





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



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

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

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



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### 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™ 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.

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

Presented with the problem, I started looking for a

solution: how to change peripherals easily and what

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

to add to a board to be able to do so.

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> created.

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.

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

MSRP – \$89<sup>00</sup> MIKROE-2296

micro USB port. MSRP – \$89<sup>00</sup> MIKROE-2226

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NINA-B1 SERIES

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BLE 3 clic

NA-B1 Bluetooth 4.2

module from u-blox.

**BLE 3 Click** 

It features NI-

3G Click (EU/AUS)

UG95 3G UMTS/HSPA

slot, Audio/Mic jack,

module. With SIM card

QUECTEL'

UG95 ICANAL IN ITS

C€2200

1.84 490-108

> the SARA series. MSRP – \$99<sup>00</sup> MIKROE-2244

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**3G SARA click** 

**3G SARA Click** 

With UMTS/HSPA

cellular modem -

the u-blox U201, from



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

MSRP – \$30<sup>00</sup> MIKROE-1715

MSRP - \$3900 MIKROE-2471

**BLE P Click** With nRF8001 Bluetooth 4.0 peripheral device. Open source Android app available.

BLE D d

MSRP - \$2500 MIKROE-1597





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



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

MSRP – \$39<sup>00</sup> 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



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ceiver.

MSRP - \$2600

MIKROE-2218

**6LoWPAN C Click** 

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<sup>00</sup> MIKROE-1716





433 MHz

ccRF 3 Click

MSRP - \$3600 MIKROE-2389

ccRF II click

Carries the CC1120

high-performance RF

transceiver for narrow-

band systems from TI.

Microchip's MRF24J-TI's CC2520, 2.4GHz ZiqBee®/IEEE 40MA 2.4 GHz IEEE 802.15. RF trans-802.15.4 radio transceiver module.

MSRP – \$2900 MIKROE-987



Quectel's L86 GNSS module with a patch

0

antenna and an external antenna connector.

## 6890 € C

**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.

MSRP - \$4600 MIKROE-1850



**GNSS 2 Click** 

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

MSRP - \$3900 MIKROE-1887



**GSM 2 Click** With Quectel's M95 FA quad-band GSM/GPRS module. 85.6 kbps GPRS data transfer.

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





Carries SIM33ELAGNSS It features SAM-M8Q patch antenna module with an integrated module from u-blox. antenna and an external antenna connector.

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GSM 3 Click

band GSM/GPRS

module. 85.6 kbps

GPRS data transfer.

MSRP – \$5700 MIKROE-1720

With SIM800H quad-

MSRP - \$3900 MIKROE-1895

MSRP – \$44<sup>00</sup> MIKROE-2045

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GNSS 4



**GSM/GNSS** Click

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

tracking with GSM. MSRP - \$690 MIKROE-2440

GPS/GNASS location

MSRP - \$790 MIKROE-2439

5 **GSM/GNSS 2 Click** With SIM868 quadband GSM/GPRS module.

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**GNSS 5 Click** 

It features NEO-

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

M8N GNSS receiver

module from u-blox.



**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

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

MSRP - \$4300 MIKR0E-2586



**IQRF 2 Click** With DCTR-72DAT RF transceiver, operating in the 868/916 MHz frequency.

MSRP - \$49° MIKROE-2587



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10.00

With RN2483 LoRa Sub-

GHz, 433/868 MHz Europe-

an R&TTE Directive Assessed

LR Click

Radio Modem.

MSRP – \$39<sup>00</sup> MIKROE-4470



#### **GSM-GPS** Click

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





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With RN2903 915 MHz

Radio Modem compliant

with regulations for use

in the USA, CA, AU, NZ.

LR 2 Click

MSRP - \$3900 MIKROE-4615

#### nRF C Click

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

MSRP - \$1900 MIKROE-1304



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A LoRa technology-based

SRD transceiver, oper-

ates at a sub-gigahertz

frequency of 868MHz.

LR 3 Click

MSRP - \$4500

MIKROE-4616

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A LoRa RF technology

based SRD transceiver,

operates at a sub-GHz

frequency of 868MHz.

LR 4 Click

MSRP - \$4500

MIKROE-2934

#### nRF S Click

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





#### nRFT Click With nRF24L01P 2.4 GHz

transceiver module. Air data rates of 250 Kbps, 1 Mbps and 2 Mbps.

