3084

100

MSRP - \$19<sup>00</sup> MIKROE-1194





With BMI160 low power IMU. For precise acceleration and gyroscopic measurement.



### Hydrogen Click

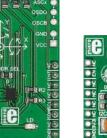
surement module - 3D accelerometer, gyroscope detection range 100and magnetometer.

MSRP - \$2400

MIKROE-1941

MIKROE-1629

MSRP - \$2400 MIKROE-2337





LSM9DS1 inertial mea-



With MQ-8 sensor for hydrogen (H2). Sensor's

10000ppm of H2. MSRP - \$1500



With ADXL345 3-axis accelerometer. 13-bit measurement, embedded FIFO technologies.



Accel 2 Click LIS3DSH IC 3-axis accelerometer. Embedded FIFO buffer and 2 programmable state machines.

MSRP - \$1900 MIKROE-1905



### Accel 3 Click

H3LIS331DL 3-axis linear accelerometer. Dynamically selectable scales ±100g/±200g/±400g.

MSRP – \$21<sup>00</sup> MIKROE-2102

ENSORS S Page 31



Angle 3 Click With AK7451, a magnetic rotational angle sensor with 12-bit angle resolution.

MSRP - \$1800 MIKROE-2755



**Barometer Click** 

LPS25HB IC, piezoresistive absolute pressure sensor. Range 260-1260 hPa.

MSRP - \$15<sup>00</sup> MIKROE-1817







MSRP - \$900 MIKROE-2549

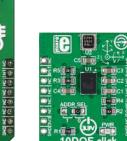
ഗ



### **RTD Click**

It is based on MAX31865 resistance to digital converter optimized for RTDs.

MSRP - \$19° MIKROE-2815



line Hal

OZONE

**Ozone Click** 

a compact MOS

detection.

MIKROE-2355

MSRP - \$6900

Carries MiCS-2614,

sensor for ozone (03)

### 10D0F Click

With BN0055, a 9-axis absolute orientation sensor and BMP180, a digital pressure sensor.

MSRP - \$4900 MIKROE-2073



### **3D Hall Click**

With MLX90333 3-axis Hall sensor. Detects the position of any magnet in nearby space.

.

LightRanger 8 Click

The VL53L3CX, a

ToF ranging sensor

with multi-target

detection.

MIKROE-4492

MSRP - \$1200

MSRP - \$2500 MIKROE-1987



(166 a) E

VCC SEL R1 PWR

**Diff Press Click** 

The MPXV7007DP,

integrated monolithic

differential pressure

sensor from NXP

MSRP - \$2700

MIKROE-3332

Diff Press click

**3D Motion Click** 

MM7150 9-axis sensor fusion motion module and SSC7150 motion coprocessor.

MSRP - \$5900 MIKROE-1877



STM's LSM6DS33TR 6-axis IMU with 3-axis gyroscope and 3-axis accelerometer.

MSRP - \$4900 MIKROE-1298



<u>u</u>

R2 R3

PWR

Magnetic cli

**GeoMagnetic Click** 

Measures the geomagnetic

field in three perpendicular

axes. The onboard sensor

uses FlipCore from Bosch.

MSRP - \$1500

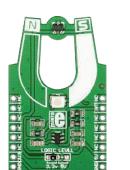
MIKROE-2935

....

RI

**6DOF IMU Click** 





0,

**Air quality Click** 

MQ-135 sensor for de-

tecting gases - ammo-

nia, nitrogen oxides,

MSRP - \$16<sup>50</sup>

MIKROE-1630

benzene, smoke, CO2.

### HALL 6 **Bi Hall Click**

US2882 bipolar Hall-effect switch and a 74LVC1T45 single bit, dual supply transceiver.

MSRP - \$1200 MIKROE-1646



MSRP - \$7900

MIKROE-2529

0.0 Cz CI RAI RA 0.00 R3 ADDR R2 0 III RI PWR Air guality E d Air quality 3 Click

**Air quality 2 Click** iAQ-Core that measures VOC levels and provides CO2 equivalent and TVOC equivalent predictions. the indoor air quality (IAQ).

> MSRP - \$2900 MIKROE-2953



CO Click

MSRP - \$1650

MIKROE-1626



### **Color Click**

MQ-7 gas sensor with high sensitivity to carbon monoxide. Detection range 20ppm-2000ppm.

> MSRP - \$1500 MIKROE-1438

With TCS3471 (RGBC) color light sensor and a RGB LED diode. Resolution up to 16-bits.



Equipped with the CCS811, an ultra-low power digital gas sensor for monitoring



**Air quality 4 Click** An advanced air quality

sensing device that combines multiple metal-oxide sensing elements on a chip.

MSRP - \$3200 MIKROE-2896



**Air quality 5 Click** 

MiCS-6814, a compact triple MOS sensor from SGX Sensortech, with 3 independent sensors.

MSRP - \$4500 MIKROE-3056

ENSORS S Page 33



Color 2 Click ISL29125 RGB color light sensor. 16-bit resolution data, measuring range 5.7 mlux-10,000 lux.

MSRP - \$1600 MIKROE-1988



Color 3 Click With TCS3771 color sensor and a narrow beam Infrared LED.

MSRP - \$1700 MIKROE-2103



<u>I</u>



**Compass Click** 

With LSM303DLHC

ultra compact high

e-compass module.

performance

MSRP - \$2500

MIKROE-1386

### **EMG Click**

Measures the electrical activity produced by the skeletal muscles.

MSRP - \$2900 MIKROE-2621



Measures temperature,

relative humidity, pres-

compounds gases.

MSRP - \$3400

MIKROE-2467

sure and Volatile Organic

**Compass 2 Click** 

compass based on the

Hall effect. 14-/16-bit

selectable resolution.

MSRP - \$2500

MIKROE-2264

With AK8963 3-axis elec.

### **Environment Click**

Measures body temperature with MAX30205 sensor. Accuracy 0.1°C (37°C to 39°C).

Current clic

**Current Click** 

With INA196 current

shunt monitor, MCP3201

12-bit ADC, MAX6106

voltage reference.

MSRP - \$2400

MIKROE-1396

MSRP - \$1100 MIKROE-2554



### **Fever Click**



### **FLAME Click**

Used for fire detection. Carries PT334-6B silicon phototransistor sensitive only to infrared light.





-

1 1 10

120 m

2 1 1

ff pressure clic

**Diff pressure Click** 

MPXV5010DP pressure

comparing 2 pressure

sensor. Designed for

measurements.

MSRP - \$5900

MIKROE-2387

Obran

6

Ðĝ

문화

DHT22 click

With DHT22 temp. and

humidity measurement

sensor. Hum. 0-100%,

temp. -40 to +80° C.

MSRP - \$2400

MIKROE-1798

DHT22 Click

With Interlink Electronics' Force Sensing Resistors. Force sensitivity range 0.2N-20N.

MSRP - \$2500 MIKROE-2065





### **IR Sense Click** With AK9750 quantumtype IR sensor. Detects

the temperature of objects and people in motion. MSRP - \$27° MIKROE-2677



temp. range

MSRP - \$2900

MIKROE-1361



IrThermo Click 3.3V **Proximity 2 Click** With MLX90614ESF-BAA With MAX44000, an IC that IR thermometer module, integrates an ambient light factory calibrated in wide and a proximity sensor. Range 0.03-65.535 lux.

> MSRP - \$1900 MIKROE-1818

OSRAM.

MSRP - \$3200 MIKROE-3012

MODE SEL RA DI RE RA art Rate 🖻 cli

**Heart rate 4 Click** Carrie the MAX30101

**Heart Rate 5 Click** Uses the top-of-theclass integrated BIOFY® SFH 7072 sensor from

high-sensitivity pulse









SFH7050 pulse oximetry

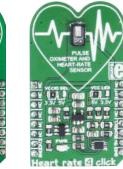
and heart rate monitoring

module, and AFE4404 IC

for bio-sensing.

MSRP - \$39°

MIKROE-2036





**Heart Rate 7 Click** The VEMD8080 photosensor. A high-speed PD element, with sensitivity in the visible light spectrum.

leart Rate 7 clic

MSRP - \$2300 MIKROE-2998



**Illuminance Click** 

With TSL2561 light-todigital converter. Two photodiodes: full-spectrum and infrared light.

MSRP - \$1600 MIKROE-1688

ENSORS S Page 35



**REED Click** With a standard reed switch. Used in mechanical systems as proximity sensors.

MSRP - \$700 MIKROE-1998



**RF Meter Click** 

It's an RF power measurement device. Frequency span 1 MHz-8 GHz, over 60 dB range.

MSRP - \$4400 MIKROE-2034







It carries D7S, the world's smallest high-precision seismic sensor from Omron.

MSRP - \$6900 MIKROE-2561

ENSORS

ഗ





### **Grid-EYE Click** 8x8 thermal array

sensor-detector that carries AMG8853 infrared array sensor.

MSRP - \$79° MIKROE-2539



### **GYRO Click**

L3GD20 3-axis digital gyroscope module - can measure angular rate and ambient temperature.

MSRP - \$25<sup>01</sup> MIKROE-1379

D2 D1 D3 R1 eff

D8 D7 D6 D5 D4 D3 D2

R16 R18 R19 R20

ECG R click

Tracks the patterns of

your beating heart. It

delta-sigma ADC.

MSRP - \$4900

MIKROE-2507

carries ADS1194 16-bit

ECG 2 Click

C25 PWR 1 11

26

7 (proto 3 (proto) 

2.048

It measures the electri-

cal activity of a beating

trodes taped to the skin.

heart through elec-

ECG

**ECG Click** 

MSRP - \$390

MIKROE-2455



### Hall current Click

High precision current sensor with TLI4970-D050T4, a magnetic current sensor.

(237

MSRP - \$3400 MIKROE-1578



**...** 

N N

C

HDC1000 cli

HDC1000 Click

It's a humidity (and

temperature) mea-

surement Click carrying

the HDC1000 sensor.

MSRP - \$1900

MIKROE-1797

H%]

6

1000

e

100

Heart rate click

Heart rate Click

integrated pulse

sensor.

MIKROE-2000

MSRP - \$1900

With Maxim's MAX30100

oximetry and heart-rate

Den: Hon

### **IR eclipse Click**

With EE-SX198 photo interrupter sensor detects anything that obstructs its beam.

T

20

MSRP - \$150 MIKROE-1711



Carries GP2S700HCP reflective photo interrupter and an onboard potentiometer.

MSRP - \$1200 MIKROE-1882



IR reflect Click



### LightHz Click

With TSL230BR converter for conversion of light intensity to frequency with no external components.

MSRP - \$1790 MIKROE-990

### Also works as an ambient light sensor.

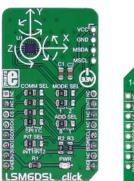
ghtRanger clic

LightRanger Click

It's a proximity sensor carrying VL6180X IC.

MSRP - \$2400 MIKROE-1897

MSRP - \$2400 MIKROE-2509



### LSM6DSL Click

Measures linear and angular velocity with six degrees of freedom. Carries LSM6DSL module.

MSRP - \$15° MIKROE-2731



**MAGNETO Click** 

Carries AS5048A contactless magnetic angle position sensor that relies on the Hall Effect.

MSRP - \$36°

MIKROE-1886

MSRP - \$2900 MIKROE-1938

MAGNETO 2 Click Enables the design of non-contacting rotary position sensors with MLX90316 sensor IC.

6



PWR E

LightRanger 2 Click

With VL53LOX IC, the world's smallest Timeof-Flight ranging and gesture detector sensor.



Ю

ear Hall sensor IC. Measures magnet's strength and distance.

MSRP - \$1700 MIKROE-1648



Manometer 2 Click

With MS5525D-SO-SB001GS digital pressure sensor. 24-bit digital pressure and temp. value.

MSRP - \$3900 MIKROE-2550

ENSORS S Page 37





Manometer Click

Carries a piezoresistive silicon pressure sensor with extremely high accuracy (±0.25%FSS BFSL).

MSRP - \$7900 MIKROE-2237



**Barcode Click** 

The LV3296, a compact integrated barcode scanner from Rakinda company.

MSRP - \$17900 MIKROE-2913



000

HEAMDONNAN H

B HHHHHHHHHH

THE MAR

IR distance Click

With GP2Y0A60SZ0F

distance measuring

sensor. Measuring

range 10-150 cm.

MSRP - \$2500

MIKROE-1991

.....

**IrThermo Click 5V** 

With MLX90614ESF-AAA

IR thermometer module,

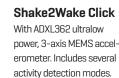
factory calibrated in wide

temperature range.

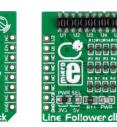
MSRP - \$2900

MIKROE-1362

10.00



MSRP - \$39° MIKROE-1942



MIKROE-1999

Line Follower Click With five QRE1113 miniature reflective object sensors. Used for line following robots and cars.

MSRP - \$1500



H

InThermo 2 clic

It is a non-contact tem-

perature measurement

thermopile sensor.

MSRP - \$20°

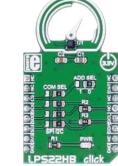
MIKROE-1888

solution, with an infrared

IrThermo 2 Click

LPG Click With MQ-5 sensor for detecting liquefied petroleum gas leakage. Detection range 200-10000 ppm. MSRP - \$15<sup>00</sup>

MIKROE-1587



 $\bigcirc$ 

4

**Light Click** 

photodiode.

MSRP - \$1800

MIKROE-1424

Used to measure

ambient light intensity,

with PD15-22CTR8 PIN

5.0

553

LDC1000 clic

With ind-to-digi. convert-

er IC and a detachable

sensor. For short range

inductive sensing.

MSRP - \$3500

MIKROE-1583

LDC1000 Click

SENSOR

### LPS22HB Click

Used as a digital barometer. It carries the LPS22HB MEMS nano pressure sensor.

MSRP - \$1500 MIKROE-2665



LSM303AGR Click Measures acceleration and magnetic field characteristics. Carries LSM303AGR module.

MSRP - \$1800 MIKROE-2684





et o

**Methane Click** 

With MQ-4 sensor

for methane (CH4).

10000ppm of CH4.

MSRP - \$1500

MIKROE-1628

Detection range 200-

**MPU 9DOF Click** Carries the MPU-9150 system in package, the world's first 9-axis motion tracking device.

J 9 DOF c

MSRP - \$42° MIKROE-1719



0

C2 { 1 1

101.1

Ozone 2 Click

With MQ131 sen-

sor for Ozone (03).

1000 ppm of 03.

MSRP - \$370

MIKROE-2767

Detection range 10-

-

ADC SEL



**MPU IMU Click** Carries MPU-6000 integrated 6-axis motion

tracking device and a DMP (Digital Motion Processor)

MSRP - \$3900 MIKROE-1577



Detects organic gases formaldehyde, benzene, alcohol, toluene, etc. Detection range 1x50ppm.

MSRP - \$4900 MIKROE-2516



**Spectral Click** 

Uses the AS7261, an XYZ chromatic white color sensor + NIR with electronic shutter and smart interface.

MSRP - \$2600 MIKROE-2972



Spectral 2 Click

Uses the AS7262, 6 channel visible spectral\_ID device with electronic shutter and smart Interface.

MSRP - \$2600 MIKROE-2973

ENSORS S Page 39





**Pressure Click** With LPS331AP digital output pressure sensor. For pressure (260-1260 mbar) and temp. [-40°C to 80°C].

MSRP - \$2500 MIKROE-1422



**Pressure 2 Click** With MS5803, a high resolution MEMS pressure sensor. Range 0-14 bars, resolution up to 0.2 mbars.

MSRP - \$6900 MIKROE-1880





e

AK9752

Sense Pic

**IR Sense 2 Click** 

Uses the AK9752, an

ultra-small infrared

interface, from AKM.

MSRP - \$2100

MIKROE-2966

sensor IC, with an I2C

**UND**R

CINI R4

a scync

PWR SEL R3 PWR

SHT click

Temperature and

humidity sensor SHT3x-

DIS. -0 to 100% RH, 40

to 125°C temp. range.

SHT Click

MSRP - \$2600

MIKROE-2101

Uses the AS7263, a 6 channel NIR Spectral ID device with electronic shutter and smart Interface.

MSRP - \$2600 MIKROE-2961

ENSORS

S



**Pressure 3 Click** With DPS310 digital barometric pressure sensor. Range 300-1200 hPa.

MSRP - \$2000 MIKROE-2293

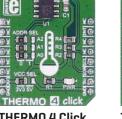






With VCNL4010 proximity and ambient light sensor. Range up to 20cm, 16-bit resolution. MSRP - \$1700

MIKROE-1445



THERMO 4 Click It carries digital temperature sensor and thermal watchdog. Range from –55 °C to +125 °C.

MSRP - \$900 MIKROE-2632



1111

SHT1x Click

newer designs.

MSRP - \$1300

MIKROF-949

Digital humidity and tem-

perature sensor SHT11.

Not recommended for

**THERMO 5 Click** 

Measures temperature in default range of 0°C to 127°C and extended range of -64°C to 191°C.

MSRP - \$1100 MIKROE-2571



G

1-1 -

**Smoke Click** 

With MAX30105 optical

sensor for smoke detec-

tion. Sensor's inherent

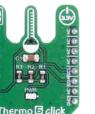
resolution 0.0625°C.

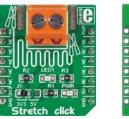
MSRP - \$1900

MIKROE-2560

**Thermo 6 Click** Ambient temp. measurement device, based on the MAX31875 temp. sensor.

MSRP - \$900 MIKROE-2769





Stretch Click

cm resistance.

MSRP - \$3500

MIKROE-2064

Measures stretch forces

with conductive rubber

cord - 40-160 ohms per

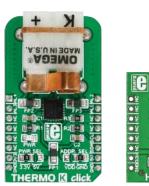


**Altitude Click** 

MEMS pressure sensor MPL3115A2. Pressure/altitude (20-bit) and temp. [12-bit] data.

MSRP - \$1450 MIKROE-1489

MSRP - \$2900 MIKROE-1197



### **THERMO K Click**

It carries the MCP9600 IC. It can measure temperatures from -200 °C to +1372 °C.

MSRP - \$2400 MIKROE-2501



HTU21D Click

Carries a relative humidity sensor with temperature output. Rel. hum. 0-100%, temp. -40 to +125° C.

MSRP - \$2100

MIKROE-1687

MSRP - \$900 MIKROE-2920

**ProxFusion Click** A multifunctional capacitive and Hall-effect sensor device. Carries the IQS624, a combined multi-sensor IC.

RS RE

市場



K

A.S.U NI BOAM

ADEMO

In the C

111

THERMO clic

THERMO Click

With MAX31855K thermocouple-to-digital converter and PCC-SMP K-type

thermocouple connector.

85°C, ±0.5°C accuracy. MSRP - \$1500 MIKROE-1840

1-110

20

ADRI

ADR2 H HER

THERMO 2 clic

**THERMO 2 Click** 

With DS1825, a digital ther-

mometer IC with a unique

64-bit address. -10°C to



**Thermo 3 Click** 

With TMP102, a digital temp. sensor IC. Accurate within 0.5°C. Range from -25°C to 85°C.

MSRP - \$900 MIKROE-1885

ENSORS S Page 41





**Hall Switch Click** 

Uses the AH1389, an ultra-sensitive dual output unipolar Hall Effect switch, from Diodes Incorporated.

MSRP - \$1800 MIKROE-2985



Thermo 7 Click Uses the MCP9800, a high accuracy temperature sensor IC with the 2-Wire interface, from Microchip.

MSRP - \$900 MIKROE-2979





It carries MAX7502 IC that can measure temp. from -25°C to +100°C. Accuracy ±1.5°C. MSRP - \$1900

MIKROE-2273

ENSORS

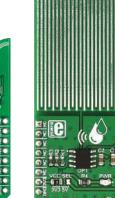
S

N



Vibra sense Click A micro shock vibration sensor with a digital output. For anti-tampering, anti-theft devices.

MSRP - \$1800 MIKROE-1927



3Y-ZESSY

RoHS

Thunder clic

Detects the presence

lightning activity with

AS3935 lightning sensor.

**Thunder Click** 

and proximity of

MSRP - \$3500

MIKROE-1444

### Water Detect Click

For detecting water and other electroconductive liquids. Carries Microchip's MCP606.

MSRP - \$900 MIKROE-2786



### Weather Click

With BME280 integrated environmental unit. Detects humidity, pressure, and temperature. MSRP - \$2200

6

R clic

Tilt click

With RPI-1035, a 4-direc-

tional optical tilt sensor -

left, right, backward,

forward movement.

MSRP - \$1290

MIKROE-1834

**Tilt Click** 

MIKROE-1978



TIL T-D-SHAKE clic

**TILTnSHAKE Click** 

With MMA84910 IC, a

3-axis digital acceler-

ometer. Can function

as a 45 ° tilt sensor.

MSRP - \$1900

MIKROE-1853

### Angle Click

Hall-effect angle sensing device used to measure the rotational angle of the magnetic field.

MSRP - \$1600 MIKROE-2030



It is a temperature measurement Click board<sup>™</sup>, which uses a thermocouple type-J probe.

MSRP - \$2400 MIKROE-2811



20

1011-H

UNI HALL C

**UNI HALL Click** 

Hall-effect switch

MSRP - \$1200

MIKROE-1647

With US5881 unipolar

sensitive to the North

Pole magnetic fields.

**Thermo J Click** 



e

00000

DOG N



UV 2 Click



UV 3 Click

Carries VEML6075 UVA and UVB light sensor. With a photodiode, amplifiers, analog/digital circuits.

G OW, I2C JP10-000 LOGIC SEL INIRA INIRA DHT22 E click

### DHT22 2 Click

It is used for measuring the environmental temperature and relative humidity.





### **Microwave Click**

Intelligent IR transceiver device that sends and receives UART commands via the IR interface.