MSRP - \$1600 MIKROE-1305



# RFIG

**RFid Click** With CR95HF 13.56 MHz contactless RFid transceiver, and trace antenna.

MSRP - \$29° MIKROE-1434



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SRD transceiver which

operates at a sub-GHz

frequency of 902-928

MHz SRD Band.

MSRP - \$4500

MIKROE-4618

LR 5 Click



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

MSRP - \$1200 MIKROE-1726



MSRP - \$1200

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MIKROE-2462

NFC)))

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tRF Click With Telit's LE70-868 - a 868 MHz transharvesting NFC Forum ceiver module with Type 2 Tag from NXP. embedded stack.

> MSRP - \$5900 MIKROE-1535



#### NFC Click

With near field communications controller PN7120 IC from NXP.



#### PR. STAT 6 RN4870 clic RN4870 Click It carries RN4870 Blue-

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

MSRP - \$2900

MIKROE-2545

energy module from Microchip. MSRP - \$3300

MIKROE-2543



LTE IoT 5 Click Features the SARA-R510M8S cellular module from u-Blox.

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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

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2 Page



•••• 5141 (-ba 100 ORDER BERR 6 📽 🕒 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



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LINE -



WiFi 3 Click With ESP8266 module. TCP/IP stack. Supports Wi-Fi Direct (p2p). 6 GPIO pins.

MSRP - \$2700

MIKROE-1769







MSRP - \$6900 MIKROE-1937





water of the local division in

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

MSRP - \$4900 MIKROE-1913

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MSRP - \$8900

MIKROE-2975

UG95 maintent

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WiFi 5 Click With Gainspan's GS1500M 802.11b/q/n Low Power Wi-Fi module with a PCB

100.00

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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





WiFi 7 Click With ATWINC1510-MR210PB IEEE 802.11 b/g/n module, 20MHz solution.

MSRP - \$2900 MIKROE-2046

۲ WIF ~ WHELESPO **WiFi ESP Click** With ESP-WR00M-02 module that integrates

WiFi client mode. MSRP - \$1500 MIKROE-2542

ESP8266EX. In AP WiFi and

MSRP - \$1700 MIKROE-2924

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MiWi clic

**MiWi Click** 



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

MSRP - \$6900 MIKROE-2747





MIKROE-2336



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



**OOK RX Click** 



**OOK TX 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.

MSRP - \$4500

MIKROE-2921

MSRP - \$5200 MIKROE-3294

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





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



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MSRP - \$1700 MIKROE-2925



**M-BUS RF Click** With ME70-169 RF wire-

less module. Unlicensed ISM frequency band 169.400-169.475 MHz.

MSRP - \$5400 MIKROE-2048



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

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MSRP - \$7900 MIKROE-3072



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

MSRP - \$6900 MIKROE-3144



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Page 24

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by InnoComm. MSRP - \$2500 MIKROE-2534



XBee,

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**SPIRIT Click** 

With SP1ML 868MHz

module. Memory: 16 kB

RAM and 128 kB Flash.

ultra low-power RF

MSRP – \$3900 MIKROE-2568

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**XBEE Click** 

Xbee® and Zig-

MSRP - \$5900 MIKROE-1599

bee-compliant XB-

with a PCB antenna.

24CZ7PIS-004 module

#### SigFox 2 Click Carries the SN10-12, a fully integrated Sig-

fox<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.

> MSRP - \$2500 MIKROE-3163



**EnOcean 4 Click** With ultra-low power TCmodule which operates at 920MHz radio band.

> MSRP - \$39° MIKROE-3637



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GPS El click

**GPS 4 Click** 

MSRP – \$3400 MIKROE-2704

GPS 4 click carries

the L70 compact GPS

module from Quectel,

with external antenna.

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NANO GPS Click

With Nano Hornet,

world's smallest GPS

module with an inte-

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grated antenna.

MSRP – \$4500 MIKROE-1912



**DeviceDrive Click** The WRF01-M24A M515U transceiver gateway module uses the UART interface (with JSON command format).

MSRP - \$1900 MIKROE-3663



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**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.



Nano LR Click The EMB-LR1276S,

a sub-1GHz wireless module that supports the LoRaWANTM®.

MSRP - \$3900 MIKROE-4514



G2C Click

MSRP - \$1900

MIKROE-3291

A gateway Click board™ which provides a simple and reliable connection to the Click Cloud platform.

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

MSRP - \$115°C MIKROE-3351

WiFi 9 Click With the PAN9420 a 2.4 GHz ISM band Wi-Fi-embedded module.

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**EnOcean 3 Click** 

With ultra-low power With the ANNA-B112, TCM515 transceiver gateway module and operates at 868MHz radio band.

MSRP – \$39<sup>00</sup> MIKROE-3653

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an ultra-small, standalone Bluetooth low energy module.

**BLE 8 Click** 

MSRP – \$2900 MIKROE-3674

MSRP – \$4500 MIKROE-3666









WiFi 10 Click Based on the SX-ULPAN-SB-2401, an integrated wireless

LAN module. MSRP – \$2500 MIKROE-3432



**WiFi BLE Click** 

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

MSRP - \$21<sup>00</sup> MIKROE-3542

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

MSRP - \$11500 MIKROE-3350



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

MSRP - \$3900 MIKROE-1887



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GNSS 70E cli

**GNSS ZOE Click** 

An evaluation board for

GNSS SiP receiver from

ultra small ZOE-M8Q

u-blox.

MSRP – \$3900 MIKROE-3660

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NFC tag device, offering

erasable programmable

16 Kbit of electrically

memory (EEPROM).

MSRP - \$1200 MIKROE-3659

NFC Tag 4 Click

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G2C 3G Click Allows connection to the feature-rich Click Cloud platform, over the 3.75G UMTS/HSPA network.

MSRP - \$69° MIKROE-3888



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

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

3G fall back.

MSRP - \$1050 MIKROE-3885





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**BLE 4 Click** 

It features the

NINA-B312, an

MSRP – \$2900 MIKROE-3773

integrated wireless

connectivity solution.

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SPIRIT 2 Click

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With the SP1ML-915,

an ultra-low power RF

at 915 MHz ISM band.

MSRP – \$3900 MIKROE-3598

module, which operates

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

> MSRP - \$2600 MIKROE-4120



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10.00

**BLE 7 Click** 

Based on the BGX-

low energy module

from Silicon Labs.

MSRP - \$2100 MIKROE-3872

13S22GA, a bluetooth

**BLE 5 Click** Based on the PA-

NFP clie

N1760A, a Bluetooth 4.2 low energy module from Panasonic.



Bluetooth audio stream add on board based on BM62 module from Microchip

MSRP - \$4500 MIKROE-4117





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M-BUS RF 4 Click

With a Telit ME70-169

RF wireless module.

MSRP – \$54<sup>0</sup> MIKROE-3692

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Nano GPS 2 Click The smallest GPS module It's compliant with with an integrated patch BT specifications antenna, the ORG1510v5.0 and BQE qualified. MK05 by OriginGPS.

MSRP - \$4500 MIKROE-4150



MSRP - \$2100

MIKROE-4170



UWB Click The DWM1000 module based on Decawave's DW1000 Ultra-Wideband (UWB) transceiver.

MSRP - \$6900 MIKROE-4199

**Thingstream Click** Uses any shape and It is equipped with the SIM868, an 802.11b/q/n size external antenquad-band GPS/GLONna, with 16 Kbit of EEPROM.

ASS/GSM module. MSRP – \$45<sup>00</sup> MIKROE-3739

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MSRP – \$600 MIKROE - 3971

uiu. 1111 -믂 -NFC Extend Click

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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

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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







MIKROE-4087



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

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MSRP – \$15<sup>00</sup> MIKROE-4230



**ISM TX Click** 

The MAX41460, a

UHF sub-GHz ISM/

Maxim Integrated.

MSRP - \$1200

MIKROE-4242

SRD transmitter from

#### **GNSS RTK Click**

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

MSRP – \$22900 MIKROE-4456

LTE IoT 9 Click EXS62-W, LTE-IoT Wireless Module from Thales. MSRP - \$6900

MIKROE-4465

Innovations

**RFID 2 Click** 

different tags.

MSRP - \$7900

MIKROE-4208

The ID-12LA-SA, an ad-

vanced low-cost RFID

reader module with 38

- C



er CMOS RF dual-channel receiver. **MSRP – \$69**00 MIKROE-4499

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The BT121, a du-

al-mode Bluetooth

from Silicon Labs.

MSRP - \$5900

MIKROE-4384

Smart Ready module

**BT Click** 



NFC

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NFC 2 Click

MHz from NXP.

MSRP - \$3400

MIKROE-4309

The PN7150, designed

for contactless com-

munication at 13.56

#### **BLE TINY Click**

Features the DA14531MOD, Smart-Bond TINY module.

**MSRP – \$1500** MIKROE-4582



### SENSORS





IR Grid Click

Equipped with the

MLX90621BAD, a

from Melexis.