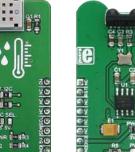
MSRP - \$2600

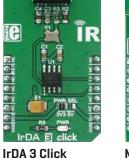
MIKROE-2871

motion sensor. MSRP - \$2500 MIKROE-2781

An advanced ultraviolet (UV) light sensor with VEML6070 UVA light sensor. MSRP - \$900 MIKROE-2736









It detects movement,

24GHz microwave





**Proximity 5 Click** 

Features the VCN-L4035X01 J, a fully integrated proximity and ambient light sensor.

MSRP - \$1500 MIKROE-2984



**Proximity 6 Click** 

Uses the ADUX1020, a photometric sensor for gesture and proximity detection.

MSRP - \$2900 MIKROE-3048

ENSORS S 43 Page .

thanks to the PD-V11 a

**Proximity 3 Click** Intelligent proximity and light sensing device - high sensitivity long distance PS and ALS.

MSRP - \$1700 MIKROE-2801



Detects alcohol in concentrations from 0.04 to 4mg/l with Q-3 Semiconductor sensor.

MSRP - \$1500 MIKROE-1586





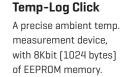
Hall current 2 Click A Hall effect linear current sensor with over-current fault output for less than 100 V Isolation App.

MSRP - \$1800 MIKROE-2987

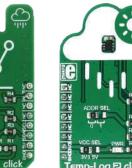
ENSORS

S





MSRP - \$15° MIKROE-2886





Temp-Log 2 Click

A precise ambient temp

measurement device,

with the non-volatile

(EEPROM) memory.

MSRP - \$1500

MIKROE-3004

2 2

6

UV 4 Click

MSRP - \$1500

MIKROE-2989

UV A click

Equipped with the Si1133,

a UV index and ambient

face, from Silicon Labs.

light sensor with I2C Inter-

5 2 2 2 2 2

6

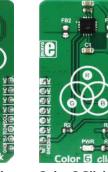
날라 오레

2



Magneto 🖬 clic Magneto 5 Click Features the MEMSIC MMC34160PJ, a 3-axis magnetic sensor IC.

MSRP - \$1500 MIKROE-3050



e

20

20

Ϋ́

e ٩

Temp&Hum click

Temp&Hum Click

With HTS221 temp. and

relative humidity sensor.

Measurement accuracy

is ±1°C in O-60°C range.

MSRP - \$1600

MIKROE-1971

PWR

Temp&Hum 2 Click

Uses the Si7034, a digital

humidity and temperature

sensor IC with I2C inter-

face, from Silicon Labs.

MSRP - \$1600

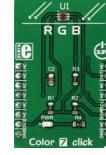
MIKROE-3085

amper tiel

INR

**Color 6 Click** Features the AS73211, an XYZ true color sensor from AMS.

MSRP - \$3200 MIKROE-3061



Features the TCS3472 color light to digital converter with IR filter, from AMS.

MSRP - \$1600 MIKROE-3062



HDC20I

0 0 22

HULL NOT RS

2101 Noil R

**Temp-Hum 3 Click** 

Uses the HDC2010, a Low

Power Humidity and Tem-

from Texas Instruments.

perature Digital Sensor

MSRP - \$1300

MIKROE-2937

0000

Color 7 Click





000

U2 1119

R6R5C5

VOUT SEL

NO SEL R4 R3

acuum alia

With the monolithic vacuum

sensor the MPXV6115V, it

measures pressure values

**Vacuum Click** 

down to -115kPa.

MSRP - \$4300

MIKROE-3195

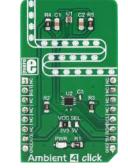
Va AVe

U3 419 -

R4 R3

Uses the MAX30003 IC, an ultra-low power, single channel, integrated biopotential AFE.

MSRP - \$4500 MIKROE-3273



MSRP - \$1600

MIKROE-3199



**Ambient 4 Click 3D HALL 5 Click** Uses the BH1721FVC, Carries the IIS2MDCa 16-bit digital light TR, a low power 3D sensor with the I2C magnetic sensor. serial interface.

> MSRP - \$1500 MIKROE-3197



**Gyro 2 Click** 

It is equipped with

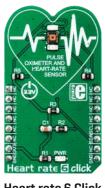
MSRP - \$1800

MIKROE-3300

the FXAS21002C, a

three-axis integrated

angular rate gyroscope.



**Heart rate 6 Click** With two green LEDs, driven by the BH1790GLC, a monolithic integrated sensor for heart rate monitoring. MSRP - \$2500

MIKROE-3215





**Color 8 Click** Features the ROHM's BH1749NUC, an integrated color sensor IC.

MSRP - \$1500 MIKROE-3213



Accel 7 Click Features the KXTJ3-1057 14-bit tri-axis digital accelerometer from Kionix.

MSRP - \$1300 MIKROE-3244

ENSORS S 45 Page



**IR Grid 3 Click** Equipped with the MLX90640-BAA, a 32x24 IR array sensor, from Melexis.

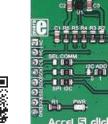
MSRP - \$8700 MIKROE-3217



**Ambient 2 Click** TI's OPT3001 ambient light sensor. Measures the visible part of the light spectrum.

MSRP - \$1400 MIKROE-1903





### Accel 5 Click

Features an ultra-low power triaxial accelerometer sensor, labeled as the BMA400.

(-----

R3 PWR

**Gaussmeter Click** The MLX90393, a micro-

power magnetometer

Triaxis® technology.

MSRP - \$1900 MIKROE-3099

based on the proprietary

e

6

0

8

0.004

6

J24

neter cl **Oximeter Click** 

The ADPD105, a highly

front end (AFE) device

from Analog Devices.

MSRP - \$390

MIKROE-3102

configurable photometric

aut Maile

6

PWR

LightRanger 3 Click

LightRangerFlo

Uses the Simblee"

enabled RFD77402

ToF sensor module

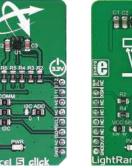
from RF Digital.

MSRP - \$2400

MIKROE-3103

e i

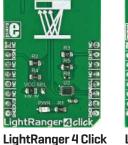






distance based on a ToF with VL53L1X rangefinder module. MSRP - \$2400 MIKRDE-3176

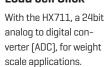
Measures an accurate

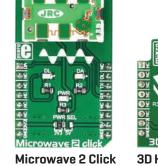


MSRP - \$1200 MIKROE-3168









R4 R5

ADDR

1013 811

IrThermo E cli

IrThermo 3 Click

Uses the MLX90632

FIR sensor from Mel-

temperature sensor.

MSRP - \$2700

MIKROE-3121

exis as the contactless

**Microwave 2 Click** Detects movement by utilizing the NJR4265RF2C1, an intelligent 24GHz microwave motion sensor.

MSRP - \$550 MIKROE-3187



TE

C

VCC SEL

ava e

C3000 - 000 R

CO E click

With the SPEC amperomet-

ric, 3SP CO 1000 gas sensor

which electrochemically

reacts with the (CO).

MSRP - \$5200

MIKROE-3196

AN SEL

CO 2 Click

Measures the magnetic field in three perpendicular axes. With the TLV493D-A1B6, a 3D magnetic sensor.

MSRP - \$15<sup>00</sup> MIKROE-3190











### Accel 6 Click

The BMA280, a 14bit triaxial acceleration sensor with intelligent on-chip motion triggered interrupt controller.





MSRP - \$1500 MIKROE-3030



### Pressure 4 Click

Altitude 2 Click Uses the MS5607-Features the BMP280, 02BA03, a barometric a digital pressure pressure sensor IC with sensor, from Bosch the stainless steel cap. Sensortech.

MSRP - \$1800 MIKROE-3020

### A magnetic rotational sensor which relies on the ultra-fast MA700 angular sensor IC.

MSRP - \$1600

---- J A B Z PWR RÍ Angle 🛛 clic **Altitude 3 Click** Angle 2 Click

-

-

**Alcohol 3 Click** 

Equipped with the MiCS-5524, a compact metal oxide

(MOS) sensor. MSRP - \$3200

MIKROE-2338











Altitude E click









The LMP91000, a highprecision integrated analog front-end IC

MSRP - \$5200 MIKROE-3097

(AFE).



NO2 Click

The 3SP-NO2-20 gas sensor from SPEC Sensors, which can sense NO2 concentration up to 20ppm.

MSRP - \$5200 MIKROE-3098

ENSORS S Page 47



NDIR CO2 Click Uses the CDM7160 integrated sensor and measures an absolute CO2 concentration.

791

DM SE

RI

1.1

MSRP - \$149° MIKROE-3134



Hall Current 3 Click

Uses Hall effect to provide a precise and reliable measurement of reasonably high current.

MSRP - \$1900 MIKROE-3118



NODUA NE NE NE CA NE

R

VCC SEL RI PWR

Temp&Hum 10 Click

The BPS230, a relative

humidity and tempera-

ture sensor with I<sup>2</sup>C

Interface, by Bourns.

0

SDC INTE

RI PWR

C UOI di

MSRP - \$1600

MIKROE-3342

N



LDC 1101 Click With the LDC1101, the integrated, high-res, high-speed, inductance-to-digital converter.

MSRP - \$29° MIKROE-3240



a interest

-

豪

PWR R1

The HDC1080, a low

power humidity and

temperature digital

sensor from TI.

MSRP - \$1300

MIKROE-3469

VCC SEL

Temp&Hum 11 Click

### **Magnetic linear Click**

Which utilizes the HMC1501, a magnetic field displacement sensor IC. MSRP - \$1800

MIKROE-3274



1

 $\odot$ 

Temp&Hum 12 Click

The HDC2080, a Low

Power Humidity and

Temperature Digital

Sensor from TI.

MSRP - \$2100

MIKROE-3636

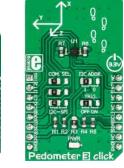
R3

6

### Magnetic rotary Click

Which utilizes the HMC1512, a magnetic field displacement sensor IC.

MSRP - \$2400 MIKROE-3275



### Pedometer 3 Click

Equipped with the KX126-1063, an advanced tri-axis acceleration sensor IC.

MSRP - \$130 MIKROE-3259



### Designed to measure relatively high current by using the integrated ACS70331 sensor.

MSRP - \$180 MIKROE-3308



R2 C1 U1 C2 R3

J.

R4

VCC SEL

PWR R1

ressure 🖬 clic

Pressure 6 Click

Allows readings in the range from 300hPa up

to 1300hPa, with the

BM1386GLV sensor.

MSRP - \$1800

MIKROE-3216

Temp&Hum 13 Click

The HTU21DF, a digital

relative humidity sen-

sor with temp. output

from TE connectivity.

MSRP - \$1200

MIKROE-3635

T NC

W HC

W HC

R N

Hall Current 4 Click



# VCC SEL

5000

PMR

Angle 4 Click

lar magnetic encoder.

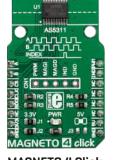
MSRP - \$26°

MIKROE-3130

API I

PWR R1 IR Grid E clic **IR Grid 2 Click** It is equipped with the MLX90640, a 32x24 IR array sensor which contains 8 Kbit EEPROM.

MSRP - \$75° MIKROE-3194



CI TUR AUCZ



MSRP - \$2200

MIKROE-3522

Semiconductor. MSRP - \$1700 MIKROE-3657

RE RE ADDR SEL

HC B 3V3 B GND

ADDR SEL

R1 PWR

The BM1422AGMV,

a 3-axis magnetic

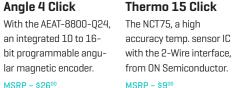
sensor IC Texas Instruments.

MSRP - \$900

INT THE R1 PWR

The TMP235, a high accuracy temperature

MIKROE-3662



MIKROE-3658

T NC

ADOR SEL

-14

A1100 0 82

A2 00 1 900 SE

R1 PWR

TO NC

TO NO

F NC

10 3V3

2000

99





0/

humidity and temp. sensor with I<sup>2</sup>C Interface, by Honeywell.

MSRP - \$2800 MIKROE-3425



Temp&Hum 9 Click

The SHTC3, a relative humidity and temp. sensor with I<sup>2</sup>C Interface, by Sensirion.

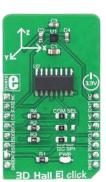
MSRP - \$1300 MIKROE-3331

ENSORS S 49 Page



MAGNETO 7 Click

sensor IC from ROHM



**3D Hall 3 Click** The LIS2MDL, a low power 3D magnetic sensor, from STMicroelectronics.

MSRP - \$1500 MIKROE-3310



**3D Hall 7 Click** The AK09970N, a low power 3D magnetic sensor, from AsahiKASEI (AKM).

MSRP - \$1700 MIKROE-3629





Thermo 11 Click The TMP117, a high accuracy temp. sensor IC with the 2-Wire interface, from TI.

Temp-Log 4 Click

Featuring the SE97B IC,

an accurate temperature

sensor IC with integrated

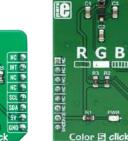
EEPROM.

MIKROE-3329

MSRP - \$1200

MSRP - \$12° MIKROE-3600

NC NC



R1

**Ultrasonic 2 Click** 

Equipped with the PGA460,

based on SONAR principle.

a highly-integrated

MSRP - \$29°

MIKROE-3302

system-on-chip (SoC),

### Color 5 Click

MIKROE-3107

Features the P12347-O1CT, a color and proximity sensor from Hamamatsu company. MSRP - \$1600



PWR RI

nity 🗐 d

**Proximity 9 Click** 

integrated proximity and

ambient light sensor from

Vishay Semiconductors.

MSRP - \$900

MIKROE-3465

The VCNL4040, a fully



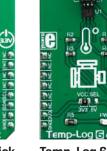






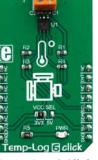
Equipped with the CAT34TS02 sensor from ON semiconductor. MSRP - \$1200

MIKROE-3442



The MAX6642, a ±1°C, SMBus/I2C compatible local/remote temp. sensor by Maxim Integrated.

MSRP - \$900 MIKROE-3437



Temp-Log 6 Click



ressure 7 c

**Pressure 7 Click** 

Features an digital

barometric pressure

labeled as MS5837.

MSRP - \$49°

MIKROE-3246

and temperature sensor



**Remote Temp Click** The EMC1833 from Microchip, a specifically designed IC, measuring remote temperature.

MSRP - \$1500

MIKROE-3685

Gyro 3 Click With the I3G4250, a three-axis digital gyroscope.

COMM SEL

(int ....

R1 PWR

00000

ADDR SEL

Guro El clic

MSRP - \$2500 MIKROE-3449

Temp&Hum 8 Click Based on a sensor from the popular SHT family, designed to measure temperature and humidity.

MSRP - \$1900 MIKROE-3263

DUB SDI SDOSCK CS NC NC COM SEL () (III) imart DOF clic **Smart DOF Click** 

100 (0000) (00

ADD SEL

PWR R1

The BN0080, a System

in Package (SiP) sensor

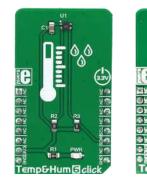
MSRP – \$2600 MIKROE-3457

The ICM-20602, a 6-axis MEMS Motionproduced by Hillcrest Labs. Tracking™ IC from TDK Invensense.

MSRP - \$160 MIKROE-3410



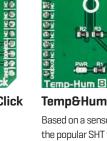
6DOF IMU 4 Click



Temp&Hum 6 Click With the ENS210 sensor. An ultra-accurate temperature and relative humidity sensor (RH). MSRP - \$1200

MIKROE-3270

MSRP - \$1600 MIKROE-3272



P

Temp&Hum 7 Click Equipped with the Si7021-A20, an accurate and reliable sensor IC.

R3 R2

VCC SEL

PWR R1

Hum 🛛 a

F

A









Tilt 2 Click

Equipped with the RB-441-45, a 45° rolling ball sensor switch.

MSRP - \$1300 MIKROE-3343



Temp-Log 3 Click

Featuring the MCP9843 IC, an accurate temperature sensor IC with integrated EEPROM.

MSRP - \$1200 MIKROE-3326

ENSORS S 2

Page



R



Gyro 4 Click A two-axis MEMS gyroscope for optical image stabilization app. with

the L20G20IS. MSRP - \$1500 MIKROE-3661



**Gyro 5 Click** Equipped with the ITG-3701, a three-axis digital gyroscope.

MSRP - \$2000 MIKROE-3669



R10 ISC AUX

COM SE

R8 PWR

**Ambient 3 Click** 

The AS7225, a cali-

from ams AG.

MSRP - \$2500

MIKROE-3686

brated XYZ chromatic

smart lighting director

**BND** 

-

NC

NC NC

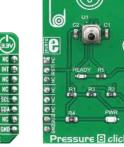
S NG SV3 GND

	NC COMM
	D NC
	to CS finit
	P SCK -IIII
回殺殺国	SDO HER
80 H.	SPI SPI
100-05-05	1 3Y3 - 1
	GND GND
	Pressi

Pressure 5 Click The BMP388, a digital pressure sensor, from Bosch Sensortech.

R3

MSRP - \$1400 MIKROE-3566



MSRP - \$2100

MIKROE-3338

ক

R3

I2C ADD

bient E d

The VEML6030, a high

accuracy ambient light

sensor (ALS), from Vi-

shay Semiconductors.

MSRP - \$1100

MIKROE-3320

100

**Ambient 5 Click** 

PWR

E

Pressure 8 Click The MPRLS0025PA00001A, an accurate compensated pressure sensor, by Honeywell.



Pressure 9 Click The DPS422, a digital barometric air pressure sensor, by Infineon.

MSRP - \$1500 MIKROE-3441



M AN M NC M NC

T NO

m

R3

bient G cli

**Ambient 6 Click** 

The AS5311, a high

resolution magnetic

linear encoder by

ams.

MSRP - \$9°

MIKROE-3444

1001

PWR

1

**C8** 

a me

PWR R1

**Ambient 7 Click** 

The SFH 5701 A01, an

accurate light-intensity

sensor from Osram Opto

Semiconductors.

MSRP - \$900

MIKROE-3601

NC CSC6C7 FB1 C1C2C3

Pressure 11 Click The LPS33HW, digital output barometer IC in water-resistant package, from STMicroelectronics.

MSRP - \$24° MIKROE-3411



C

Y

PWR R1

nbient 🛛 clici

**Ambient 8 Click** 

The LTR-329ALS-01, a

high accuracy ambient

light sensor (ALS) from

201 Ra

LiteOn.

MSRP - \$900

MIKRDE-3452

Pressure 12 Click The ABP series gauge pressure sensor ABPLLNN600MGAA3, made by Honeywell.

MSRP - \$2900 MIKROE-3466





~

**Thermostat 2 Click** 

The G6D series PCB

power relay, from

Omron.

MSRP - \$15°

MIKROE-3415

time

22

PWR

R6

ADD LSB

COM SEL

1

6DOF IMUBC

6DOF IMU 8 Click

and 3D gyro. with digital

MSRP - \$2100

MIKROE-3447

The ISM330DLC, a 3D accel.

output for industrial applica-

tions, by STMicroelectronics.

e



STN R10

**EEG Click** 

a division of TI.

MSRP - \$3900

MIKROE-3359

**Opto Encoder 2 Click** The AK09970N, a low The LPS35HW, an power 3D magnetic sensor, from barometer IC in wa-AsahiKASEI (AKM).

MSRP - \$26°

MIKROE-3634

MSRP - \$1500 MIKROE-3603

E

M HC MC NC

T NC

T NE

1 3V3

 $\bigcirc$ 

ADDR.

R1 PWR

THE RE RE RE

ECG 4 Click The INA114, a precision The BMD101, specialinstrumentation ampliized bio-signal sensing fier (IA) by Burr Brown<sup>®</sup>, System-on-Chip (SoC), from NeuroSky.

MSRP - \$3500 MIKROE-3427

R1 C clic ECG Z





integrated heart rate monitoring front-end, by Analog Devices.

MSRP - \$3500 MIKROE-3446

Spline Au

R4 C

R19 ECG



Hall current 5 Click

The ACS733(KLATR-AU), a Hall effect linear current sensor from Allegro Microsystems.

MSRP - \$1800 MIKROE-3393

ENSORS S 53 Page



**Barometer 2 Click** 

absolute digital output ter-resistant package.



Pedometer Click Contains the STP201M module, made by NiceRF.

MSRP - \$1600 MIKROE-3567



**IR Sense 3 Click** The AK9754, an ultra-small infrared sensor IC, with an I2C interface, from AKM.

MSRP - \$2100 MIKROE-3607







I NC

NC

Th NC

TO NO

N NC

N NC

NC

NC 1

R5 R4 R3 R2

ADD SEL

Int Int

**6DOF IMU 7 Click** 

performance, 6-axis

MSRP - \$1600

MIKROE-3776

The ICM-20649, a high-

MEMS MotionTracking<sup>™</sup>

IC from TDK Invensense.

c2



MSRP - \$1500 MIKROE-3310

M HC M HC M HC M HC M HC M HC M HC

31:

ഗ

N



**Color 9 Click** The APDS-9250, an integrated color sensor IC, made by Broadcom.

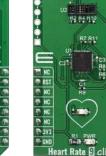
MSRP – \$1200 MIKROE-3690





**GMR Angle Click** The TLI5012B E1000 is a 360° angle sensor and the analog multiplexer

74HCT4053. MSRP - \$1700 MIKROE-3815



R3 R5

**Heart Rate 9 Click** With PIC16F1779 8-bit MCU and SFH 7060 heart rate and pulse oximetry monitoring sensor.

3002 mg

٩

R5 R6

COMM SEL RA

T Tall 9 (a)

RI PWR

6DOF IMU 9 Click

The 6DOF IMU 9 click is

based on the IAM-20680

is a 6-axis MotionTracking

device for Automotive app.