MSRP – \$6900 MIKROE-2622

16x4 IR array sensor,



Accel Click

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

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

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MSRP - \$1900 MIKROE-3084



#### 6DOF IMU 2 Click

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

MSRP - \$2400 MIKROE-2337



#### Hydrogen Click

LSM9DS1 inertial mea-With MQ-8 sensor for surement module - 3D hydrogen (H2). Sensor's accelerometer, gyroscope detection range 100and magnetometer.

9DOF click

9DOF Click

MSRP - \$2400

MIKROE-1941

MSRP – \$15<sup>00</sup> MIKROE-1629









10000ppm of H2.



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

SENSORS Page 31



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

MSRP – \$18<sup>00</sup> MIKRDE-2755



**Barometer Click** 

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

MSRP – \$15<sup>00</sup> MIKROE-1817







MSRP - \$900 MIKROE-2549

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#### **RTD Click**

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

MSRP - \$19° MIKROE-2815



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



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**Diff Press Click** 

The MPXV7007DP,

integrated monolithic

differential pressure

sensor from NXP

MSRP - \$2700

MIKROE-3332

**Diff Press clici** 

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#### **3D Motion Click**

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

MSRP - \$5900 MIKROE-1877



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MSRP - \$1500

MIKROE-2935

**GeoMagnetic Click** 

Measures the geomagnetic

field in three perpendicular

axes. The onboard sensor

uses FlipCore from Bosch.

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

MSRP - \$4900 MIKROE-1298



**6DOF IMU Click** 







**Air quality Click** 

nia, nitrogen oxides,

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

MIKROE-1630

benzene, smoke, CO2.

MQ-135 sensor for de-

tecting gases - ammo-

#### **Bi Hall Click**

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







equivalent predictions.

MSRP - \$7900

MIKROE-2529

the indoor air quality (IAQ). MSRP - \$2900 MIKROE-2953



#### **Color Click**

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

CO Click

MSRP - \$1650

MIKROE-1626

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



**Compass Click** 

With LSM303DLHC

ultra compact high

e-compass module.

performance

MSRP - \$2500

MIKROE-1386

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#### EMG Click

Measures the electrical activity produced by the skeletal muscles.

MSRP - \$2900 MIKROE-2621



MSRP - \$3400

MIKROE-2467

**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 temperature, relative humidity, pressure and Volatile Organic compounds gases.



MIKROE-1396

#### **Fever Click**

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

MSRP - \$1100 MIKROE-2554



#### **FLAME Click**

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

MSRP - \$1200 MIKROE-1820





Force 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





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

Uses the top-of-theclass integrated BIOFY® SFH 7072 sensor from OSRAM.

10.1 a mu a 1000 3 in a f t Rate El cl Heart Rate 5 Click

**Heart rate 4 Click** Carrie the MAX30101 high-sensitivity pulse

oximeter and heartrate sensor. MSRP - \$2100

MIKROE-2510

MSRP - \$3200 MIKROE-3012





DHT22 die **Current Click** DHT22 Click With INA196 current With DHT22 temp. and shunt monitor, MCP3201 humidity measurement 12-bit ADC, MAX6106 sensor. Hum. 0-100%, voltage reference. temp. -40 to +80° C. MSRP - \$2400

MSRP - \$2400 MIKROE-1798

#### **Diff pressure Click** MPXV5010DP pressure sensor. Designed for comparing 2 pressure measurements.

MSRP - \$5900 MIKROE-2387



**Heart rate 3 Click** 

SFH7050 pulse oximetry

and heart rate monitoring

module, and AFE4404 IC

for bio-sensing.

MSRP - \$3900

MIKROE-2036







BULL ON

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



### ENSORS ഗ

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**Earthquake Click** 

high-precision seismic

sensor from Omron.

It carries D7S, the

world's smallest

MSRP - \$6900

MIKROE-2561



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.

MIKROE-1379

MSRP - \$250

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ECG

It measures the electri-

cal activity of a beating

trodes taped to the skin.

heart through elec-

ECG Click

MSRP - \$3900

MIKROE-2455

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ECG S c

Tracks the patterns of

your beating heart. It

delta-sigma ADC.

MSRP - \$4900

MIKROE-2507

carries ADS1194 16-bit

ECG 2 Click



#### Hall current Click

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

MSRP - \$3400 MIKROE-1578



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HDC1000 Click

It's a humidity (and

temperature) mea-

surement Click carrying

the HDC1000 sensor.

MSRP - \$1900

MIKROE-1797

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**IR eclipse Click** 

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

MSRP - \$1500 MIKROE-1711



Heart rate clic

**Heart rate Click** 

integrated pulse

sensor.

MSRP - \$1900

MIKROE-2000

With Maxim's MAX30100

oximetry and heart-rate

IR reflect Click Carries GP2S700HCP reflective photo interrupter and an onboard potentiometer.

MIKROE-1882





MSRP - \$1200





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**MAGNETO Click** 

MSRP - \$36°

MIKROE-1886

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

MIKROE-1938

LightRanger Click LightRanger 2 Click It's a proximity sensor With VL53LOX IC, the

world's smallest Timeof-Flight ranging and gesture detector sensor.

MSRP – \$24<sup>00</sup> MIKROE-2509







LightHz Click

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

MSRP – \$17<sup>90</sup> MIKROE-990

bient light sensor. MSRP - \$2400 MIKROE-1897





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LSM6DSL Click

Measures linear and

angular velocity with

six degrees of freedom.

Carries LSM6DSL module.

SM605

MSRP - \$15°

MIKROE-2731









non-contacting rotary position sensors with MLX90316 sensor IC.

MSRP - \$2900





MSRP - \$1700 MIKROE-1648



**Manometer 2 Click** 

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

MSRP – \$39<sup>00</sup> 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



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Shake2Wake Click With ADXL362 ultralow power, 3-axis MEMS accelerometer. Includes several activity detection modes.

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S RECEIPTION

**IR distance Click** 

With GP2Y0A60SZ0F

distance measuring

sensor. Measuring

range 10-150 cm.

MSRP - \$2500

MIKROE-1991

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MSRP - \$39° MIKROE-1942



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

MSRP - \$1500

MIKROE-1999

IrThermo Click 5V

With MLX90614ESF-AAA

IR thermometer module,

factory calibrated in wide

temperature range.

MSRP - \$2900

MIKROE-1362



MIKROE-1587

Thermo 2 di

IrThermo 2 Click

It is a non-contact tem-

perature measurement

thermopile sensor.

MSRP - \$20°

MIKROE-1888

solution, with an infrared

LPG Click With MQ-5 sensor for detecting liquefied petroleum gas leakage. Detection range 200-10000 ppm. MSRP - \$15°



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DC 1000 cli

With ind-to-digi. convert-

er IC and a detachable

sensor. For short range

inductive sensing.

MSRP - \$3500

MIKROE-1583

LDC1000 Click

**Light Click** 

photodiode.

MSRP - \$1800

MIKROE-1424

Used to measure

ambient light intensity,

with PD15-22CTR8 PIN

#### 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





Methane Click

With MQ-4 sensor

for methane (CH4).

10000ppm of CH4.

MSRP - \$1500

MIKROE-1628

Detection range 200-

PU 9 DOF **MPU 9DOF Click** 

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

MSRP - \$42° MIKROE-1719



Ozone 2 Click

With MQ131 sen-

sor for Ozone (03).

1000 ppm of 03.

MSRP - \$3700

MIKROE-2767

Detection range 10-

**MOTION Click** 

MSRP - \$1300

MIKROE-1589

It's a motion detector

sensitive only to live



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

MSRP - \$4900 MIKROE-2516

**MPU IMU Click** Carries MPU-6000 integrated 6-axis motion tracking device and a DMP (Digital Motion Processor) MSRP – \$39<sup>00</sup> MIKROE-1577

bodies with PIR500B, a pyroelectric sensor.



**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





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AK9752

**IR Sense 2 Click** 

Uses the AK9752, an

ultra-small infrared

sensor IC, with an I2C

interface, from AKM.

MSRP - \$2100

MIKROE-2966



MSRP - \$2600 MIKROE-2961

ENSORS

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MSRP - \$2000 MIKROE-2293







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

MIKROE-1445



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SHT click

Temperature and

humidity sensor SHT3x-

DIS. -0 to 100% RH, 40

to 125°C temp. range.

SHT Click

MSRP - \$2600

MIKROE-2101

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

MSRP - \$900 MIKROE-2632



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



**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





retch cli

Measures stretch forces

with conductive rubber

cord - 40-160 ohms per

Stretch Click

cm resistance.