MSRP - \$2500

MIKROE-3827

1 (a) #2

SYN

R3 NC

E

30

MSRP - \$1900 MIKROE-3822



ADDR SEL

R1 PWR

6DOF IMU 11 Click

accelerometer, tri-axis

The KMX63 a tri-axis

magnetometer, and

temp. sensor.

MSRP - \$2100

MIKROE-3869

C R2

NO2 2 Click With the MiCS-2714. a compact metal oxide (MOS) sensor.

MIKROE-3700



MSRP - \$3900



ADD SEL

RI PWR

Accel 13 Click

The KMX63 a tri-axis

magnetometer, and

temp. sensor.

MSRP - \$1200

MIKROE-3742

accelerometer, tri-axis

NC

HC HC CS SCK

T SDO

W SDI

E 3V3

I JUR

SP1 GP2 NC NC

SCL SDA NC GND

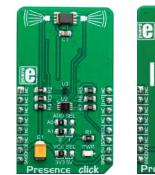
**Opto Encoder 3 Click** The TCUT1800X01 sensor is equipped with one infrared LED with the wavelength of 950nm.

MSRP - \$1200 MIKROE-3710









C2 01

e

R2 R3

ĨĨ

AOD SEL

.

el 🖪 c

Accel 8 Click

The MPU6050, a

motion tracking

Invensense

MSRP - \$1900

MIKROE-3341

sensor IC, from TDK

**Presence Click** The TPiS 1S 1385. a device The ADPS9930, a digital from CaliPile<sup>™</sup> multifunction IR sensor series by Excelitas Technologies.

MSRP – \$27<sup>0</sup> MIKROE-3575



MSRP - \$1700

Tille

R4

10

VCC SEL

PWR R1

**Proximity 7 Click** 

ambient and proximity

sensor, by Broadcom

(Avago Technologies).

MSRP - \$1400

MIKROE-3330

ximity Z click

MIKROE-3440



Accel 11 Click Accel 12 Click The BMA456, a digital The MC3216, a lowtriaxial acceleration noise and low power sensor from Bosch 3-axis accelerometer, Sensortech. from mCube.

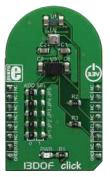
> MSRP - \$900 MIKROE-3464

C2 C2 R2 R3 R4 -PWR R1 (m)

> Proximitu El clia **Proximity 8 Click** The VCNL36687S. a proximity sensor with VCSEL in a single package, from Vishay.

MSRP - \$1300 MIKROE-3439





13D0F Click The BME680 is a digital

4-in-1 sensor with gas, humidity, pressure and temp. measurement.

MSRP - \$3500 MIKROE-3775



### 13D0F 2 Click

The BME680 is a digital 4-in-1 sensor with VOC, humidity, pressure and temp. measurement.

MSRP - \$4200 MIKROE-3687

ENSORS S Page 55





Hall Current 9 Click The CQ3300, a highspeed response coreless current sensor using a Hall sensor.

MSRP - \$1500 MIKROE-4466



**AMR Current Click** The MCR1101-20-5 current sensor, which is an AMR based integrated current sensor.

MSRP - \$1500 MIKROE-3812





**Temp-Hum 4 Click** 

A smart environmental temp. and humidity sensor, uses HDC1010 sensor from Texas Instruments.

MSRP - \$1300 MIKROE-2938

ENSORS

ഗ





It is an optical biosensor Click board™, designed for heart-rate monitoring (HRM).

MSRP - \$29° MIKROE-3218



MIKROE-3290

**IR Click** 

Features TSOP38338 IR

38 kHz receiver module

as well as QEE113 IR

emitting diode.

MSRP - \$950

MIKROE-1377

### **Thermo 8 Click**

It features the MCP9808. a digital temp. sensor with ±0.5 °C max. accuracy, from Microchip. MSRP - \$900



IrDA2 Click

With TFDU4101 infrared transceiver module and MCP2120 infrared encoder/decoder.

MSRP - \$2590 MIKROE-1195

T NC GP2 NC NC

· NE

M. NC

6Dof

ADDR SE

R1 PWR

Freedom inertial sensor

from Kionix.

MSRP - \$2100

MIKROE-3934

NC T



**IR Beacon Click** 

Functions as a beacon device with nine VSMB-2948SL high speed infrared emitting diodes.

MSRP - \$2100 MIKROE-1939



**GSR Click** 

Galvanic skin response (GSR) measures the electrodermal activity (EDA) of the human body.

MSRP - \$2400 MIKROE-2860



RST RST W NC COM SE т нс т нс т л/3 8-101 8-101 UART/I2C R8 PWR **Ambient 3 Click** 

 $\equiv$ 

The IIS2DLPC, a highperformance ultra-lowpower 3-axis accel. for industrial app.

0.0

-----

SDA

MSRP - \$1200 MIKROE-3742



**Proximity 10 Click** 

The SI1143, a pho-

tometric sensor for

proximity detection.

MSRP - \$1600

MIKROE-3455

the ambient light and

TO NO **3V3** CND

Proximity 11 Click The RPR-0521RS, a digital ambient and proximity sensor, by ROHM Semiconductor.

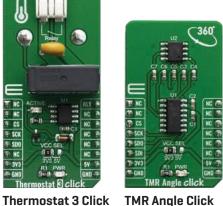
MSRP - \$900 MIKROE-3689



**PIR Click** 

The PL-N823-01 -a PL Pyroelectric Infrared Sensors from KEMET.

MSRP - \$1800 MIKROE-3339



### **TMR Angle Click**

The MAX31855, it's IC a thermocouple-todigital converter with a built-in 14-bit ADC.

MSRP - \$1900

MIKROE-3724

VCC SEL

R1 PWR

MSRP - \$1700 MIKROE-3769

The TLE5501 it's an angle sensors for any kind of angular position sensing.

a digital temperature sensor from TE Connectivity.

MSRP - \$1200 MIKROE-3983



Based on SI1153-AB09-GMR IC from Silicon Labs that can be used as an proximity, and gesture detector.



**Proximity 13 Click** 





6DOF IMU 10 Click **Thermo 9 Click** Features the KMX62-Features the TSYSO1, 1031 a 6 Degrees-of-





**Remote Temp Click** The EMC1833, a ±1°C, SMBus/I2C compatible local/remote temperature sensor.

MSRP - \$1500 MIKROE-3685



Thermo 13 Click

The BH1900NUX, a high accuracy temperature sensor IC with the 2-Wire interface.

MSRP - \$700 MIKROE-3688

ENSORS S Page 57

CAMERA did

-----

**CAMERA Click** Carries OV7670-VL2A, a low voltage CMOS image sensor.

MSRP - \$3900 MIKROE-1816



With MLX75305 IC. CMOS integrated optical sensor. Converts ambient light intensity into voltage.

**Ambient Click** 

MSRP - \$900 MIKROE-1890







Features NAU7802 24-Bit Dual-Channel ADC For Bridge Sensors.

MSRP - \$900 MIKROE-4047

ഗ



**Compass 3 Click** The MMC5883MA, a complete 3-axis magnetic sensor with signal processing from MEMSIC.

MSRP - \$900 MIKROE-4063



### ECG 6 Click

VCC SEL

It features the MAX86150, a Reflective Heart Rate Monitor and Medical-Grade Pulse Oximeter. MSRP - \$2900

MIKROE-4061



NC NC CS SCK SDO 501 3V3

A COD-

.

Rt PWR

ADDR SE

6DOF IMU 12 Click

The BMI270 IC, a low

surement unit, from

power inertial mea-

Bosch Sensortec.

MSRP - \$1500

MIKROE-4073

-

-

PWR R1

With the FSS015NGT

Honeywell's FSS-SMT

Series force sensor.

MSRP - \$14900

MIKROE-4046

Force 2 Click

S NG

S NC

S NC T NC T GND

NC 5

NC C

NC

NC

NC T

### 6DOF IMU 3 Click

RA .

The FXOS8700CQ is a low-power 3-axis linear accelerometer, and 3-axis magnetometer.

MSRP - \$700 MIKROE-4086



**Motion 4 Click** Features EKMC1603111, a PIR motion sensor from Panasonic Corporation.

MSRP - \$2900 MIKROE-4078



Features 7-Axis ICM-20789 chip from TDK.

> MSRP - \$1900 MIKROE-4089



6.6

**Motion 3 Click** 

EKMC1606112, PIR

motion sensor from

Panasonic Corporation.

Based on

MSRP - \$2400

MIKROE-4049

R4 U2 C1

VCC SEL

Motion 2 Click

EKMC1607112, PIR

motion sensor from

Panasonic Corporation.

Based on

MSRP - \$290

MIKROE-4059

HC TO NC TO

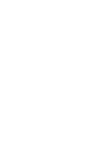
NG P

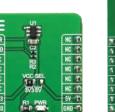
NC 🚿

NC 🛷 SCL 🖘 SDA 🛷

GND 4

**6DOF IMU 5 Click** 





**Index Counter Click** 

Features the TLE4966K, an integrated circuit double Hall-effect sensor.

MSRP - \$700 MIKROE-4005



HC CONTRACTOR

NC

GND @

C2

Com

22 22 51

Ambient 11 Click

With the VEML6035, a low

power, high sensitivity, I2C

ambient light sensor from

Vishay Semiconductors.

MSRP - \$900

MIKROE-3990

8 R4



**Heater Click** 

Set and control exact PCB temp. with the TMP235 on board temp. sensor from Texas Instruments.

MSRP - \$900

MIKROE-3996

BG51SM TEVISO.COM SWISS MADE NC P NC NC R1 PWR

**Radiation Click** 

MSRP - \$12900

MIKROE-4036

Feature the BG51 radiation sensor is based on an array of customized PIN diodes.

> MSRP - \$1600 MIKROE-4039

built-in local temp. sensor. MSRP - \$900 MIKROE-3994







voltage monitor with an I2C

and SMBus<sup>™</sup>interface.



VCC SEL 3V3 SV RI PWR

SHT AN CIIC

The SHT31-ARP, a high

**SHT AN Click** 

NC CO NC CO SV 3 GND 4

### Thermo 17 Click

The TMP451-01, a highaccuracy, low-power remote temp. sensor monitor with a

accuracy temperature and humidity sensor from Sensirion.

MSRP - \$1600 MIKROE-3984



**Color 10 Click** 

It's based on VEML3328, a RGB and IR light sensor from Vishay.

MSRP - \$700 MIKROE-3997

ENSORS S Page 59

output, current, power, and

TO BE TO R4 85 VCC SEL RT PWR

----

**Heart Rate 2 Click** The MAXM8616 - Single-Supply Integrated Optical Module for HR and SpO2 Measurement.

MSRP - \$2300 MIKROE-4037



**6DOF IMU 6 Click** 

The ICM-20689, a 6-axis Motion-tracking with a 3-axis gyroscope, a 3-axis accelerometer, and a DMP.

MSRP - \$1500 MIKROE-4044





0

The BMX055, a 9-axis

sensor for the detection of movements, rotations, and magnetic heading.

E-0-0-0-0-0-0

653 T

INT

SOA 1

CND 1

ADOR SEL NC 1

END & NO P

fion SCL S

=

E NC NC NC NC

NC NC

3V3 GHD

2

The TMD37253 IC, a

MSRP - \$700

MIKROE-4148

proximity measurement,

color sense (RGBC+IR), and

digital ALS device, from AMS.

R1 PWR

mix-sens click

Light mix-sens Click

MSRP - \$1600 MIKROE-4153

ENSORS

ഗ

<u>I</u>



### Ammonia Click

An Ammonia detection (NH3) sensor, based on the MQ-137 gas sensor.

MSRP - \$5500 MIKROE-4151



### **Hydro Probe Click**

Uses the MIC1557 and MCP3221 IC's. The capacitive soil moisture sensors.

MSRP - \$900 MIKROE-4131



### Accel 14 Click

M AN

R NC

NG NG

313

GND

INT NC

SEL

SDA

NC

GND

Ranced FR4

14

c2

RI PWR

Force 4 click

Based on HSFPA-

force sensor from

Alpsalpine.

MIKROE-4193

MSRP - \$2900

R003A piezoresistive

NC C

SDA E

5V 🕲

Uses the IIS3DWB IC, an ultra-wide bandwidth, low-noise, 3-axis digital vibration sensor.

MSRP - \$3200 MIKROE-4185



S GND

AMS-AG.

MIKROE-4165

MSRP - \$2400

R6 R7 R5 R8 R7 R5 R8 R7 R5 C41 L1 R9 C41 L1 R9 C1 100 \$C3

VCC SEL

R1 PWR

Spectrometer Click

Uses the AS7341 IC,

11-Channel Spectral

Sensor Frontend from

NC

INT 12 NC 12 NC 12 SCL 12 SDA 13

5V 7

GHD

### **Thermostat 4 Click**

The TMP392, enables protection and detection of system thermal events from 30°C to 130°C.

MSRP - \$15<sup>0</sup> MIKROE-4194



Based on DPS368, a digital barometric air pressure sensor IC from Infineon.

MSRP - \$800 MIKROE-4190



182

E R\$

ADDR SEL ST SA1 SA2 O T SV3SV R1 PWR R1 PWR

Surface temp Click

With the ADT7420 - an

accurate 16-Bit Digital

I2C temp. sensor from

Analog Devices.

MSRP - \$1900

MIKROE-4205

CT CH INT CH NC CH SCL CH SDA CH SCL CH SDA CH SCL CH SCL

GND

# **Barometer 3 Click**





### **Thermo 14 Click**

RI PWR

The STTS22H, a high accuracy temp. sensor IC with the 2-Wire interface, from STMicroelectronics.

MSRP - \$700 MIKROE-4132



**UVB Click** 

Based on GU-VB-C31SM, a Digital UV Sensor from GENUV Technology.

MSRP - \$2400

MIKROE-4145

MSRP - \$4500 MIKROE-4144

### ..... R1 PWR **TMR mix-sens Click** Accel 10 Click

"iiiu"

With three different Coto Technology RedRock<sup>™</sup> TMR maq-

MSRP - \$1900 MIKROE-4106





### **Scanner Click**

The TSL3301CL IC, 102 x 1 linear optical sensor array with onboard A/D conversion from AMS-AG.

MSRP - \$2400







netic sensors.

----

MSRP - \$900 MIKROE-4112

"femto" accelerometer.

MIKROE-4108









NC NC CS SCK SCK SDO SDI SDI SDI SDI



Based on the ICM-20948, a high performance, 9-axis MotionTracking<sup>™</sup> IC from TDK Invensense

9D0F 2 Click

SNC (D) INT (D) NC (D)

NC 1

E. 146( 1881

R1 PWR

MSRP - \$1500 MIKROE-4128



Altitude 4 Click

Uses the NPA-201 IC, an absolute pressure sensor with digital output for low-cost applications.

MSRP - \$1200 MIKROE-4127

ENSORS S Page 61



Magneto 6 Click

The GUVC-T21GH UV sensor Uses the TLI493D-A2B6 IC, from GenUV, measures UVC low power 3 dimensional Hall effect sensor with I2C interface, from Infineon.

> MSRP - \$1200 MIKROE-4139



**Pressure 10 Click** Uses the HSPPAD042A IC, a digital pressure sensor, from ALPS ELECTRIC.

MSRP - \$1200 MIKROE-4142







E

Features AK09915, a

complete 3-axis mag-

netic sensor with signal

processing from AKM.

MSRP - \$1200

MIKROE-4231

 $\equiv$ 

KC NC

E SCK

- 100

COMM SEL INT SEL

SOI SOI SOU

6DOF IMU 15 click

Features the ASM-

330LHH, automotive

6-axis MEMS motion

tracking device.

MSRP - \$2400

MIKROE-4330

GND

**Angle 5 Click** 

The MA302, a 12-bit digital contactless angle sensor with ABZ and UVW incremental outputs.

MSRP - \$1800 MIKROE-4270

ENSORS

ഗ



**Pressure 13 Click** The KP229E2701, a miniaturized analog absolute pressure sensor

MSRP - \$1200 MIKROE-4294



MIKROE-4305

### **Force 5 Click**

The FMAMSDXX025W-C2C3, a piezoresistive-based force sensor with a digital output. MSRP - \$5500

MSRP - \$1500 MIKROE-4306

S 3¥3

GND

I,

ADDR SE

VCC SEL

The SHT40, high-accu-

16-bit relative humidity

and temperature sensor.

racy ultra-low-power



### Temp&Hum 14 Click

The TSYSO3, a digital temp. sensor with precise digital output and

MSRP - \$700 MIKROE-4316



10

 $\equiv$ 

SYN RST

GND

PWR

**XSENS MTi-3 Click** 

The MTi-3, a module output-

ting 3D orientation, 3D rate

of turn, 3D accelerations,

and 3D magnetic field.

MSRP - \$39900

MIKROE-4192

XSENS MTI-3

8

GND

RA

C

GP SEL ADDR SEL

IRS PWR

**Thermo 19 Click** 

digital thermometer

The MAX31825, a

with 12-bit temp.

measurements.

MSRP - \$900

MIKROE-4295

GND -

CP1

ar N

...... 23 

### Thermo 20 Click

low power consumption.



### The MS8607, a digital combination sensor providing 3 environmental measurements.

MSRP - \$700 MIKROE-4348



# **PHT Click**



NC NC NC NC NC NC NC NC NC

GND

PWR R1

from Interlink Electronics.

Force 3 Click

MSRP - \$2500

MIKROE-4149

### 6DOF IMU 13 Click

NC C

SCL C SDA C NC C

NC

NC.

3¥3

MSRP - \$3200

MIKROE-4196

The MC6470 with an accelerometer and magnetometer for a 6 DoF sensor solution.





Features the AS5601, 12-bit programmable contactless encoder IC from AMS-AG.



E

HC NC

SDI SDI

3V3

GND

COMM SEL

3:500 400 1 400 R SE 3:501 SPI 12C 0 1

6DOF IMU 14

R1 PWR

SCK GOD E



### Surface temp 2 Click

perature sensor from

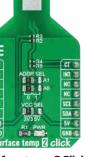
The MiCS-VZ-89TE, an integrated sensor module for indoor air quality monitoring from Amphenol.

IND COS

**Air quality 7 Click** 

Analog Devices. MSRP - \$1600 MIKROE-4266

a 16-bit I2C tem-





### Based on the FSR 400 series 34-00004 single zone Force Sensing Resistor IC

MSRP - \$1500

MIKROE-4204



6DOF IMU 14 Click

The ICM-42688-P, high precision 6-axis MEMS



**Ambient 9 Click** 

The APDS-9160-003, digital proximity, and ambient light sensing sensor from Broadcom Limited.

MSRP - \$900 MIKROE-4197



**Oximeter 3 Click** 

Features the VCN-L4020C-GS08, a fully integrated high-resolution digital biosensor.

MSRP - \$1500 MIKROE-4267

ENSORS S Page 63

Features the ADT7422,

RTD 2 Click The ADS1247, a highly integrated 24-bit data converters with a PGA.

581 FB2

1 C2

R1 PWR

RTD 2 clic

NC

MSRP - \$2400 MIKROE-4282



**Barcode 2 Click** 

The EM3080-W, a barcode decoder chip with superior performance, and low power consumption.

MSRP - \$13900 MIKROE-4195





Hall Current 7 Click The ACS770, a Hall effect-based high precision linear current sensor with 100µ∘ current conductor.

MSRP - \$29° MIKROE-4420





WW 14 TE .te.com

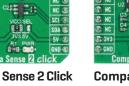
NC

NC

E

NC NC

C NC



MIKROE-4366





The AKO9918C, a 3-axis electronic compass with high sensitive Hall sensor technology.

MSRP - \$1500



**RAQ Click** 

The ZMOD4450, a gas sensor module used to detect typical gases inside refrigeration applications.

MSRP - \$35<sup>0</sup> MIKROE-4385



pH Click

The pH EZO™, offers the highest level of stability and accuracy from AtlasScientific.

MSRP - \$8900 MIKROE-4297





The ADPD188BI module for smoke detection with optical dual-wavelength technology.

MSRP - \$4500 MIKROE-4299



MSRP - \$1900

MIKROE-4558

R6 I-GR6 R3 CT VIO SEL R1000 0000

### **Environment 2 Click** Temp&Hum 15 Click

The SHT40 and SGP40, a The SHT40, high-accuracy ultra-low-power high-accuracy best-inclass SHT relative humidi-16-bit relative humidity ty, and a temp. sensor. and temperature sensor

> MSRP - \$700 MIKROE-4496



10M 

-

NC (

NC

NC (

SCL 🗐 SDA 🚳

5V

GND

ADDR SEL

VCC SEL 3V3 5V

R1 PWR

**VCT Monitor Click** 

The LTC2990, a

MSRP - \$1500

MIKROE-4353

high-performance

temperature, voltage,

and current monitor.

### Probe click Temp Probe Click

The LTC2986, a high

accuracy digital tem-

perature measure-

ment system.

MSRP - \$8900

MIKROE-4301

SV

Features the ZSC31014, a CMOS integrated circuit for highly accurate amplification.

06 04

53 60 FR FG

3- 400 \*\*

Gent Card

pad Cell 🛛 cli

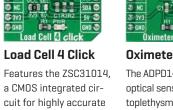
NC O

R4 NC C



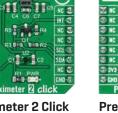
O NC

0 3



3 N





The ADPD144RI, a PPG optical sensor for photoplethysmography detection of blood oxygenation.

MIKROE-4292



**Pressure 14 Click** The ABP2LANT060P-G2A3XX, a piezoresistive silicon pressure sensor.

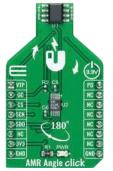
MSRP - \$2900 MIKROE-4424



### Load Cell 5 Click

The AD7780- pin-programmable, low power, 24-bit sigma-deltaADC from Analog Devices.

MSRP - \$2100 MIKROE-4510



### **AMR Angle Click**

Features the ADA4571, an AMR sensor with clean and amplified cosine and sine output signals.

MSRP - \$2400 MIKROE-4561





MSRP - \$1800

### 20 NO R1 PWR **Oximeter 2 Click**







Accel 15 Click The BMA490L, a

high-performance 16-bit digital triaxial longevity acceleration sensor

MSRP - \$900 MIKROE-4501



**ECG/GSR Click** 

The AS7030B, a vital sign sensor with PPG and Electrocardiogram (ECG) operations.

MSRP - \$2700 MIKROE-4500

ENSORS S Page 65



## INTERFACE





RS232 C dick

The MAX3237E, a 3V to 5.5V multichannel RS232,

1 Mbit/s line driver/receiver

from Texas Instruments.

MSRP - \$1500

MIKROE-2897

4 D3

CB

RS232 2 Click



1-Wire I2C Click Converts I2C to 1-wire with DS28E17 1-Wire-

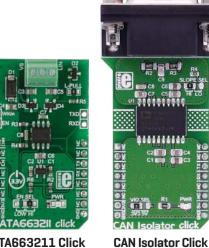
MIKROE-2750

MSRP - \$3900

MIKROE-2627

to-I2C master bridge from Maxim Integrated. MSRP - \$2200

MSRP - \$2600 MIKROE-1387



### ATA663211 Click

LIN transceiver IC designed to handle lowspeed data communication in applications.

MSRP - \$1900 MIKROE-2335



Provides isolated CAN Adds CAN connectivity communication. Data rates with SPI interface. Features SN65HVD230 CAN of up to 1 Mbps. Carries a DB 9-pin male connector. transceiver circuit.

MSRP - \$2100 MIKROE-986





Serves as a receiver in a 4-20mA current loop standard. Converts it into a voltage (0.4-2V).



Easy solution for adding 4-to-20mA industry standard communication

protocol to your design. MSRP - \$2600 MIKROE-1296



ATA6563 Click

Microchip's ATA6563 high-speed CAN transceiver for Classical CAN and CAN FD networks.

MSRP - \$2000 MIKROE-2334

INTERFACE



Page 69



**CAN SPI Click 5V** Adds CAN connectivity with SPI interface. With MCP2551 CAN transceiver circuit.

MSRP - \$2100 MIKROE-988



**Provides Digital Lighting** Interface. With two optocouplers, push button, screw terminal.

MSRP - \$2500 MIKROE-1297



しい

ETH Click

MSRP - \$2400 MIKRDE-971

A THURSDAY AND A

With ENC28J60, a 28-pin,

Ethernet controller with an

digital output 350mA max

8

HATTER A

000

9.9

**MERICANOLOGICA** 

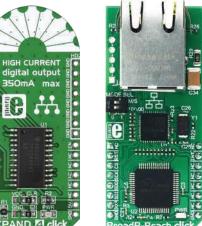
10BASE-T stand-alone

on-board MAC & PHY.



**EXPAND 4 Click** Port expander for high power peripherals with TPCIC6A595 power logic 8-bit register.

MSRP - \$1400 MIKROE-1910



**BroadR-Reach Click** 

For realizing network in

harsh environments that

net-based open network.

require reliable Ether-

MSRP - \$690

MIKROE-2796

1403 8001

- 11

film (Real) (Mar

an of fit and putter

ETH WIZ click

With W5500, a 48-pin,

10/100 BASE-TX stand-

alone Ethernet controller.

Standard RJ-45 connector.

**ETH WIZ Click** 

MSRP - \$1900

MIKROE-1718

T THEE

6

ā





011

**EXPAND Click** 

Expands the number of

input-output lines with

Microchip's 16-bit I/O

expander MCP23S17.

MSRP - \$1200

MIKROE-951

### **USB UART 4 Click**

MIKROE-2810

USB to asynchronous serial data transfer interface. With FT232RL, USB-to-UART interface module. MSRP - \$1390



0.0

THE THE PARTY OF T

EXPAND Click

Expands the number of

input-output lines with

Microchip's 16-bit I/O

expander MCP23017.

MSRP - \$120

MIKROE-1838

Expand 2 Click

**WINNING WINNI** 

20

### RS232 Click

Adds RS232 connectivity with a standard RS232 DB9 port and a MAX3232 IC.

MSRP - \$1500 MIKROE-1582



USB I2C Click With MCP2221 USB-to-UART/I2C converter. Fullspeed USB (12 Mb/s), I2C up to 400 kHz clock rates.

MSRP - \$1390 MIKROE-1985



8 4 8 g

5 8 8 8

한 문 문 문 문 문 한 문 -

ALARASIS C

EXPAND 3 c

**Expand 3 Click** 

8-channel programma-

ble I/O expander from

Maxim Integrated.

MSRP - \$1900

MIKROE-1874

With DS2408, an

i P

00000 00000









**USB UART 2 Click** 

Provides USB isolation

and carries the AD-

UM4160BRWZ USB

port isolator.

MSRP - \$39°

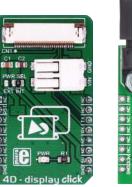
MIKROE-2674



**USB UART Click** 

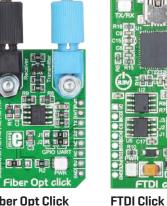
Adds serial UART communication via USB cable. With FT232RL USB-to-UART interface module.

MSRP - \$1390 MIKROE-1203



4D - display Click Offers a mikroBUS<sup>™</sup> interface for controlling 4D Systems gen4 Series intelligent Display Modules.

MSRP - \$900 MIKROE-3044



**Fiber Opt Click** Adds fiber-optic communication with IF-D91 fiber-optic photodiode, IF-E97 fiber-optic LED diode.

MSRP - \$3400

MIKROE-1940

interface converter. MSRP - \$2900 MIKROE-1421



MSRP - \$1600 MIKROE-2872



ATA663254 Click

It is a fully integrated LIN transceiver device with an integrated 5V LDO voltage regulator.



**OBDII Click** 

Tap inside the car diagnostic systems! Features the STN1110 Multiprotocol OBD to UART Interface.

MSRP - \$900 MIKROE-2452

FACE INTER

ণ্ট

7 Page



With FT2232H - dual high speed USB 2.0 to UART/I2C/SPI serial



I2C 1-Wire Click

Performs bidirectional conversions between I2C masters and 1-Wire slave devices with DS2482-800.

MSRP - \$280 MIKROE-1892



**I2C Isolator Click** TI's ISO1540, a lowpower, bidirectional isolator compatible with I2C interfaces.

MSRP - \$1800 MIKROE-1878





# RS485 Click 3.3V

Carries SN-65HVD12 half-duplex, RS-485 transceiver from Texas Instruments.

9849999998

e

SPI Isolator click

SPI Isolator Click

Carries ADuM4154 5kV

for a serial peripheral

interface (SPI).

MSRP - \$2900

MIKROE-2583

digital isolator optimized

8

-

20

CDessesses

nac

8

e

2C Isolator Click

Provides I2C lines and

power isolation for slave

devices with ADM3260

dual I2C isolator.

MSRP - \$2400

MIKROE-2609

**I2C Isolator 2 Click** 

MSRP - \$180 MIKROE-989



MIKROE-925

### RS485 Click 5V

Carries Adds keyboard and the ADM485 differmouse connectivity. With ential line transceiver a standard 6-pin Minifrom Analog Devices. DIN PS/2 connector. MSRP - \$1800

MSRP - \$900 MIKROE-1576

PS/2 Click



A B B C

di ile

SELLILLI.

1111111

FD controller

MSRP - \$2500

MIKROE-2379

and ATA6563 high-

ACP25I7FD a

MCP2517FD Click

With MCP2517FD CAN

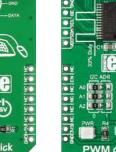
speed CAN transceiver.

1111 100

E

STBY SE

T



### **PWM Click**

For controlling 16 PWM outputs through a single I2C interface. With PCA9685PW IC.

MSRP - \$1490 MIKROE-1898



PWM 2 Click

000000

UNITEEE

- Euu

R7 PWR

RS485 E cli

The Click is intended to be

used as UART to RS422/

RS485 communication

interface.

MIKROE-2821

MSRP - \$2000

RS485 3 Click

XX XX

e

E H

X 6 26

O

20 20 20

THE.

105

5485 B d

Carries MAX3471 half-du-

plex transceiver for lithium

battery-powered RS-485/

RS-422 applications.

MSRP - \$1800

MIKROE-2700

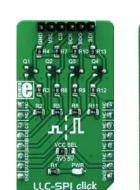
RS485 2 Click

CC SEL

With the LT8500, a 48-Channel LED PWM generator with 12-Bit res. and 50MHz serial interface

MSRP - \$1900 MIKROE-3148





HUU

CINER AND

.....

D1 D2

r i i i

----

C

.

MCP2542 clic

MCP2542 Click

Transceiver with Wake-

Up Pattern. Compliant

with CAN 2.0 and CAN FD.

Microchip's CAN FD

MSRP - \$2000

MIKROE-2299

-----

MODE SEL

LLC-SPI Click Used as the level converter for logic signals. It is perfectly suited for SPI communication.

MSRP - \$900 MIKROE-3298



**UART 1-Wire Click** Designed to convert standard UART or RS232 signals into 1-Wire® signals.

MSRP - \$2200

MIKROE-3340

with galvanic isolation. MSRP - \$56° MIKROE-2864

With CAN controller with an integrated transceiver. High speed operation up to 1 Mb/s.

power isolated RS-485 MSRP - \$2400

MIKROE-2228

000 TITTT

20

(1) (0) 🐸

**RS485 Isolator Click** 

With ADM2682EBRIZ.

a 5 kV RMS signal and

RS485 Isolator

transceiver.

MSRP - \$4900

MIKROE-2673

11

P mikro 10 (0) 10 (0) e MCP25625 clic MCP25625 Click



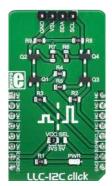




MCP2003B Click

It's a physical interface to automotive and industrial LIN systems with a bi-directional LIN transceiver. MSRP - \$1800

MIKROE-2227



LLC-I2C Click

Used as the level converter for logic signals. It is perfectly suited for the bi-directional I2C communication.

MSRP - \$900 MIKROE-3276

ACE Ш Ц Ľ

ণ্ট

Page 73



Isolated dual transceiver Click - secure and easy UART to RS232 conversion,



Skvwire<sup>™</sup> Click Adapter Click, which hosts NimbeLink/Skvwire<sup>™</sup> cellular modems [using stacking headers]. MSRP - \$1900 MIKROE-2405



Adapter Click Simplifies connection of the add-on boards with IDC10 headers to mikroBUS<sup>™</sup> socket.

MSRP - \$650 MIKROE-1432



r Kall

**Riverdi Click** 

An adapter for

MSRP - \$900

MIKROE-2100

connecting Riverdi

TFT displays to a

mikroBUS™ socket.

......

.......

**Riverdi** clic

ণ্ট



### Shuttle Click The mikroBUS<sup>™</sup> socket expansion board, which allows stacking up to four Click boards<sup>™</sup>.

MSRP - \$800 MIKROE-2880



TOTR

C 3V3

100 (\*\*\*)

An adapter for connecting

any Riverdi TFT displays to

a mikroBUS<sup>™</sup> socket over

the RiBUS connector.

MSRP - \$900

MIKROE-3642

**RiBUS Click** 

### iButton<sup>™</sup> Click Comes with Maxim's DS1990A, a serial number iButton<sup>™</sup> device with a unique 64-bit serial number.

MSRP - \$3500 MIKROE-3045



**USB UART 3 Click** The CP2102N, a highly integrated USB to UART interface, from Silicon Labs.

8\_0 D

1111

SILLIN

MCP2518D Click

The ATA6563, a high-speed

MCP2518FD, CAN FD control-

CAN transceiver and the

ler both ICs by Microchip.

MSRP - \$2500

MIKROE-3060

.......

MSRP - \$1500 MIKROE-3063





And And In 

........

(III) #

PWR

37

technology, by Analog Devices. support, from NXP.

C5

R2 860

5485 4

RS485 4 Click

MSRP - \$3900

MIKROE-3395

The ADM2795E, a dual

channel RS485 driver/receiv-

er, with the ICoupler® isolation

C

### **DALI 2 Click**

It is used for interfacing with the DALI network, and as a compliant with the DALI-2 physical layer requirements.

MSRP - \$2500 MIKROE-2672



A STATISTICS

man tillt -----\$ 🗎 🗎

R1

COMM SEL

-

-----

1 3

212522

375

PWR

**UART I2C/SPI Click** 

The SC16IS740, 64 bytes

FIFOs, and IrDA SIR built-in

of transmit and receive

MSRP - \$2400

MIKROE-3349

ATA6570 Click Uses the ATA6570. a standalone high speed CAN transceiver IC from Microchip.

MSRP - \$2300 MIKROE-2900





**Dual LIN Click** 

It's a dual transceiver

for LIN with the TLE-

7268SKXUMA1 from

Infineon.

MIKROE-3870

MSRP - \$1200

NC NC NC 0.21 eINK Click -WD

Click board adapter

MSRP - \$700

MIKROE-3683

for connection of the

e-paper displays to the

MCU over SPI interface.

NC RST CS SCK SD0 SD1 3V3 CND NC INT NC NC SCL SDA R4 R3 R2 ADDR SEL AZELD () A1 DD () A0 DT () 0 1 R1 PWR 12C to SPL C

**I2C to SPI Click** It's based around two SC18IS602B, an I2C-bus to SPi bridge from NXP.

MSRP - \$1200 MIKROE-3743

VCC TX3 RX3 GND

1000

VCC TX1 RX1 RX1 GND

MG NG

W HC

T NC T 3V3

DISTRICT (SISTER)

R8 R7 R6 R9

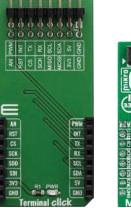
1111111

111111 R2 R4 R5 R3

VCC SEL SV3 SV R1 PWR

VCC TX4 RX4 10.00

VCC TX2 RX2



**Terminal Click** The stackable mikroBUS™ extension board that can be used for testing or com. surveillance.

MSRP - \$700 MIKROE-3745



**Matrix RGB Click** Powered by a 32-bit FT900 MCU designed specifically for powering 16x32 RGB LED matrices.

MSRP - \$2400

MIKROE-2239

MSRP - \$700 MIKROE-3878

HART MILY C **UART MUX Click** It's the SN74LV4052A. a Dual 4-Channel Multiplexer and

Demultiplexer.



LIN Click It's the TLE7259-3GE, LIN transceiver with integrated wake-up and protection features.

MSRP - \$1200 MIKROE-3816





M-Bus Master Click It's the TLE7259-3GE,

LIN transceiver with integrated wake-up and protection features.

MSRP - \$1500 MIKROE-3880





Page 75





RS232 SPI Click It's a SPI to RS232 interface converter with two ICs - MAX3100 and MAX3232.

MSRP - \$2200 MIKROE-3912



FT click Features FT 6050 Free Topology Smart Transceiver from Dialog Semiconductor.

MSRP - \$3900 MIKROE-3929







The TCA9546A, a quad

bidirectional translat-

ing switch controlled

via the I2C bus.

MSRP - \$700

MIKROE-4048



Features MCP2518FD, CAN FD controller and ATA6563 CAN transceiver.

Ш

AC

Ш

Ц

Ľ

ণ্ট



### RS4856 click

Infenion.

MIKROE-3992

MSRP - \$1500

With the THVD1329DT a half-duplex RS-485 communication with integrated surge protection.

MSRP - \$1600 MIKROE-3993



### **CAN FD 3 Click**

Features TLE9251V, With the CD74HC4067, a a High-Speed CAN high-speed CMOS logic transceiver from 16-channel analog multiplexer/demultiplexer.



STB

NC NC

M NC

S NC

9 3V3

Infineon.

MIKROE-3933

MSRP - \$2100

Features TLE9252V

high speed CAN net-

THE FLORE

VGC SEL

Analog MUX Click

MUX click

NC.

INC.

AL NC

er 3V3.

MSRP - \$700

MIKROE-4111

NC 1

NC

NC = 5V = GND =



Uses the TCA9545A, a 4-channel, bidirecwork transceiver from tional translating I2C switch.

1 100

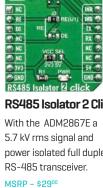
MSRP - \$700 MIKROE-4094



RS485 Isolator 2 Click

power isolated full duplex

MIKROE-3863





### **CAN FD 4 Click**

Features the NC-V7344D10R2G, a Controller Area Network (CAN) transceiver.

CAN FD Clic

1135

RC

NC

GND

MSRP - \$700 MIKROE-4107

NC

C CND



row, 20-pin, 100mil female extension header MSRP - \$1200

MIKROE-4123





**DMX Click** 

MSRP - \$2900

MIKROE-4130

With the ADM2862E

- Power Isolated RS-

485 Transceiver and

PIC18F26K42 MCU.





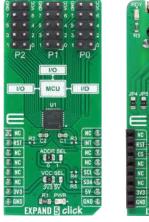
Monarch Adapter Click RS485 5 Click

Connects a compatible Mon- Equipped with the arch Go LTE-M modems from MAX485, low-power, Sequans to a development slew-rate-limited board or prototype device.

MSRP - \$800 MIKROE-4057

MSRP - \$1600 MIKROE-4156

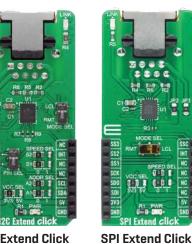
transceiver



### **EXPAND 5 Click**

Uses the TCA6424A IC, low-voltage 24-bit I2C, and SMBus I/O expander.





**I2C Extend Click** Based on the LTC4331, which is a point-topoint compatible I2C

MIKROE-4207

MIKROE-4184

based on LTC4332, a 2MHz point-to-point slave device extender. MSRP - \$1900

SPI Extend Click is



**M-Bus Slave Click** 

ANH CO O VIN

1111 122

IIII-ant

VCC SEL

R1 PWR

**Single Wire CAN Click** 

Single Wire CAN o

4-000-000

86**181**8

 $\equiv$ 

KC

MDO

€ MD1

R NC

NC

NC NC

S 3V3

CND 🖉

Equipped with the TSS721A, a single chip transceiver.

MSRP - \$1500 MIKROE-4137



**RF Switch Click** 

Uses the MASWSS0115 IC, a GaAs PHEMT MMIC single-pole, doublethrow (SPDT) switch.

MSRP - \$1400 MIKROE-4168

ACE Ш Ц Ľ

ণ্ট

Page 77



JP2 J

SPEED S

Based on the NCV7356D1R2G, a Single Wire CAN transceiver

MSRP - \$900 MIKROE-4225



I2C MUX 4 Click Based on the LTC4306, a 4-channel, 2-wire bus multiplexer with bus buffers.

MSRP - \$700 MIKROE-4240





5 4/5

2 3 = 2 3 .

=...=j0 1(= =j0 1(=·

EEPROM

I/O IC PWM

NC

2 INT

P2

 $\mathbf{E}$ 

NC NC

RST

B NC





2 10 10

voltage eight bidirectional expander with EEPROM, translating switches with and 8 independently conan active-low reset input. fig. 8-bit PWM outputs.

MSRP - \$2400 MIKROE-4244

C3 (910)

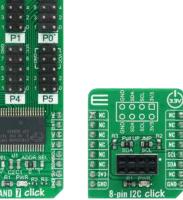
MSRP - \$1200

MIKROE-4336

E

I NC

E BI



8-pin I2C Click

The CY8C9540A, 40-bit I/O A breakout board that simplifies the connection of MFI devices to the mikroBUS<sup>™</sup> socket.

NC

NC

NC NC NC NC SCL SDA SDA SV GND

MSRP - \$700 MIKROE-4241



**CAN FD 5 Click** Based on the

UJA1162A, a 'selfsupplied' high-speed [HS] CAN transceiver. MSRP - \$2100

MIKROE-4286





I2C MUX 5 Click Based the LTC4306, a 4-channel, 2-wire bus multiplexer from Analog Devices.

C2 C1 ADDP SE

O NC VCC SEL AT THE SCL C O NC THE AND A CONTRACT SOA CO O SV3 SV3 SV 0 1 SV

R1 PWR

12C MUX 5 cli

NDY

D NG

O BN

O NC

ALERT

GHD

MSRP - \$1700 MIKROE-4453



MSRP - \$1200

MIKROE-4415



SPI Isolator 2 Click

The ISO7741, a high-perfor- CPC5902 - a dual mance quad-channel digital optically isolated biisolator capable of galvanic directional logic-bus isolation up to 5000Vrms. repeater.

> MSRP - \$1200 MIKROE-4467



# **Fingerprint 3 Click**

An adapter with socket for the capacitive fingerprint sensor module scanner.

MSRP - \$6º MIKROE-4265



MIKROE-4331

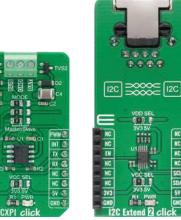
### ISO 9141 Click

NC

Ð.

RX C

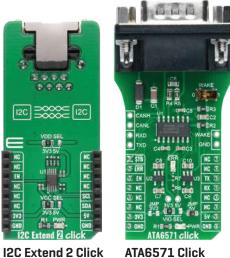
The L9637, a monolithic bus driver designed for serial comm. in automotive diagnostic applications. MSRP - \$700



### **CXPI Click**

The BD41000AFJ-C, a The PCA9615, a Fasttransceiver for the Clock Ex- Mode Plus (FM+) I2C tension Peripheral Interface bus buffer from NXP. (CXPI) communication.

> MSRP - \$1700 MIKROE-4419



A standalone highspeed CAN FD transceiver up to 5 Mbit/s from Microchip.

MSRP - \$2300 MIKROE-4381



### RS232 Isolator 2 Click

Uses the ICL3221, a 3.3V powered RS232 transmitter/receiver that provides ±15kV ESD protection.

MSRP - \$19° MIKROE-4536



MSRP - \$3700 MIKROE-2851





TX RX TX RX TX P



### 2/3-Port EtherCAT® Slave Controller with

Integrated Ethernet PHYs.

MSRP - \$2700 MIKROE-4494

**I2C Isolator 3 Click** 



SPI

Multi-protocol adapter, support for SPI I2C and UART interface, ideal for testing and validation.

MSRP - \$650 MIKROE-4439



**ETH 3 Click** 

Uses the LAN9250, a fully-featured high-performance 10/100 Ethernet controller.

MSRP - \$3900 MIKROE-2850

INTERFACE

Ŷ

Page 79



# **DISPLAY &** LED





### **OLED B Click**

With a 96 x 39px blue monochrome passive matrix OLED display and SSD1306 controller.

MSRP - \$2400 MIKROE-1650

MSRP - \$2900

**OLED W Click** 

Carries a 96x39px

white monochrome

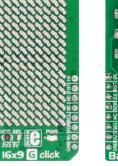
passive matrix OLED



### **Light Temp Click**

The AL1782, a dual-channel PWM dimmable linear LED driver by Diodes Incorporated.

MSRP - \$1700 MIKROE-3399



16x9 G Click

MSRP - \$3400

MIKROE-2520



### **BarGraph 3 Click**

With a green 16x9 LED Uses a single 74HC595 IC, matrix and IS31FL3731 a tri-state, serial-in, paralaudio modulated malel-out, 8-bit shift-register trix LED driver. with output latch.

> MSRP - \$1500 MIKROE-3264





# **OLED C Click**

With PSP27801 OLED display and SSD1351 OLED driver with controller. Various color support.

MIKROE-1585

display. MSRP - \$2400 MIKROE-1649





LCD mini Click

Displays 2x16 monochrome characters on an LMB162XFW LCD display.

MSRP - \$1900 MIKROE-2453



OSD Click

With MAX7456 single-channel monochrome OSD module with integrated EEPROM memory.

MSRP - \$3500 MIKROE-1366

 ${\displaystyle \bigcirc}\\{\displaystyle \amalg}$  $\propto$ DISPLAY

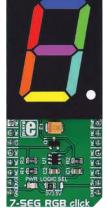




4X4 RGB Click

With a matrix of 16 WS2812 RGB LEDs a MCP1826 low dropout regulator.

MSRP - \$1900 MIKROE-1881



7-SEG RGB Click

Carries a full color single 7 segment digit display. 16,581,375 color combinations.

MSRP - \$2900 MIKROE-2734





7ser **7seq Click** 

2-digit seven-seg display. With two 74HC595 8-bit

serial-in, parallel-out

shift registers.

MSRP - \$1000 MIKROE-1201

### 16x12 G Click

Carries a 16x12 LED display and the IS-31FL3733 matrix driver with 1/12 cycle rate.

MSRP - \$3000 MIKROE-2758

### 8x8 B Click

It features MAX7219 8-digit LED display driver module as well as 64 BLUE LEDs. MSRP - \$180 MIKROE-1307

Bx8 C click 8x8 G Click

000000000

C Barre

ALALAR .

0000000000

411111

US C3 C11 C13 U4 2

\*\*\*\*\*\*

7x10 C click

With a matrix of 70 green

LEDs driven by a pair of

8-bit serial-in, paral-

MSRP - \$1500

MIKROE-2705

lel-out shift registers.

7x10 G Click

U2

00000 00000

CLEGET I

DUUIU

R12 PWR

0000000000

0000000000 000000000

C3 R11 R13

turner (

ZxIO E click

With a matrix of 70 blue

LEDs driven by a pair of

8-bit serial-in, paral-

lel-out shift registers.

MSRP - \$1500

MIKROE-2789

THURSDAY

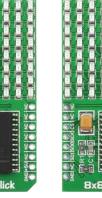
-(10)

7x10 B Click

0 

### It features MAX7219 8-digit LED display driver

module as well as 64 GREEN LEDs. MSRP - \$1500 MIKROE-1306





...

00

00

TANATA STATE

11111111

7x10 R Click

7xIO R click

With a matrix of 70 red

LEDs driven by a pair of

8-bit serial-in, paral-

lel-out shift registers.

MSRP - \$1500

MIKROE-1993

0000000

@ @

00

...

11111111

### 8x8 R Click

MIKROE-1295

It features MAX7219 8-digit LED display driver module as well as 64 RED LEDs. MSRP - \$1500



0000000

000000000

222222222

INTERNA I

7x10 Y Click

00000000 

......

C3 R11 R13

1111111 1111111

7xIO Y clic

With a matrix of 70 vellow

LEDs driven by a pair of

8-bit serial-in, paral-

lel-out shift registers.

MSRP - \$1500

MIKROE-2790

HILLI

EWF

00000000

000000

It features MAX7219 8-digit LED display driver module as well as 64 YELLOW LEDs. MSRP - \$1500

MIKROE-1294





BarGraph clic

With 10-segment JSB-

display and two 74HC5

95 8-bit shift registers.

**BarGraph Click** 

R102510Z light bar

MSRP - \$1200

MIKROE-1423

### **LED Flash Click** Functions as a high power LED flash, and carries the CAT3224



MSRP - \$1900

MIKROE-2269



**eINK Click** 

With an adapter for connecting eINK display and parallel-OUT displays, with a 24pin shift register 74HC595. ribbon cable.

> MSRP - \$5900 MIKROE-2659

ADDADDA 

RECOR

### Led ring R Click

LEDs driven by four

It is a powerful flash/ torch Click, featuring the MIC2870 from Microchip.

ri n

PWR

**LED Flash 2 Click** 

LED Flash E clic

R4 MER

RIE

MSRP - \$1900

MIKROE-2830

STOR R6

B=ER7 RS Hall CALL RE

DED R9

MSRP - \$16°C MIKROE-2153

flash LED driver. MSRP - \$3400 MIKROE-2479





### **EVE Click**

Brings visually stunning graphics even to 8-bit MCUs, with FT800Q graphics controller.

MSRP - \$3900 MIKROE-1430



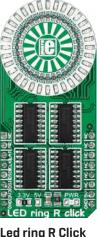
### **Matrix G Click**

Matrix text display with two green 5x7 matrices and two MAX7219 8-bit LED display drivers.

MSRP - \$2900 MIKROE-2246

Ш  $\propto$ АY DISPL

Page 85



With a ring of 32 red

74HC595 serial-in, parallel-out shift registers.



AlphaNum R Click With a dual character red LED 14-segment display and two TLC5926 16-bit shift registers.

MSRP - \$1500 MIKROE-1864



**AlphaNum G Click** 

With a dual character green LED 14-segment display and two TLC5926 16-bit shift registers.

MSRP - \$1500 MIKROE-1851





.....

E T

R click

-100

2 (m)

ot-Matrix R click

**4Dot-Matrix R Click** 

Displays 4 char. of 5x7

dot size. With SLO2016

module and MCP23017

I2C port expander.

MSRP - \$5900

MIKROE-2706

C

.

0

٥Y

Matrix

**Matrix R Click** 

Matrix text display with

two red 5x7 matrices

LED display drivers.

MSRP - \$2900

MIKROE-2245

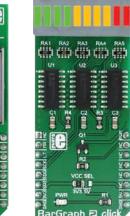
44

and two MAX7219 8-bit



a switch and a full color organic LED display. MSRP - \$9900

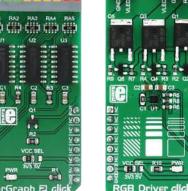
MIKROE-2449



### **BarGraph 2 Click**

The 74HC595, 8-bit serial-in, parallel-out shift registers with output latches.

MSRP - \$1900 MIKROE-3021



### **RGB Driver Click**

The NCP5623B, a triple output RGB LED driver, controlled via the I2C interface, from ON Semiconductors.

1 1 1 1 1 1 1 1 1 1

Section and section for the

R3 R2 R4 41

UT-L 7-SEG R click

UT-L 7-SEG R Click

With two SMD ultra-thin

LED 7-SEG displays and

MAX6969 constant-cur-

111

NUBR5

rent LED driver.

MSRP - \$4400

MIKROE-2034

- 0.56

DIGIT HEIGHT

MSRP - \$1500 MIKROE-3078



UT-M 7-SEG R click

UT-M 7-SEG R Click

1.01

Add a double 7

emitting color.

MSRP - \$20<sup>0</sup>

MIKROE-2746

segment display to

your next project. RED

26

101 86

### LED Driver 5 Click

The TPS54200, a synchronous The AL1781, a sinbuck converter designed to drive monochrome, color, and IR LED arrays by TI.

MSRP - \$1500 MIKROE-3297



ale-channel PWM dimmable linear LED driver by Diodes Incorporated.

MSRP - \$1500 MIKROE-3400



PEPEBBANAN

000

ULTRA THIN 7-SEGMENT

R3 R2

UT-S 7-SEG R click

UT-S 7-SEG R Click

For displaying charac-

ters on two 7 segment

displays. RED emitting

color.

MSRP - \$20°C

MIKROE-2840



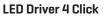
1 HOT SURFACE LED Driver E di

### **LED Driver 3 Click**

The NCP5623B, a triple output RGB LED driver, controlled through the I2C protocol.

MSRP - \$1500 MIKROE-2950





The TPS61160A, a white LED driver with PWM brightness control.

MSRP - \$1500

MIKROE-3037

MSRP - \$3500 MIKROE-4115

T NC

NC NC

With 4 high-power white LEDs. Carries Microchip's MCP1664, a high-voltage step-up LED driver.



**LED Driver 7 Click** 

SDA

HI II

.....

The AL1781, a sin-

MSRP - \$2300

MIKROE-3917

gle-channel PWM dim-

mable linear LED driver

by Diodes Incorporated.

HULL PWR

NC NC

F HC CS SCK

E SOI 373 GND

LCD Mono Click The LSO13B7DH03 LCD has an active-matrix memory liquid crystal display mod-

ule with 128 x128 panel. MSRP - \$65<sup>01</sup> MIKROE-3789

MSRP - \$2600 MIKROE-2548



CAUTION HOT SURFA R1 PWF MCPI664 clic MCP1664 Click







**LED Driver Click** 

Carries MCP1662 high-voltage step-up voltage driver from Microchip.

MSRP - \$1500 MIKROE-2676



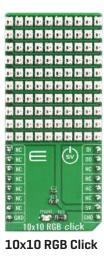
LED Driver 2 Click

Carries the MCP1643 · LED constant current regulator, made by Microchip.

MSRP - \$1500 MIKROE-2807

 ${\displaystyle \bigcirc}\\{\displaystyle \amalg}$  $\propto$ ¥ DISPL

87 Page



(sv)

1

-----

A matrix of 100 "intelligent" RGB elements - WS2812 an intelligent control LED light source.



**UVC Light Click** With ultraviolet LEDs with 275nm wavelength for measuring exact dose of UV radiation.

MSRP - \$3900 MIKROE-4177



**Dot Matrix R Click** 

Based on a four-digit dot matrix display module, labeled as HCMS-3906.

MSRP - \$5500 MIKROE-4169





### **LED Driver 8 Click**

The PCA9957, a daisy-chain SPI compatible 4-wire serial bus controlled 24-channel LED driver.

MSRP – \$7<sup>00</sup> MIKROE-4268

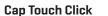
DISPLAY & LED



HUMAN MACHINE INTERFACE







A capacitive touch sensing button, integrated on a Click board™.

> MSRP - \$1600 MIKROE-2888

> > B

D

(1)

With 4 capacitive pads

powered by Microchip's

touch QTouch® controller.

ATtiny817. Integrated

MSRP - \$1600

MIKROE-2474

MSRP - \$1500 MIKROE-3202





sensing button, which features the CAP1166.

MSRP - \$1500 MIKROE-2964



TouchKey 3 Click Equipped with advanced

capacitive sensors, based on the proprietary QTouch® technology.

MSRP - \$1900 MIKROE-2405



0

F

TO TI T2 T3 T4

SENSITIVI

**Cap Extend 3 Click** 

With four capacitive sen-

sor pads that can sense

touch through a variety

of different materials.

MSRP - \$1600

MIKROE-2474

4

5

Cap Extend E clic



A capacitive touch









SwipeSwitch Click

The IQS266, a trackpad controller circuit, featuring ProxSense® and IQ Switch® technologies, from Azoteq.

TC from Azoteq. MSRP - \$1500 MIKROE-3677

The IQS263B, ProxSense®

IC, a 3-channel projected

capacitive proximity and



**CAP Wheel Click** 

The IQS333, ProxSense® IC, a 9-channel projected capacitive proximity and TC from Azoteq.

MSRP - \$1500 MIKROE-3203

HUMAN MACHINE INTERFACE



Page 91



# SAML Touch Click

The ATSAML10, an ultra-low power 32-bit ARM® Cortex® MicroController Unit (MCU) from Microchip. MSRP - \$1500 MIKROE-3414



TouchKey 4 Click

A capacitive touch sensing button, with the advanced touch/ proximity sensor IC.

MSRP - \$1500 MIKROE-2965





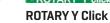
**Tamper Click** 

Equipped with SDS001, a low profile side-actuated detect switch.

MSRP - \$900 MIKROE-2551

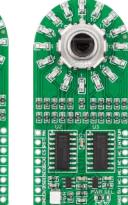
Cal 1





With a 15-pulse incremental rotary encoder with detents, surrounded by a ring of 16 yellow LEDs.

MSRP - \$1200 MIKROE-1825



Jh

utton PLAY click

sensor display.

MSRP - \$2100

MIKROE-3327

### **ROTARY B Click**

With a 15-pulse incremental rotary encoder with detents, surrounded by a ring of 16 blue LEDs. MSRP - \$1200

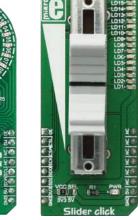
MIKROE-1824



**Button PLAY Click Knob G Click** 

It is equipped with the Combination of high-CTHS15CIC05ARROW. quality quadrature rotary encoder, and a LED ring of a capacitive touch 24 individual green LEDs.

MSRP - \$1700 MIKROE-3299



**Slider Click** 

Features a mechanical slide action potentiometer.

MSRP - \$2400 MIKROE-2702

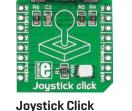


**Tamper 2 Click** 

Levered D2HW-A221D switch. Outputs signal in both positions pressed and released.

MSRP - \$1500 MIKROE-2552





5831351

A smart navigation key concept based on contactless, magnetic movement detection.

MSRP - \$2200 MIKROE-1506



**Keylock Click** 

MIKROE-2564

Carries a processed sealed key lock mechanism that can be set in 3 different positions.

MSRP - \$2500

MSRP - \$1600 MIKROE-1446



With a 15-pulse incremental rotary encoder with detents, surrounded by a ring of 16 green LEDs.

> MSRP - \$1200 MIKROE-1822

TATER OF 4111111

BOTARY G click

**ROTARY G Click** 

mi



### **ROTARY O Click**

With a 15-pulse incremental rotary encoder with detents, surrounded by a ring of 16 orange LEDs.





With a 15-pulse incremental rotary encoder with detents, surrounded by a ring of 16 red LEDs. MSRP - \$1200

MIKROE-1823



The Click has a 4 button keypad. It allows multiple key presses and has a debounce circuit.

2x2 Key click

2x2 Key Click

MSRP - \$900 MIKROE-2152



### 4x4 Key Click

Carries a 16 button keypad. Allows for multiple key presses at the same time.

MSRP - \$1100

MIKROE-1889

MSRP - \$990 MIKROE-2040



**Button G Click** 

000



•

.

Capacitive sensing module. Input-human body capacitance, output - the real time sensor information.

MSRP - \$2500



**COUNTER Click** 

Counter Click carries an LS7366R 32-bit quadrature counter.

MIKROE-1917



**IR gesture Click** 

Enables contactless gesture recognition. With ambient light and proximity sensing capabilities.

MSRP - \$1600 MIKROE-2086

HUMAN MACHINE INTERFACE



93 Page



6

G clic



**Button R Click** 

A single pushbutton - transparent, 6.8mm in diameter, with a red LED backlight.

MSRP - \$990 MIKROE-1901



**Cap Extend Click** With SX8633, capacitive button touch controller. 12 pins for connecting capacitive inputs.

MSRP - \$1800 MIKROE-2238



OWER dellow

Takin Pr - 1995

**Thumb wheel Click** 

tary sprocket connected

With a 10-position ro-

to a 1-Wire 8-Channel

Addressable Switch.

MSRP - \$2900

MIKROE-2366

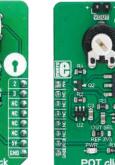
1000 E.

mly s



**Keylock 2 Click** Uses SK13AEG13 switch keylock from the company NKK Switches.

MSRP - \$28° MIKROE-3471



### POT Click

The MCP1501, a precision voltage Microchip. MSRP - \$1200 MIKROE-3402



TouchClamp Click

With NXP's MPR121

proximity capacitive

MSRP - \$900

MIKROE-2294

touch sensor controller.

7 plated holes for clamps.

reference IC from



### ProxFusion<sup>®</sup> 2 Click

The IQS621, a multifunctional sensor with the ambient light (ALS) from Azoteq.

tick c

Thumbstick Click

A high precision input

device with a dual axis,

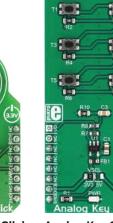
spring return and push-

button enabled joystick.

MSRP - \$20°

MIKROE-1627

MSRP - \$900 MIKROE-3205



R1 PWR

**Touchpad Click** 

Capacitive touch

by Microchip's

MSRP - \$1500

MIKROE-1995

input device driven

MTCH6102 controller.

Touchpad click

### **Analog Key Click**

The KMR2 series KMR221 tactile buttons are high-quality SPST switches produced by CKSwitches.

MSRP - \$1400 MIKROE-3409



as 3006.2111. MSRP - \$990 MIKROE-3262



B

TouchKeu c

**TouchKey Click** 

It has four capaci-

tive pads powered

pad detector IC.

MSRP - \$1200

MIKROE-1906

by TTP224, a touch-

**Button Y Click** Designed with the high-quality, single-pole, single-throw (SPST) tactile switch labeled





-Ren Pave

**Button ALARM Click** 

With the CTHS15CI-

CO5ALARM , a capac-

itive touch sensor

display.

MSRP - \$2100

MIKROE-3763

### Vibro Motor 2 Click HAPTIC Click

With the ERM motor. Uses the DMG3420U MOSFET to drive it.





\*\*\*\*\*\* **Cap Touch 5 Click** 

MSRP - \$1500 MIKROE-3786

(10) (11) **Vibro Motor Click** Features a compact size Eccentric Rotating Mass (ERM) motor, labeled

as C1026B002F. MSRP - \$1200 MIKROE-2826

HAPTIC clic

With DRV2605 Haptic

Driver for ERM and LRA

vibration motors. Over



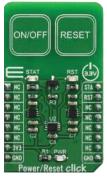


R2 R6 Hour In (intres **Holin** E RST CONC NC NC AD AD dim ADDR SE AG 1 E D A1 1 E D VCC SEL NC ( SCL ( (TH HC E NC SDA D 3V3 R1 PWR GND

**Joystick 2 Click** 

With a SKRHABEO1, a 4-direction joystick switch with Center-push Function.

MSRP - \$1500 MIKROE-3711



**Power/Reset Click** 

IT's the QT1011, digital burst mode charge-transfer sensor – detects near proximity or touch.

MSRP - \$700 MIKROE-3771







min 

**Fingerprint Click** It carries the GTS-511E2 module, the thinnest optical touch fingerprint sensor in the world.

MSRP - \$5500 MIKROE-1722



Slider 2 Click Utilizes the PTA3043, a linear, high-grade, 10K potentiometer

MSRP - \$2000 MIKROE-3301







The MCP1541, a precision voltage reference IC from Microchip is used to provide the voltage of 4.096V.

MSRP - \$1200

MIKROE-3325

mg 2





**TouchPad 3 Click** 

Features the MTCH6301, a turnkey capacitive touch controller.

MSRP - \$1100 MIKROE-4382



POT 3 Click The MCP1501, a

Microchip.

MIKROE-3691

MSRP - \$2500

precision voltage reference IC from



8

7

6

5

ProxFusion & click

MSRP - \$1200

MIKROE-4469

3

2

1

**ProxFusion 3 Click Fingerprint 2 Click** 

Features the IQS2692A, The A-172-MRQ, a 2D caan 8-channel ProxFusion® pacitive fingerprint sensor capacitive touch and capable of storing up to proximity controller. 24 different fingerprints.

MSRP - \$4500 MIKROE-4119



Vibro Motor 3 Click

Features the G0832022D, a coinsized linear resonant actuator (LRA).

MSRP - \$1500 MIKROE-4356



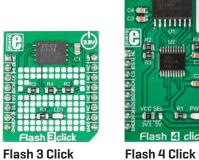
### HAPTIC 2 Click

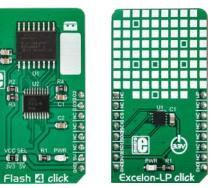
The LC898302AXA, a motor driver dedicated to LRA and ERM applications.

MSRP - \$700 MIKROE-4452

STORAGE







**Excelon-LP Click** 

Equipped with the CY-15B108Q, a serial ferroelectric (FRAM) module with 8 Mbit density.

MSRP - \$2500 MIKROE-3104



### Flash 3 Click

With ISSI's IS25LP128 IC Carries the S25FL512S, a 512 with 128 Mbit capacity. 50MHz at Normal, 133MHz Mbit SPI Flash memat Fast Read speeds. ory module.

MSRP - \$1200 MIKROE-2374



### FRAM 2 Click

With CY15B104Q 4-Mbit (512K x 8) serial F-RAM from Cypress. 100 trillion (10^14) read/writes.

MSRP - \$1900 MIKROE-2768



**EEPROM Click** 

MSRP - \$800

MIKROE-1200

MSRP - \$2500

MIKROE-3191



### **EEPROM 2 Click**

With 24C08WP - a highly reliable, high performance CMOS technology serial 8K EEPROM. STMicroelectronics.

> MSRP - \$1800 MIKROE-1909



MAC Address click **MAC Address Click** A unique node address. Carries 24AAO25E64 2Kb

PWR SEL RI PWR

5000 Ra Real

I'C ADD SE

Serial EEPROM with EUI-64<sup>™</sup> node identity. MSRP - \$900

MIKROE-2733



microSD Click

With a microSD card slot for microSD cards used as a mass storage media for portable devices.

MSRP - \$1600 MIKROE-924

STORAGE



Page 99

With M95M02-DR DIP-8 socket EEPROM chip with 256 KB of memory from



**EEPROM 3 Click** 

With AT24CM02 DIP-8 socket EEPROM chip with 256 KB of memory from Microchip. MSRP - \$1400

MIKROE-1989



EERAM 3.3V Click

With 47L16 EERAM, a 16Kbit SRAM with EE-PROM Backup from Microchip.

MSRP - \$1400 MIKROE-2728



DEATERS . IN

FERAMENIC

**EERAM 5V Click** 

With 47C16 EERAM,

a 16Kbit SRAM with

EEPROM Backup from



### Flash 5 Click

Based on the W25N01GVZEIG/IT (1G-bit) Serial SLC NAND Flash Memory.

MSRP - \$900 MIKROE-3780



MSRP - \$900

MIKROE-3817

### **FRAM 3 Click**

Uses the MB94R330, which is an FRAM (Ferroelectric Random Access Memory].

NC

NC C

GND

H.

P

00000000

RoHS

22×2 2×

Flash click

With EN25080B - 8Mb

serial Flash memory

quency up to 75MHz.

module. Clock fre-

MSRP - \$1000

MIKROE-1199

**Flash Click** 

FLASH E click

Flash 2 Click

SST26VF064B

MSRP - \$1200

MIKROE-2267

It carries Microchip's

flash-memory module

with 64 Mbits capacity.

minn

<u>uuuu</u>

Memory module based

Mbit SPI Flash memory

module, from Cypress.

ME NC

CS CS

T SOK

MSRP - \$2500 MIKROE-3823



### Semper Flash Click

Provides 1 Mbit of on the S25HS512T a 512 ory, via Microchip's 23LC1024.

> MSRP - \$1500 MIKROE-1902



### **SRAM Click**

additional SRAM mem-





26VF064B, a 64 Mbit Serial Quad I/O flash device from Microchip.

> MSRP - \$1390 MIKROE-2828



tith nett, net

Dual EE click

VCC SEL PWR

**Dual EE Click** 

Contains 2 EEPROM

ICs onboard - the

AT24CM02, an I2C

serial EEPROM.

MSRP - \$1800

MIKROE-3762

HC HC HC HC

NC NC NC NC NC NC

THE STORE

100 R2 R3 (11

MRAM click

Uses the MR25H256

a 256 kilobits serial SPI

MRAM memory module

from Everspin company.

**MRAM Click** 

MSRP - \$1800

MIKROE-2914



### **EERAM 2 Click**

A static RAM [SRAM] memory Click board" with hidden EEPROM backup.







### MRAM 2 Click

SRAM 2 Click Based on ANV32A62A SRAM memory from Anvo-Systems

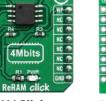
> MSRP - \$1900 MIKROE-4232

MB85RS256A module.

FRAM click FRAM Click

256K (32,768 words x 8 bits) of Ferroelectric Random Access Memory with

MSRP - \$1500



C1



EEPROM 2 click **EEPROM 4 Click** 

4D 69 6B 72 6F 45 6C 65 6B 74 72 6F 6E 69 6B 61 07 D1

COC SEL

R28008

Ratint

840

(IN) R4

C3 00 12 00 05 20

PWR

An EEPROM memory medium with the capacity of 256KB.

> with 4 Mbits of data. MSRP - \$1800



**ReRAM Click** 

E R2

**Resistive Random Access** Memory module which contains the cell array

MIKROE-1486





Dresden.

MIKROE-4178

MSRP - \$1500



Features the MR10Q010, 1Mb Quad Output High-Speed Serial SPI MRAM memory.



### Semper Flash 2 Click The S25HL512T, a 512 Mbit SPI/QSPI Flash memory module, from

MSRP - \$2500 MIKROE-4028

Cypress.



### Flash 6 Click

The W250128JV array is organized into 65,536 programmable pages of 256-bytes each.

MSRP - \$700 MIKROE-4067

RAGE STO



Page 101



### SRAM 3 Click

The ANV32AA1WDK66, a 1Mb serial SRAM with a non-volatile SONOS storage element.

MSRP - \$1900 MIKROE-4293



**EEPROM 6 Click** 

The DS28EC20, a 20480-bit EEPROM organized as 80 memory pages of 256 bits each.

MSRP - \$900 MIKROE-4296







The CY14B101J, a

1-Mbit nvSRAM orga-

nized as 128K words

of 8 bits each.

MSRP - \$2400

MIKROE-4441

0

8888

RAM

0000

RI PWR

NVSRAM 2 C

nvSRAM 2 Click

the CY14B101Q, a

1Mbit nvSRAM orga-

nized as 128K words

of 8 bits each.

MSRP - \$2400

MIKROE-4423

NC SI NC SI

Flash 7 Click

With the GD25LQ16C a high-performance 16Mbit SPI NOR Flash Memory solution.

MSRP - \$900 MIKROE-4440

STORAGE



EEPROM 7 Click

The 25CSM04, a 4-Mbit SPI Serial EEPROM with a 128-bit serial number and write protection mode.

MSRP - \$1200 MIKROE-4421



### **EEPROM 5 Click**

Features the M95M04, the 4Mbit electrically erasable programmable memory.

MSRP - \$900

MIKROE-4422



nvSRAM 3 Click

Features the CY14B101I a 1-Mbit nvSRAM organized as 128K words of 8 bits each.

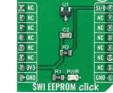


### nvSRAM 4 Click

The CY14B101PA, a 1-Mbit nvSRAM with a fully-featured real-time clock.

> MSRP - \$2900 MIKROE-4482

# MISCELLANEOUS



Ŵ

The AT21CSO1, a singlewire serial EEPROM with a, factory-programmed 64bit serial number.

MSRP - \$700 MIKROE-4521



### SWI EEPROM Click







Secure Click

with secure hard-

MSRP - \$900

MIKROE-2522

With ATECC508A cryp-

tographic coprocessor

ware-based key storage.



CUR

SI DE 1

Secure B click

Microchip's ATAES132A, a

cryptographic coproces-

ware-based key storage.

sor with secure hard-

MSRP - \$900

MIKROE-2760

In

Secure 2 Click

VIO SEI

Secure 3 Click

Microchip's ATSHA204A, a cryptographic coprocessor with secure hardware-based key storage.

MSRP - \$900 MIKROE-2761







Secure 6 Click

The ATSHA204A implements a complete asymmetric key cryptographic signature solution.

MSRP - \$700 MIKROE-3699



Secure 7 Click The ATECC608A integrates ECDH (Elliptic Curve Diffie Hellman) security protocol.

MSRP - \$700

MIKROE-3915

MSRP – \$1800 MIKROE-1370

With two G6D1AA-





UR

Microchip. MSRP - \$900 MIKROE-2829



Secure 5 Click

The ATECC508A integrates ECDH (Elliptic Curve Diffie Hellman) security protocol.

**MSRP – \$7**00 MIKROE-3774

105 Page



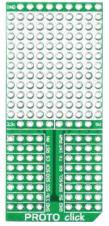
SI-5DC power PCB relay modules. Controls up to 5A, 250V AC/30V DC loads.



### **Relay 2 Click**

Carries two LCA717 single-pole, OptoMOS® solid state relays.

MSRP - \$2600 MIKROE-1899



### **PROTO Click**

10x11 prototyping area and additional power pads for creating custom electronics or Click boards<sup>™</sup>.

MSRP - \$4<sup>50</sup> MIKROE-1507



### Opto 3 Click

e OUT!

Two pairs of normally opened, high-quality solid-state relays labeled as TLP241A.

MSRP - \$2100 MIKROE-3319



### Secure SOIC Click

MIKROE-3788

lt's an universal socket that supports any Microchip security SOIC IC device.

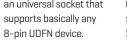
MSRP - \$3900



MSRP - \$6900

MIKROE-3746

12





C

TX (10) RX (11)

SCL

SDA

• CS

• SCK • SDO • SDO • SDI

 $\mathbf{\Theta}$ 

UNIQUE ID click

With DS2401 enhanced

silicon serial number

IC. Provides a unique

registration number.

MSRP - \$900

MIKROE-1819

**UNIQUE ID Click** 

222222

3V3 PWR

**TESTER Click** 

201210

TESTER click

An ideal solution for

testing and diagnos-

tics of the mikroBUS™

socket pin states.

MSRP - \$600

MIKROE-3083

5V PWR

### **Relay 3 Click**

It features two SRD-05VDC-SL-C smallsize relays, from Songle Relays.

MSRP - \$1800







**Opto 2 Click** 

Uses four TLP2770. 20-Mbps low-power optocouplers, from Toshiba.



**Opto Click** 

two VO2630 dual

channel, high speed

It features

MIKROE-1196



**Opto 5 Click** 



**RNG Click** 

Features the The NC7S14M5X FOD4216, a random inverter, and the phase snubberless ADS1115 - 16BIT Triac driver. sigma-delta ADC.

optocoupler modules. MSRP - \$2100 MSRP - \$1500 MIKROE-4476

MSRP - \$1500 MIKROE-4090

115 • ایک



## Relau El click RITER



optocoupler with a high isolation voltage, by LITEON.



Opto 4 Click The LTV-817S, an







\*

G6D-ASI power PCB relay. ON/OFF 0.1-6 sec. MSRP - \$1900

MIKROE-2481 000



OUT2

Rea

-

\*\*\*\*\*\*

AVA SV

PWR R5

Opto E click

21 B 2



CIN 01 20

ignal Relay click

**Signal Relay Click** 

It carries four ul-

tra-small GV5-1 PCB

relays from Omron.

For ON/OFF control.

MSRP - \$2900

MIKROE-2154

ŀ

O

a



**Trust M Click** 

It's based on SLS 32AIA010 OPTIGA™ Trust M1 high-end security controller.

MSRP - \$800 MIKROE-4236

MISCELLANEOUS



107 Page .



MOTOR CONTROL





**Brushless 6 Click** 

three-phase sensorless,

brushless motor. With AT-

mega8A from Microchip.

Designed to drive a

MSRP - \$2700

MIKROE-2847



Fan 3 Click

Perfect solution for

speed control. It can

operate in seven dis-

crete speed steps.

MSRP - \$1790

MIKROE-2841



DC Motor 8 Click

The MIC4605, 85V halfbridge MOSFET driver with adaptive dead time and shoot-through protection.

MSRP - \$1800 MIKROE-2893









an H-Bridge DC motor driver, with up to 15V and 1.2A, from NXP. MSRP - \$1800

MIKROE-3000

MSRP - \$1900

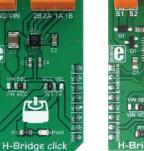
MSRP - \$1600 MIKROE-3031

from NXP.

**H-Bridge Click** 

Uses the MC34933, a

dual H-bridge driver,







Uses the A4941, a threephase sensorless fan

driver IC, made by Allegro MicroSystems LLC.

MIKROE-3032





**Stepper 7 Click** 

MTS62C19A Dual Full-Bridge Motor Driver, MCP23S08 8bit I/O Expander with Serial Interface. MSRP - \$1700

MIKROE-2912



**Brushless 4 Click** 

The MCP8063, a 3 phase brushless sinusoidal sensorless motor driver, from Microchip.

MSRP - \$1900 MIKROE-3019

CONTROL MOTOR



Page 111

PWF 100 Stepper 5 click Stepper 5 Click

0000000

Uses the TM2208, a highly integrated bipolar step motor power driver, with the UART interface. MSRP - \$1700 MIKROE-2624



**Driver Click** 

The DRV777, an integrated motor and relay driver from Texas Instruments.

MSRP - \$1300 MIKROE-3109



NUL UR

F

Servo clic

A 16-channel PWM

the voltage sensing

servo driver with

circuitry.

MIKROE-3133

MSRP - \$2500

Servo Click

01

R2R3

PWR R1

FAN A click

A two-wire fan driver.

Utilizes the LTC1695,

an I2C fan speed

controller.

MIKROE-3200

MSRP - \$1500

FAN 4 Click



**Brushless Click** Toshiba's TB6575F-NG IC for driving 3-phase full-wave Brushless DC motors.

Brushless clic

MSRP - \$3900 MIKROE-2441



**Brushless 2 Click** It carries TI's DRV10964 BLDC motor controller with an integrated output stage. MSRP - \$2600

MIKROF-2754



del l

813

chopper-type integrated

DC motor driver, labeled

as TB67H400AFTG.

MSRP - \$1900

MIKROE-3289

**Brushless 3 Click** With TI's DRV10983 three-phase sensorless motor driver with integrated power MOSFETs.

MSRP - \$1900 MIKROE-2766



DC MOTOR Click With TI's DRV8833RT-YH-Bridge motor driver and TI's 74HC4053 multiplexer.

DC MOTOR clic

MSRP - \$1800 MIKROE-1526



DC MOTOR 2 Click With Toshiba's TB6593F-NG driver IC for direct current motors. Motors' supply voltage 2.5V-13V. MSRP - \$1700 MIKROE-2699





B - Citri

11111

e

8

-

1. 1.

With Toshiba's TB-

Up to 3.5A with 30V.

MSRP - \$1900

MIKROE-2047

DC MOTOR Elclick

DC MOTOR 3 Click

6549FG full-bridge driver

for direct current motors.

**PWM driver Click** Silicon Labs' Si8711CC one-channel isolator for controlling DC motors





driver from Maxim Inte-

grated. Motors' voltage

supply 4.5V-36V.

00000

STEPPER click

**STEPPER Click** 

MSRP - \$1500

MIKROE-2221

**DC MOTOR 5 Click** 

-2

With TI's DRV8701 brushed DC motor full-bridge gate driver. Operating voltage

MSRP - \$1700 MIKROE-2699

supply 5.9V-45V.

R250 R250 -STEPPER P clic

**STEPPER 2 Click** 

With A3967SLBT microstepping motor driver with a built-in translator. Max. supply minimum 7V.

> MSRP - \$1900 MIKROE-1926







**DC MOTOR 9 Click** 

The DR8871. a brushed DC motor driver, with internal current sensing, by Texas Instruments.

1

MSRP - \$180 MIKROE-3416



### DC MOTOR 11 Click

by Texas Instruments.

MIKROE-3649

Voltage Motor Driver With Serial Interface,

MSRP - \$1500

# The DRV8830. a Low-





Fan Click

With EMC2301 controller for powering and regulating the operation of 5V four-wire fans.

MSRP - \$990 MIKROE-2004



Fan 2 Click

With MAX31760 precision fan-speed controller. Can control two fans at the same time.

MSRP - \$1200 MIKROE-2708

Page 113



With A4988 microstepping motor driver. Required external power



**STEPPER 3 Click** With TI's ULN2003 High-**Current Darlington** transistor array. For precise motor control.

MSRP - \$1900 MIKROE-2035



**STEPPER 4 Click** With TB67S269FTG two-phase bipolar

stepping motor driver from Toshiba

MSRP - \$1900 MIKROE-2748



30 88 88

PWR R13

Stepper

sensing, from TI.

MSRP - \$2300

MIKROE-3214

**Stepper 6 Click** 

The DRV8886, a highly

integrated bipolar step

motor driver with current



### STSPIN220 Click

The STSPIN220, a low voltage stepper motor driver by STMicroelectronics.

6.5

STSPIN220 clic

MSRP - \$1700 MIKROE-3545



10

33333333333

DC MOTOR 10 Click

The TLE 6208-6 G, a Hex-

Half-Bridge-Driver made

for auto. and industrial

motion control app.

MSRP - \$1700

MIKROE-3879

.

### STSPIN250 Click

The STSPIN250, a brushed DC motor driver with the current limiting and current sensing.

MSRP - \$1400

MIKROE-3543

MIKROE-3544



0000000

VFAN SEL

1 TEC

The EMC2103 includes

Fan 6 Click

an RPM based

Algorithm.

MIKROE-3867

MSRP - \$1600

Fan Speed Control

### STSPIN820 Click

The STSPIN820, an advanced stepper motor driver produced by STMicroelectronics.

MSRP - \$1700



### STSPIN233 Click

The step motor driver IC is the MP6500, a dual full-bridge motor driver.

MSRP - \$1700 MIKROE-3546





3300000000

HC RST HC NG HC HC NC NC

driver.

MSRP - \$1500

MIKROE-3736

A1 A2 82 81

R4 10 R3 J10 R5 J10 R2 100

ADDR SEL

Stepper 13 Click

The step motor driver

dual full-bridge motor

IC is the MP6500, a

NC ( SCL ( SDA ( SV ( GND (

Time Ca



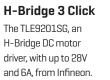
# t Sten **Driver Click** The TMC2660, a highly

integrated bipolar step motor power driver, from the Trinamic company.

MSRP - \$2700 MIKROE-3676







MSRP - \$1800 MIKROE-3613



H-Bridge 4 Click

AP1010AEN, which is a

2003

two channel H-Bridge

Contains the

motor driver.

MSRP - \$1500

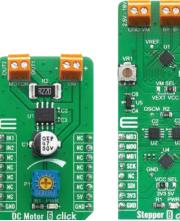
MIKROE-3787



**H-Bridge 5 Click** 

Contains the MP6515GF-Z, a H-bridge motor driver from MPS.

MSRP - \$1500 MIKROE-3854



**DC Motor 6 Click** The TB67H451FNG, a PWM chopper-type

driver. MSRP - \$1200 MIKROE-4114

brushed DC motor

INI

NC NC

NC

NC NC

NC

GND



### **Stepper 8 Click**

Based on TC78H-670FTG a clock-in and serial controlled Bipolar Stepping Motor Driver.

> MSRP - \$1200 MIKROE-4143

MSRP - \$1500 MIKROE-4157



driver.





0000

cs 🛛

R2

E

SPM

SOM

T 05

SCK

TAXABLE INC.

VSEL JV3 5V

RI PVIR

**Silent Step Click** 

The TMC5130 - the uni-

versal high voltage con-

troller/driver for 2-phase

bipolar stepper motor.

MSRP - \$2400

MIKROE-3714

R4

NC NC NC





**Silent Step 3 Click** Uses the TMC2660,

a highly integrated bipolar step motor power driver.

MSRP - \$2700 MIKROE-3676



DC Motor 14 Click

The TB67H450FNG, a PWM chopper-type brushed DC motor driver.

MSRP - \$1400 MIKROE-3982

CONTROL Ŷ MOTO



115 Page .





Stepper 10 Click

Uses the TB67S128FTG a twophase bipolar stepper motor driver.

MSRP - \$290 MIKROE-4138



Stepper 14 Click

Features the DRV8847PWPR, a step motor driver with bipolar step motor controle.

MSRP - \$1500 MIKROE-4125







Based on TC78B-009FTG IC which is a three-phase BLDC motor controller

MSRP - \$2500 MIKROE-4182



**Brushless 12 Click** Features the L6235, DMOS fully integrated 3-phase motor driver.

MSRP - \$2900 MIKROE-4357



MSRP - \$1200

MIKROE-4454

GND

6121

REV

NC

NC

NC

GND

12.2.4 1222

AND SEL

R1 PWR

DC Motor 16 Click

high-performance single

drive with speed control.

phase reversible DC motor

The ZXBM5210 a

MSRP - \$900

MIKROE-4333

4000

### DC Motor 17 Click

Features the TC78H-The TC78B042FTG, a sine-660FTG, a dual H wave PWM drive three-Bridge driver for one or phase full-wave brushless two brushed motors. motor controller.

> MSRP - \$2900 MIKROE-4275



### **Brushless 9 Click**

The TC78B027FTG, a 1-Hall sine-wave PWM controller for three-phase brushless DC motors.

MSRP - \$1900 MIKROE-4387



### **Driver 2 Click**

M

NC NC SB NC SB NC NC NC NC SB NC NC SB NC NC NC NC NC NC NC SB SB NC

4 5V

R5000

DC

1

1000 200

DC Motor 15 Click

DRV8874, an integrat-

ed motor driver with

N-channel H-bridge.

[**h**]

....

**Brushless 8 Click** 

DIR

Features the

MSRP - \$1500

MIKROE-4334

IPR

Features the IR2104S, a high voltage, highspeed power MOSFET and IGBT driver.

MSRP - \$1500 MIKROE-4352

H-Bridge 6 click Features the VNmotive DC motor.

MSRP - \$2900

# TE ILI III (PW 111 BAT GER BAR GER SOA (=) 31

HD7008AY, an H-bridge motor driver for auto-

MIKROE-4289

# AUDIO & VOICE







SpeakUp Click A speech recognition Click. Can recognize over 200 different voice commands.

MSRP - \$3900 MIKROE-1534



MSRP - \$3400

C3{

0

ADOR SE

RS UN SV PWR

MIC E click

MSRP - \$1500

MIKROE-3445

RTEIL C2(00) RTEIL R2 C3 R5 PHP R4 C3 C5 C00 C1 C00

MIKROE-2375

e

AudioAmp 🛛 click Audio Amp 4 Click A speech recognition With the LM4860, an audio Click. Set it up to amplifier IC capable of delivrecognize up to 100 ering up to 1W of continuous commands. power to an 8om load.

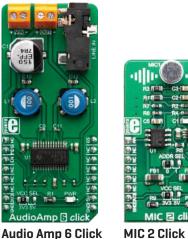
> MSRP - \$1700 MIKROE-3271

RET CLER

mm 1111111 R3 C1

RIGHT REAL

PWR R1



Audio Amp 6 Click

The TPA3138D2, a stereo class-D audio amplifier, from Texas Instruments.

MSRP - \$1400 MIKROE-3448



**Rec&Play Click** 

The MCP6022, a dual, rail-to-rail, low noise sage record and playback operational amplifier device with ChipCorder® from Microchip. technology, by Nuvoton.

MSRP - \$4500 MIKROE-3345



AudioMUX Click Two-band digitally controlled high-quality audio processor with BASS ALC feat. and a 4-channel input selector.

ALLX cli

VIN

......

1111

STREET STREET

INA

e

minini

MSRP - \$4900 MIKROE-3344



Audio Amp 5 Click

The TPA3138D2, an inductorless stereo class-D audio amplifier, from Texas Instruments.

MSRP - \$1700 MIKROE-3401

VOICE  $\propto$ AUDIO

Page 119

The ISD3900, a multi-mes-

(s id (s id (B ) 0.4 88 ..... . 2x20W Amp click

2x20W Amp Click

Carries MAX9744 stereo class D audio power amplifier from Maxim Integrated.

MSRP - \$2100 MIKROE-2779



2x5W AMP Click

Functions as an amplifier. With TDA7491LP 2x5-watt dual BTL class-D audio amplifier.

MSRP - \$1900 MIKROE-2477





ie 

Audio Amp Click

A mono audio amplifier.

With TI's LM48100Q-Q1

Boomer<sup>™</sup> Mono, 1.3W

MSRP - \$1400

MIKROE-2368

Audio Power Amplifier IC.

### GainAMP 2 Click

A 6-channel programmable gain amplifier. Amplifies up to 32x, in eight discrete steps.





**BUZZ Click** 

Features a piezo speaker

audio signals. Resonant

capable of emitting

frequency 3.8 kHz.

MSRP - \$900

MIKROE-945

### RadioStation Click

With the Si4713-B30, the best in class integrated FM broadcast stereo transmitter.

MSRP - \$2500 MIKROE-2822



With noise detecting circuitry. Enables you to set a noise detection threshold.



Ele a.



### FM Click

Features Si4703 IC and functions as a FM radio tuner. Supports worldwide FM band (76-108 MHz).





### GainAMP Click Carries LTC®6912 channel, low noise, digitally programmable gain amplifier (PGA).

MSRP - \$1500 MIKROE-2555





RING TOPPWR

AM/FM click

MSRP - \$49° MIKROE-3800





### 2x30W Amp Click

The TPA3128, 2x30-W class-D amplifier with low idle power dissipation, from TI.

MSRP - \$2300 MIKROE-3010



Audio Amp 3 Click Based on the Si4731 IC - digital CMOS AM/ FM radio receiver from Silicon Labs.

MSRP - \$4500

MIKROE-3901

MSRP - \$1800

RI PWR

o Xover clic

click Noise Click

MIKROE-2371



 $(\mathbf{O})$ 



D

BUZZ P clic

NER ER

0.00

**BUZZ 2 Click** 

MSRP - \$1200

MIKROE-2720

9 (a) 9 (a)

With 2 TI's LM481000-01 Boomer<sup>™</sup> single supply, mono, bridge-tied load

1 10 1 ANDE 1



# the Fonix DECtalk® v5

MIKROE-2253



With SP00410HR5H-B surface mount silicon microphone with max. RF protection. MSRP - \$900

MIKROE-2563







## Audio Xover Click An analog active crossover solution for





tereoAmp clic StereoAmp Click

8 C

TextToSpeech Click With S1V30120 speech synthesis IC powered by speech synthesis engine.

MSRP - \$3900

1 2 (-1-101 (m) (-) (m Mic click **Mic Click** 

With a stereo MP3 de-

coder VS1053. Multiple formats (MP3, MP1, MP2, MPEG4, etc.). MSRP - \$2190





Audio Amp 2 Click

The TDA7491, a 20W dual BTL class-D audio amplifier IC, from STMicroelectronics.

MSRP - \$2100 MIKROE-3077



**EVC Click** 

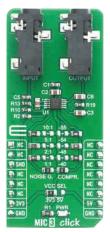
The PT2258, a six-channel electronic volume controller IC, by Princeton Technology Corp.

MSRP - \$1700 MIKROE-3358

VOICE  $\propto$ AUDIO

Page 121





### MIC 3 click

Features the SSM2167-1RMZ-R7, a Microphone Preamplifier.

MSRP - \$1500 MIKROE-4136



MP3 2 Click Based on KT403A, a hardware audio MP3/WAV decoder and DSP, with onboard microSD card slot.

MSRP - \$1700 MIKROE-4159





C+010 C1 U2 R2 C5

Cay IIII

1111

ON L

R1 PWR

HT9200A, a dual-tone

CLK

NC

NC C

5V III GND

DTMF Generator Click BUZZ 3 Click

MC DAT

II NC

= 3V3 = GND

DTM

Features the

decoder.

MIKROE-4298

-

MSRP - \$1500

multi-frequency



SDA 54 .

GND-

Features the MT8870D, a complete DTMF receiver integrating the band-split filter.

MSRP - \$1600 MIKROE-4579



The PAM8904, a

MSRP - \$900

MIKROE-4390

piezo-sounder driver

pump boost converter.



### Volume Click

R5

Based on the CS3310, a complete with a Multi-Mode charge stereo digital volume control.

C13 1111111 11

C2 R8

. . .

NC C

5V (

BND

MSRP - \$4300 MIKROE-4450



**DSP Click** 

Based on the V1000, a complete multieffects audio DSP from Coolaudio.

MSRP - \$4500 MIKROE-4431



### Volume 2 click

The NJU72341, a 2-channel I2C configurable electronic volume IC with external mute control.

MSRP - \$1500 MIKROE-4560

# MIXED SIGNAL









. . . . . . . .

20-PORT PROGRAMMABL

ISIO NC NC NC NC NC NC SINT

IN ISSEE

P

C=D 6

MSRP - \$2900 MIKROE-2817

er, and an A/D converter [ADC]. MSRP - \$3900 MIKROE-3116

R2

R5 U1

C2

MSRP - \$1700

MIKROE-2910

Hh ion ion ren

82 00 08 88

- 10

Canal Management

RIS RR

, tanaf same

timeter c

Has different ICs: amplifiers.

NE555 timer, BCD decoder,

**Multimeter Click** 

29

20

Ia :

transducer. MSRP - \$5900 MIKROE-2553

0

÷Ē

60 21 21 01 01 04

SO UNIT

LEM Click

LEM click

e



Hz to V Click The TC9400, a voltage-to-frequency and

frequency-to-voltage converter from Microchip. MSRP - \$2700 MIKROE-2890



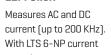
PAC1921 Click **DIGI POT 3 Click** The PAC1921, a high The AD5321, a 1024-posiside power/current tion (10bit) digital potentimonitor from Microchip. ometer with a non-volatile memory (EEMEM).

> MSRP - \$2100 MIKROE-3016



E

100



Carries PAC1934 four channel DC power/ energy monitor from Microchip. MSRP - \$2900

000000000

101 11

R3 R5 R4 R2

ADDH SEL DYDSEL ONDVCC 3V3 5V

PAC1934 clic

PAC1934 Click

S No Co

MIKROE-2735



V to Hz Click

The TC9400, a voltage-to-frequency and frequency-to-voltage converter from Microchip.

MSRP - \$2700 MIKROE-2889

SIGNAL  ${\displaystyle \bigcirc\atop \amalg}$  $\frac{\times}{\Sigma}$ 



Page 125





ADC 6 Click With the AD7124-8, an 8 channel, low noise, low power, 24bit sigma-delta ADC.

MSRP - \$2900 MIKROE-2932



ADC 7 Click The LTC2500-32. It is a 32bit oversampling ADC with a configurable digital filter, from Analog Devices.

MSRP - \$9900 MIKROE-3115



A

**AC Current Click** 

Measure alternating cur-

rents up to 30A. MCP3201

MCP607 CMOS Op Amp.

ADC converter and

MSRP - \$1400 MIKROE-2523



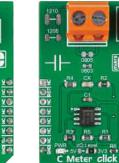


A

# **Ammeter Click**

With circuitry for measuring electric current (AC and DC). 0.1A-1A measurement range.

MSRP - \$24° MIKROE-2377

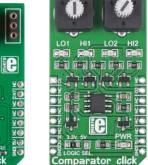


MSRP - \$900

MIKROE-2376

### **C Meter Click**

Circuitry for measuring the value of capacitors. Based on NE-555 timer/ square-wave generator.



E Z GND

-00

11:20

### **Comparator Click**

MIKROE-1915

Carries LM2903 IC, has two independent precision voltage comparators. 2 mV offset voltage. MSRP - \$1200





### **DAC Click**

Includes a 12-bit Digital-to-Analog Converter MCP4921 form Microchip.







MSRP - \$1900 MIKROE-1918



20

Carries LTC2601CDD, a 16-bit digital-to-analog converter from Linear Technology.







### **DIGI POT Click**

Carries MCP416 single-channel 8-bit resolution (256 wiper steps) digital potentiometer.





**DIGI POT 2 Click** 

Carries a single channel digital potentiometer TPL0501 with 256

10K**Ω**. MSRP - \$2100 MIKROE-2873

ADC 3 Click With Microchip's MCP3428 16-bit multichannel analog-to-digital converter.

MSRP - \$2200 MIKROE-1894

-www

10K

VCC SEL CT HI PWR

411 103

4

NOT STOR STOR STO 6 ....... Ň ADRO 







With AD5593R configurable ADC/DAC.

MSRP - \$1400 MIKROE-2523

60000000000

THE REPORT OF THE PARTY OF THE

E 0 0 0 0 0 0 0

ADAC click

8 mm 1111111 VCC SEL PWR LOG SEL 5 COL (00) 100 2 70 **ADC Click** 

00000

ADAC Click

lt's an 8-channel 12-With Microchip's bit ADC, DAC and GPIO. MCP3204 12-bit Analog-to-Digital converter.

> MSRP - \$2600 MIKROE-2690



INPUT SEL

C91000 R416ch

C5

Hz to V 2 Click

With the VFC32KU, a voltage-to-frequency and frequency-to-voltage converter.

TTS NEXTOD 24 BIOK

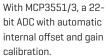
MSRP - \$420 MIKROE-3126



### V to Hz 2 Click With the VFC32KU, a voltage-to-frequency

and frequency-to-voltage converter. MSRP - \$4200

MIKROE-3131



ADC 2 Click











log converter. MSRP - \$18° MIKROE-2038























converter. It can work in

16bit or 24bit mode MSRP - \$65<sup>0</sup> MIKROE-2879

An advanced analog

to digital multichannel



8 2 2 2 2 2 2 2 2 2 2 2





ADC 5 Click

With a low power. single channel 12-bit CMOS analog to digital converter.

MSRP - \$1800 MIKROE-2846

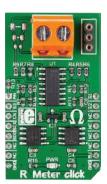
SIGNAL  ${\displaystyle \bigcirc\atop \amalg}$  $\frac{1}{\Sigma}$ 



127 Page

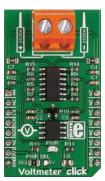


A digitally controlled dual potentiometer, with the resistance of



**R Meter Click** With circuitry for measuring the value of resistors. A wide range of resistors (0-1 Mega Ohm).

MSRP - \$2700



**Voltmeter Click** 

For measuring voltage in an external electric circuit. Measures direct current (from 0 to 24V).

MSRP - \$2400 MIKROE-2436

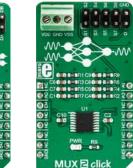




### **MUX Click**

Equipped with the MUX509, a precise analog multiplexing IC.

MSRP - \$1700 MIKROE-3247



000

u)) ((....)) ((......)) (

A

Chine ( sector \*\*

- C1

1 12 15 15 1 Y Y Y Y

0-1 1 -200 - 6m

PWR Meter click

**PWR Meter Click** 

Uses the MCP39F511A, a

very sophisticated monitor-

ing IC from Microchip, with

16-bit processing core.

MSRP - \$4200

MIKROE-3169

VENT

CS SEL

PWR

10K**Ω**.

MSRP - \$1690 MIKROE-2863

100

DIGI POT E dia

**DIGI POT 5 Click** 

A digitally controlled

quad potentiometer,

with the resistance of

### MUX 2 Click

The MUX508, a modern CMOS analog multiplexing integrated circuit.

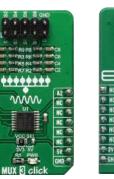
MSRP - \$1700 MIKROE-3245



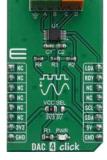
### MUX 3 Click

Based around the TMUX1208 module, a 5-V Bidirectional 8:1, 1-Channel Multiplexer.

MSRP - \$700 MIKROE-3916







### **DAC 4 Click**

The MCP4728, a quad, 12-bit voltage output Digital-to-Analog Convertor (DAC) with (EEPROM).

MSRP - \$1200







JV3 5V R1 PWR DAC E click

**DAC 5 Click** 

It's an advanced 10-bit eight-channel digital to analog converter (DAC) with DAC53608.

MSRP - \$15° MIKROE-3712



### L meter click Features the LM311D, a high-speed voltage



comparator.



(8 8) 18 8) 18 81 18 81

C3

ESL E

R2 R3



a perfect solution to be used in various A/D conversion applications.

MSRP - \$1500 MIKROE-3334



AD-SWI0 2 Click With a 16-bit ADC con-

591

guad-channel softverter, and 13-bit DAC ware configurable converter integrated input/output solution. into the AD74413R. MSRP - \$4900

MSRP - \$5600 MIKROE-3861





Veun



+ 0.02



**PWR Meter 2 Click** Measuring and monitoring voltage up to 24V and current up to 5A. It carries

the MCP3910 module. MSRP - \$1900 MIKROE-3150

RMS value of the input signal. MSRP - \$35<sup>0</sup> MIKROE-3311

IN+

OC IN-

AX 5VAC

100

RMS to DC cli

**RMS to DC Click** 

With the LTC1968, converter

IC, which outputs an analog

voltage depending on the

ISEI PWR1 R4 Current B cl

**Current 2 Click** 

Equipped with an integrated transimpedance amplifying circuit.

MSRP - \$1700 MIKROE-3292



M NC M NC M CS M SCK M NC M SOI M NC M SOI

DAC 7 Click

It's an advanced 12-bit, four-channel digital to analog converter (DAC) with AD5624R.

MSRP - \$26° MIKROE-3886





MIKROE-4081



**S**V NC NC T NC T VREF SEL R1 PWR

2 m







3-001

∨||Ⴠ||∿

0 - 12.5 MHz

generator. MSRP - \$4700 MIKROE-3309



Waveform 2 Click

Features the AD9834, a 75 MHz low power DDS device.

MSRP - \$4500 MIKROE-4346

SIGNAL MIXED

129

Page



**AN To PWM click** 

III NC PWR R1 n PWM cl

Uses OPA365 series op-amps, and the TLV 3201 comparators from TI.

MSRP - \$1200 MIKROE-4060



AN to PWM 2 Click

Features the LTC6992CS6, a silicon oscillator from Analog Devices.

MSRP - \$2400 MIKROE-4221



C3

**R**3

NC T

NC m

NC .

NC T

NC 🕫

5V 🥌

GKD 🦘

HIIIII Ic

CONTRACTOR OF CO

VCC SEL

RT PWR

The AMC1204BDWR, Iso-

lated Delta-Sigma Mod-

ulator for Current-Shunt

ET

**ISO ADC Click** 

Measurement.

MSRP - \$1500

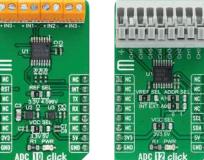
MIKROE-4088

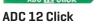
Ú1 NC RST annessee. 222 E NC 전 HC 전 HC 제 HC 전 3V3 주 GND 



Features the AD-S122U04, a 24-bit precision •Σ ADC converter.

MSRP - \$2700 MIKROE-4488





•

NC

NC (

GND

IIIIIIII

VCC SEL

(INI) and

**ISO ADC 2 Click** 

successive-approxi-

tal converter (ADC).

MSRP - \$4500

MIKROE-4166

Features the AD7091R

mation analog-to-digi

E NC

CRT

CS

SCK

ID NC ID 3V3 IF GND

The ADS7828, a low-power 12-bit data acquisition device.

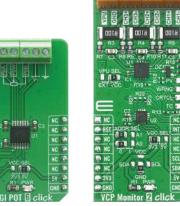
MSRP - \$2700 MIKROE-4376



### **DIGI POT 6 Click**

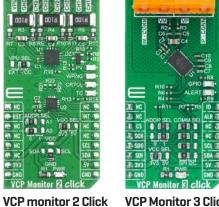
Features the MCP41HV51, 8-bit dual power rails digital potentiometer.

MSRP - \$1400 MIKROE-4110



Uses the INA3221-Q1, a three-channel, highside current and bus voltage monitor.

MSRP - \$2300 MIKROE-4126



45888888888

8888888

VCC REF

R1 LD1

Based on MCP3564 a

24-bit Delta-Sigma

Analoq-to-Digital

Converter.

MIKROE-4105

MSRP - \$1700

ADC 9 Click

UI No ICI

INT

NC (3

NC P

NC (P) NC (P) GHD (P)

NC

. NC

CS

SCK

SDO SDO

S SDI

GND

S 3V3

000000

R1 R2 R3

ADDR VCC

GND

VCC SEL

373 5

ADC E click

The ADS1115 a high

precision, low-power,

16-bit analog-to-dig-

ital converter (ADC)

MSRP - \$2100

MIKROE-3394

ADC 8 Click

PAVR.

1

10

8.1

e

VEYT

NC 2

NC

NC G

SCL 🔊 SDA 🥶

SV S

HIR

THE

C3I R3

VCC SEL 3V3 5V

RI PWR

**ISO ADC 3 Click** 

AMC1100, a precision

isolation amplifier.

Features the

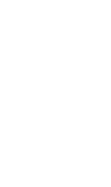
MSRP - \$1500

MIKROE-4383

VCP Monitor 3 Click Features the LTC2947 a high precision power and energy monitor.

MSRP - \$2700 MIKROE-4222







With the MAX4208

an ultra-low offset/

mentation amplifier.

MSRP - \$1500

MIKROE-4124

I NC

S NC

drift, precision instru-



**DAC 6 Click** 

alog converter.

MSRP - \$1500

MIKROE-4206

The DAC104S085,

10-bit, micro-power,

a quad digital-to-an-



DAC 9 Click

Features the DAC80501, a 16-bit voltage-output digital-to-analog converter.

> MSRP - \$1500 MIKROE-4332

R2 C3

C5 to 1 C6 to 1

U1 R12 C28

DAM RA

A0 1

JP58-8 1001 JP41011 1000 JP82-8 C7



### Analog MUX 2 Click

Features the ADG728, a low voltage, CMOS 8-channel analog matrix switch.

MSRP - \$1800 MIKROE-4468



### Waveform 3 Click

Uses the AD9837, a fully integrated direct digital synthesis (DDS)

> MSRP - \$7900 MIKROE-4486

device. MSRP - \$2500 MIKROE-4432

DAQ 3 Click Uses the ADAQ4003, a fast and precise system-in-package DAQ signal chain solution.





Features the AD5175, a single-channel 1024-position digital rheostat.

MSRP - \$1200 MIKROE-4414



**Current 3 Click** 

Features the EMC1702, a combination of the high-side current sensing device.

MSRP - \$1500 MIKROE-4203

SIGNAL  $\square$ Ш  $\frac{1}{\Sigma}$ 

Page 131



C4 R3

JP6 JP2 1-8-8-8 1-8 JP7 1-8 JP3

" nnc

RIDED CO

5 80



**Analog MUX 3 Click** 

Uses the ADG738, a CMOS analog matrix switch with a serially-controlled SPI interface.

MSRP - \$1200 MIKROE-4580



POWER MANAGEMENT





Carries MIC23099 single AA/AAA cell step-down/ step-up regulator with battery monitoring.

MSRP - \$2900 MIKROE-2765



.....

**BATT-MAN Click** The LTC3586, a high-efficiency power manager

with boost, buck-boost,

に分

(5)

and dual buck converters. MSRP - \$2700 MIKROE-2901



···· •••

MCP73213 Click

Carries MCP73213 du-

al-cell Li-Ion/Li-Poly-

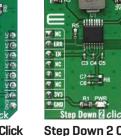
management controller.

mer battery charge

MSRP - \$1800

MIKRDE-2575

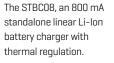




Step Down 2 Click The L6986HTR is a

Works in an inverting configuration, provides a negative output voltage

MSRP - \$15<sup>00</sup> MIKROE-3895



-

CUR

MSRP – \$17<sup>00</sup> MIKROE-3049



# in respect to the GND.









MIC24045 Click Carries MIC24045 5A synchronous stepdown regulator. Input range 4.5V-19V.

1 68 6

RSE BUR BUR SV35V

MIC24045 click

1 0

MSRP – \$13<sup>00</sup> MIKROE-2574



**VREG Click** 

Digitally controlled DC voltage regulator. Based on the wellknown LM317 circuit.

MSRP – \$24<sup>00</sup> MIKROE-2443



Page 135



step-down monolithic switching regulator able to deliver up to 2 A DC.



**Step Up Click** 

The MCP1665, a 500 kHz, compact, high-efficiency, fixed-frequency, nonsynchronous step-up DC-DC.

MSRP - \$1900 MIKROE-3709



**Peltier Click** With the SPV1050, an ultralow power energy harvester and battery charger.

MSRP - \$1500 MIKROE-3814



VIN

---

----

VOUT

U

THE DESID

-

MIC24055 c

MIC24055 Click

MIC24055, high-effi-

ciency buck regulator

Equipped with the

from Microchip.

MSRP – \$29<sup>00</sup> MIKROE-2835

e

C6

62 13 BB

Step-Dov

CGD



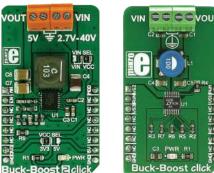
**Buck-Boost 2 Click** The LTC3115-2. a 40V. 2A synchronous buck-boost DC/DC converter from Linear Technology.

000

VCC SEL 3V3 5V

R1 (THI)

MSRP - \$27° MIKROE-2963



0:0

STAT

1-1

**Qi Receiver Click** 

Utilizes the principles of

the inductive coupling

for the purpose of wire-

less power transfer.

MSRP - \$1800 MIKROE-2799

### **Buck-Boost Click** Features LTC3129-1. a buck-boost DC/DC

conversion integrated circuit. MSRP - \$2000

MIKROE-2806



MSRP - \$1600 MIKROE-2848



### Charger 5 Click

Designed to charge Lithium-Ion and Lithium-Polymer batteries.



VIN

411

ODC:

AND DWR

C33153

MIC33153 Click

A DC-DC adjustable

step-down (buck)

converter.

MSRP - \$2100

MIKROE-2887

RER3 RER8

R1 PWR

Solar energy Click

nano-power high-efficien-

cy boost charger and buck

Uses Tl's B025570 - a

converter device.

MSRP - \$2700 MIKROE-2814

CRI III

VOUT

I family for the

- 97

In

**666666** 

### MCP16331 Click

Functions as a non-inverting buck-boost voltage requlator.

MSRP - \$2200 MIKROE-2762



11111

**VREG 2 Click** 

MSRP - \$21<sup>00</sup> MIKROE-3055

Uses the LM2596, a 3A,

step down voltage regu-

lator working at 150 kHz,

from Texas Instruments.

TE PC2 Unil-R4 PWR





Integrated solution for system power delivery and Li-Po/Li-Ion battery







**BUCK 7 Click** The MAX17504, a high efficiency, synchronous step-down DC-DC converter with internal compensation.







**Boost 4 Click** Carries TI's TPS61230A, a high efficiency fully integrated synchronous boost converter.

MSRP - \$17<sup>00</sup> MIKROE-2757





Buck El clic

**Buck 8 Click** 

a high-efficiency,

synchronous step-

MSRP - \$2600

MIKROE-2997

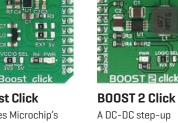
down DC-DC converter.

Uses the MAX17536.



Buck-Boost 3 Click The ISL85403, a 2.5A requlator with the integrated high-side MOSFET and a low-side driver.

MSRP - \$2700 MIKROE-3277



**Boost Click** Carries Microchip's MIC2606, a 2MHz, PWM DC/DC boost switching regulator.

MSRP - \$21<sup>00</sup> MIKROE-2780

----

R5 Intl R6 Intl C9 C6 Intl C5 Intl Rise

ā)

NOU

1U0/ ₹

----

Be

0

....

A DC-DC step-up regulator that has a fixed 5V output.

MSRP - \$1500 MIKROE-2894





Nano Power 2 Click The MAX40000AUT12+, a nanoPower comparator with built-in reference.

MSRP - \$11<sup>00</sup> MIKROE-3036



**Smart Buck Click** The MIC2230, a dual synchronous step-down DC/DC regulator.

MSRP - \$2900 MIKROE-3113



137 Page



Li-Po/Li-Ion 100 PWR CER INT Charger click **Charger Click** 

Carries a battery charger controller and a battery charge monitor, along with a battery connector.

MSRP - \$2200 MIKROE-2033



**Charger 8 Click** The MAX8903B and the MAX17201, both ICs from Maxim Integrated.

MSRP - \$2400 MIKROE-3348



CGD

+010- +	SUN + SUR	17(12) -
1.2	2.5	
	+ 5116- M- M JP2	+ 616 
-	●220 E4	
	u (im)	
TEN FAUL	( FITT	FULL
Cha	irger 🛙 c	lick

C711 11

. UND P

R4 R5

GE RO RTHOP

(0) I Get Date

Buck S clic

The MP9943, a synchro-

from Monolithic Power

0000000

Systems (MPS).

MSRP – \$21<sup>00</sup> MIKROE-3057

nous step-down converter,

**Buck 9 Click** 

R

(1) (1)

**Charger 9 Click** The MAX1757, a standalone, switch-mode Li+ battery charger, from Maxim Integrated.

MSRP - \$24º MIKROE-3568



Ra Ra

OUT SEL

ick ID click

The MPM3632C, a 18V 3A

ultra-low profile DC-to-DC

power module by Monolith-

ic Power Systems (MPS).

MSRP - \$1500 MIKROE-3569

**Buck 10 Click** 

PWR

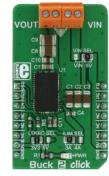
rii t

3¥3

### **BUCK Click**

Buck switching regulator. A wide input voltage range of up to 40V. Steps it down to 3.3V or 5V. MSRP - \$2800

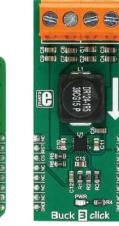
MIKROE-1592



### Buck 2 Click

A powerful step down DC-DC switching regulator. Input voltage range 4.5V-19V.

MSRP - \$1600 MIKROE-2858



5

dian of

R7 -Tical

RB R9 R10

1111

PWR

Ruck 1

**Buck 12 Click** 

The MPQ8632, a syn-

chronous step-down

converter, from Mono-

lithic Power (MPS).

MSRP - \$2100

MIKROE-3438

fi ficinics

I SE MARA

DC

DC

PWR R

**Buck 11 Click** 

Instruments.

MSRP - \$2100

MIKRDE-3438

Buck II clic

The LMR36015, a syn-

chronous step-down

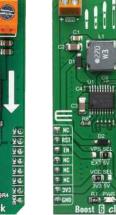
converter, from Texas

R61 C4

### **Buck 3 Click**

Uses the TPS568215, a 4.5V to 17V Input, 8A synchronous step-down SWIFT<sup>™</sup> converter.

MSRP - \$22° MIKROE-2971



cat initiation at R8 .... D2 NG VPS SEL

C1 - (1)) C3 - (1)) C10 - (1))

2000) 2000) 2000)

Sin I

E

EN EN

E CS

n sei

**DB2** 

F NC

E NC

R1 PWR

The MPM3530, a 55V 3A

Power Systems (MPS)

MSRP – \$21<sup>00</sup> MIKROE-3438

ultra-low profile DC-to-DC

power module by Monolithic

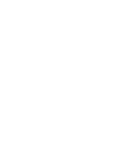
**Buck 13 Click** 

(50

**Boost 6 Click** The BQ25887 fully integrated 2-cell Li-ion batt. charger IC ideal for portable app. with cell balancing. MSRP - \$1500

MIKROE-3813







### **BUCK 5 Click**

The MAX17506, a high Uses the MAX17572, a efficiency, synchronous step down (buck) DC-DC step-down DC/DC converter converter from Maxim with internal compensation. Integrated.

MSRP – \$2900 MIKROE-3100

# **(** 11 R11 R10 PWR R8 BUCK G dia

**BUCK 6 Click** 

MSRP - \$1800

 $\wedge$ 

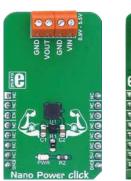
MIKROE-2957



### **Boost-INV Click**

The LTC3582, programmable boost and inverting DC/DC converter with OTP memory.

MSRP - \$2100 MIKROE-3124



Nano Power Click The MAX17222 - a nanoPower synchronous boost converter with True Shutdown<sup>™</sup> technology.

MSRP - \$1100 MIKROE-3035



**Balancer 3 Click** The BQ29200, Voltage Protection with Automatic Cell Balance for 2-Series Cell Li-Ion Batt.

MSRP - \$1200

MIKROE-3737

The BQ25887 fully integrated 2-cell Li-ion batt. charger IC ideal for portable app. with cell balancing.







MSRP - \$2900 MIKROE-3123

7 (ma) - 4

Reit Rit

1111 1111

liei

-1727 -

111 1000



**UPS Click** 

The LTC3225, a 150mA supercapacitor charger from Analog Devices.

MSRP - \$25<sup>00</sup> MIKROE-3001

いう

139 Page





**BATT-MON Click** The STC3115, a high-precision batt. gas gauge IC with alarm output for handheld app.

MSRP - \$1300 MIKROE-3741



**BUCK 14 Click** Based around the BMR4613001/001 - a PoL regulator from Flex.

MSRP - \$3200 MIKROE-3847



T 3V:

R1 PWR

**Charger 11 Click** 

The MCP73123 - Lith-

(LiFePO4) batt. charge

management controller.

ium Iron Phosphate

MSRP - \$1700

MIKROE-3650

GND -

CGD





The MCP3202, Dual Channel 12-Bit A/D Converter with SPI Serial Interface.

MSRP - \$15° MIKROE-4058



VIN+

1111

CS SCK C NC SCK NC SDI SV3 SV3 SV3 SV3

-BAT-

1000

• 200 m

HC (P) HC (P) HC (P)

5V 👔

GND 1

TIME SET

3h 4.5h 6t

VCC SEL

R1 PWR

Charger 12 Click

The MAX1501 - linear

battery charger with

thermal regulation for

portable applications

MSRP - \$1500

MIKROE-3744

ann a LI LI M



Uses MP2632B a highly integrated 3A Lu-ion and Li-polymer battery charger.

MSRP - \$1900 MIKROE-4082



6

711

Charger 13 Click

It's a single lithium-ion

[Li+] cell batt. charger

based on the RT-

9532GQW

MIKROE-3748

MSRP - \$1500

(U)

STATUS

Equipped with the RT9480, highly integrated and easy to use power solution.

MSRP - \$1900 MIKROE-4116



### **PowerBank 2 Click**

Uses the TPS2115AP-WR IC, auto-switching power multiplexer.

> MSRP - \$1100 MIKROE-4109





Features the MAX890L, a lowresistance power switch.

MSRP - \$1500 MIKROE-4271



**Current Limit Click** 



VCC SEL

PWR CHG

Qi RX clic

The PIC16F15313, a 8-bit

MCU that makes a flexible,

alternative to the wireless

charging solutions.

MSRP - \$33º

MIKROE-4345

**Qi RX Click** 

5V 3

GND 😤



**Charger 3 Click** 

MSRP - \$1200

MIKROE-4449

Features the TP4056, a complete constant-current/constant-voltage linear charger.

> MSRP - \$2900 MIKROE-4479

**USB-C Source Click USB-C Sink Click** Features the The STUSB4700, an independent STUSB4700, an inde-

controller. MSRP - \$25<sup>0</sup> MIKROE-4329

MSRP - \$2500 MIKROE-4328



-

+ VIN -



R1 PWR GND e Cell C **Single Cell Click** The MCP16251 synchronous boost req. with true load disconnect and MC-P1811A LDO linear req.

HC T

NC T

NC T

MSRP - \$900 MIKROE-3844

-

NC NC

TH EH

. NC

T NC



0000000000

**3xBuck Click** 

It relies on the TPS65263, a triple synchronous stepdown converter.

MSRP - \$3500 MIKROE-3201





The TPS61391, a 700-kHz pulse-width modulating (PWM) Step-Up converter

MSRP - \$1500 MIKROE-4287

USB power delivery pendent USB power

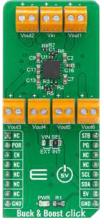
delivery controller.



### **UPS 3 Click**

The LTC3110, a bidirectional buck-boost DC/DC regulator/ charger combination.





Buck & Boost Click

The MIC7401, a highly-integrated power-management IC with five synchronous buck regulators.

MSRP - \$6900 MIKROE-4354



eFuse 2 Click

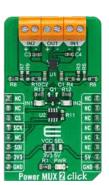
The TPS259631, a highly integrated circuit protection and power management solution.

MSRP - \$2100 MIKROE-4335



[4] Page .





Power MUX 2 Click The TPS2120, a dual-input single-output power multiplexer with an automatic switchover.

MSRP - \$1500 MIKROE-4575



**Charger 6 Click** Uses the BQ25601, a fast-charging solution for single-cell Li-lon and Li-polymer battery.

MSRP - \$1200 MIKROE-4576



CLOCK & TIMING







 $\odot$ 

**RTC 4 Click** 

Carries DS2417, a real time clock/calendar with a 1-Wire MicroLAN interface. 16.3 kbits per second. MSRP - \$2100

MIKROE-1891

real-time clock/calendar. MSRP - \$2100 MIKROE-1990

**TIMER Click** 

the ALARM pin.

MSRP - \$18<sup>00</sup> MIKROE-2333

TIMER click

Carries Micro-

chip's MCP79510

er, from Integrated Device Technology. MSRP - \$1500 MIKROE-2993

CLOCK OUT

E=B-0 8

-

பா AS YCC SEL PWR RI

PLL click

The ICS501, a LOCO™

PLL clock multipli-

PLL Click



### RTC 6 Click

Carries MCP79410 real-time clock/calendar IC. 64 bytes of battery-backed SRAM.

MSRP – \$21<sup>00</sup> MIKROE-2063



### PULSE Click

With DS1682 total elapsed A pulse generator time recorder from Maxim with precise frequen-Integrated. ETC used with cy control. Features

MSRP – \$2500 MIKROE-2032







**Clock Gen 2 Click** 

0

The DS1087LU-266, a 3.3V spread-spectrum EconOscillator, from Maxim Integrated. MSRP - \$1700

MIKROE-3076



RTC 8 Click

The RV-3028-C7, an extreme low power RTC module from Micro Crystal Switzerland. MSRP - \$1700

MIKROE-3076

CLOCK & TIMING Page 145

NE555 precision timer.



RTC 2 Click With DS1307 serial real-time clock. It's a full binary-coded decimal (BCD) clock/calendar.

**MSRP – \$21**00 MIKROE-948



RTC 3 Click Carries BQ32000, a real time clock with an integrated trickle charge circuit for automatic switchover.

**MSRP - \$21**00 MIKROE-1839



TRE MC

е кс Э кс Ф зуз

........ ...... R6

R1 PWR

**One Shot Click** 

The LTC6993-2, a

monostable multivibra-

tor known as a "one-

shot" pulse generator.

MSRP - \$1900

MIKROE-3877

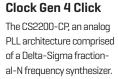
-C2

HC

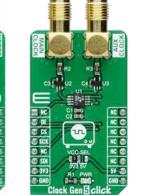
NC A SCL (\* SDA 5V GND

(l)





MSRP - \$1900 MIKROE-4300



MIKROE-4413

000

RTC Z clic

The MAX31341B, a

low-current RTC with

I2C interface and power

**RTC 7 Click** 

management. MSRP - \$1700

MIKROE-2976

ITB

T KC T 3Y3 T GND

### **Clock Gen 5 Click**

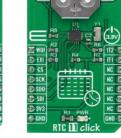
Features the LTC6903, a low-power self-contained digital frequency source. MSRP - \$1500

MSRP - \$1200 MIKROE-4121



### **RTC 9 Click**

Features the M41T82, real-time clock (RTC) with battery switchover



CTE

.....

VDDO SEL 3V3 EXT

**TIF** 

R1 PWR

**Clock Gen Click** 

Features the Si5351A,

an I2C configurable

clock generator.

MSRP - \$1500

MIKROE-4113

NC (P) NC (P) NC (P) NC (P) SCL (P)

SDA 🕥

GND

### RTC 11 Click

The ABO815, an ultra-low-power coupled with a highly sophisticated feature set.





### Watchdog Click



TPS3430, a stand-

### alone watchdog timer.

MSRP - \$700 MIKROE-4416





**Clock Gen 3 Click** Uses the LTC6904 IC, 1kHz to 68MHz Serial Port Programmable Oscillator.

MSRP - \$1700 MIKROE-4171



### **RTC Click**

It features the PCF8583 serial real-time clock (RTC).

MSRP - \$2100 MIKROE-947



전 AN 아RST 아NC 아NC 아NC 아NC 아NC 아NC

MSRP - \$1700

MIKROE-2976





# 1000<sup>th</sup>

### **EtherCAT Click**

2/3-Port EtherCAT<sup>®</sup> Slave Controller with Integrated Ethernet PHYs.

MSRP – \$37<sup>00</sup> MIKROE-2851

This board was developed in partnership with Microchip. The first big silicon vendor who accepted the mikroBUS™ standard.





# Everything under one roof

We are most fortunate to have our in-house production, procurement, and distribution - all of this enables us to push forward.

Every day we introduce a new Click board<sup>™</sup>, but at the same time, we produce at least 40-50 different Click boards<sup>™</sup> to refill our warehouse or our distributor's warehouse. It is a most dynamic process: work is being constantly done inside the company, only to be completed at the end of the day when a courier comes in, picks up the boxes, and ships them.

# mikroBUS<sup>™</sup> standard



ber grows every day as 0BU e numbel his num

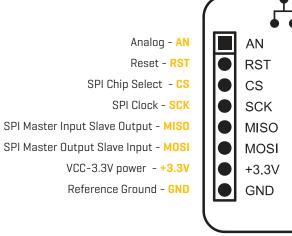
Most people do not understand how huge a trillion is.

Let us give you a hint: a million seconds is equal to 12 days; billion seconds is 31 years; and trillion seconds is 31688 years.

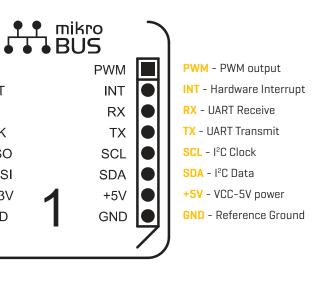
So if we spent a mere second on every combination of Click boards<sup>™</sup> on a development board with five mikroBUS<sup>™</sup> sockets, it would take well over 261615 years to test all of the combinations.

We are sure everyone will be able to find a great combination of Click boards<sup>™</sup> for his or her new project. But just imagine the extra time that engineers world wide have thanks to this fast prototyping.

You can now test not one, but many project possibilities in virtually no time.



mikroBUS<sup>m</sup> - the add-on board socket standard that offers maximum expandability with the smallest number of pins. All the major vendors have accepted the mikroBUS<sup>m</sup> standard and added it to their development boards.





# Growing with our partners



159 Boards

132 Boards

Texas Instruments

maxim integrated...

61 Boards

SILICON LABS

17 Boards

Melexis

15 Boards





am

22 Boards



ON Semice 13 Boards



12 Boards



10 Boards



11 Boards

9 Boards





5 Boards

infineon

19 Boards

15 Boards

QUECTEL

11 Boards

**MPS** 

9 Boards

•

Hanwei

8 Boards

BOSCH

Invented for life

FTDI Chip



63 Boards



20 Boards

VISHAY. 19 Boards

**TOSHIBA** 

15 Boards

E TE 11 Boards



9 Boards



8 Boards

*Azoteg* 

7 Boards

7 Boards

BROADCOM<sup>®</sup>



SIMCom

6 Boards

5 Boards

**OSRAM** 

Telit

4 Boards

Kīonix Sensing the Future

4 Boards

Amphenol

4 Boards

**SPEC** SENSORS 3 Boards

4 Boards

Å TRINAMIC 3 Boards

nuvoTon 3 Boards

2 Boards

2 Boards

2 Boards





2 Boards

1 Boards









**Multi-Inno** Technology Co., Ltd





6 Boards



5 Boards



4 Boards



4 Boards







2 Boards



1 Boards



6 Boards



4 Boards



4 Boards



3 Boards





2 Boards



2 Boards



1 Boards

# Clicking on all platforms

Use Click boards<sup>™</sup> with your favorite development platform. A range of Shields bring Click connectivity to:

Arduino

- Freedom
- BeagleBone Black
- Feather

Raspberry Pi

• Discovery and more...



Arduino Nano Click Shield MSRP - \$29<sup>00</sup> MIKROE-4443



Scan ΩR Code to see them all.







NEW	NEW	NEW
Click board™	Click board™	Click board™
yet to come	yet to come	• yet to come

Even though it was printed recently, the booklet you are holding is probably already outdated. That's because we release new Click boards<sup>™</sup> daily. To learn more about Click boards<sup>™</sup>, visit: www.mikroe.com/click-boards and for the most current list of Click boards<sup>™</sup>, visit: www.mikroe.com/click

NEW Click board™ yet to come	· · · · · · · · · · · · · · · · · · ·	NEW Click board™ yet to come	NEW Click board™ yet to come



2	•	• • • • • • • • • • • •	•	•••••	2
	•	•	•	• •	
	•		•	• •	
	•			• •	
				• •	
				• •	
				• •	
				• •	
		•			
	•	• • • • • • • •		• • • • • • •	
	•	• NEW	•	NEW ·	
	•		•		5
	•	Click board <sup>™</sup>	•	<ul> <li>Click board<sup>™</sup></li> </ul>	
					ł
	•	• yet to come	•	• yet to come	ł
		geriocome		yer to come	ł
					ł
		•		•	ł
					I
		•		•	l
		•		•	
		•			ĺ
	-		•	• •	l
	•		•	•	1
	•	•	•	• •	i
2		• • • • • • • • • • • •		• • • • • • • • • • • •	

NEW NEW Click board<sup>™</sup> Click board<sup>™</sup> yet to come yet to come

Designed by MikroElektronika www.mikroe.com