MSRP - \$3500

MIKROE-2064

#### **THERMO K Click**

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

MSRP - \$2400 MIKROE-2501



**Altitude Click** 

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

MSRP - \$1450 MIKROE-1489

MSRP - \$2900 MIKROE-1197

and PCC-SMP K-type

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#### roxFusion **ProxFusion Click**

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

HTU21D Click

MSRP - \$2100

MIKROE-1687

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combined multi-sensor IC. MSRP - \$900 MIKROE-2920



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ADEMO

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THERMO dla

THERMO Click



thermocouple connector.

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

THERMO 2 dl

**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 ഗ Page 41



A multifunctional capacitive and Hall-effect sensor device. Carries the IQS624, a



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

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

MSRP - \$1800 MIKROE-1927



MIKROE-2786

24-2000 RoHS

**Thunder Click** 

and proximity of

MSRP - \$3500

MIKROE-1444

Detects the presence

lightning activity with

AS3935 lightning sensor.

#### Water Detect Click

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

MSRP - \$900



Tilt click

With RPI-1035, a 4-direc-

tional optical tilt sensor -

left, right, backward,

forward movement.

MSRP - \$1290

MIKROE-1834

**Tilt Click** 

#### Weather Click

MIKROE-1978

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



ILT-D-SHAKE di

**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



UNI HALL

**UNI HALL Click** 

Hall-effect switch

MSRP - \$1200

MIKROE-1647

With US5881 unipolar

sensitive to the North

Pole magnetic fields.

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

MIKROE-2811



Thermo J Click

MSRP - \$2400





UV Click

MSRP - \$2400

MIKROE-1677

With ML8511 IC that

is sensitive to UVA and

UVB rays. Outputs either

analog or digital signals.





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UV 2 Click

MSRP - \$1900

MIKROE-2378

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

> MSRP - \$900 MIKROE-2736

.... - Harris --.

#### DHT22 2 Click

DHT22 El clici

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

MSRP - \$22° MIKROE-2818



IrDA 3 Click Intelligent IR transceiver

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

MSRP - \$2600

MIKROE-2871

MSRP - \$2500 MIKROE-2781

It detects movement, thanks to the PD-V11 a 24GHz microwave motion sensor.

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CONTRACT OF



with VEML6070 UVA

light sensor.





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 ഗ Page 43



**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

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**Temp-Log Click** A precise ambient temp. measurement device, with 8Kbit (1024 bytes) of EEPROM memory.

MSRP - \$1500 MIKROE-2886



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UV El cli

Equipped with the Si1133,

light sensor with I2C Inter-

a UV index and ambient

face, from Silicon Labs.

UV 4 Click

MSRP - \$1500

MIKROE-2989

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MSRP - \$1500 MIKROE-3004



Temp & Hum elle

Temp&Hum Click

With HTS221 temp. and

relative humidity sensor.

Measurement accuracy

is ±1°C in O-60°C range.

MSRP - \$1600

MIKROE-1971

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

MSRP - \$1500 MIKROE-3050



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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

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

MSRP - \$3200 MIKROE-3061



Color 7 Click Features the TCS3472 color light to digital converter with IR filter, from AMS.

MSRP - \$1600 MIKROE-3062



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Temp-Hum 3 Click

Uses the HDC2010, a Low

Power Humidity and Tem-

from Texas Instruments.

perature Digital Sensor

MSRP - \$1300

MIKROE-2937



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ECG 3 Click

ECG E did

Uses the MAX30003 IC,

an ultra-low power, sin-

gle channel, integrated

biopotential AFE.

MSRP - \$4500

MIKROE-3273

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acuum elle

With the monolithic vacuum

sensor the MPXV6115V, it

measures pressure values

Vacuum Click

down to -115kPa.

MSRP - \$4300

MIKROE-3195

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Gyro 2 Click It is equipped with the FXAS21002C, a three-axis integrated angular rate gyroscope.

MSRP - \$1800

MIKROE-3300

MSRP - \$2500 MIKROE-3215

heart rate monitoring.

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art rate 🖪

**3D HALL 5 Click** Carries the IIS2MDC-TR, a low power 3D magnetic sensor.

MSRP - \$1500 MIKROE-3197

a 16-bit digital light sensor with the I2C

serial interface.



MSRP - \$1600

MIKROE-3199

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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 ഗ 45 Page .



**Heart rate 6 Click** With two green LEDs, driven by the BH1790GLC, a monolithic integrated sensor for



**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.

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BLD BLD P

10.00

Gaussmeter Click The MLX90393, a micro-

power magnetometer

Triaxis® technology.

MSRP - \$1900 MIKROE-3099

based on the proprietary

all the life







**Oximeter Click** 

The ADPD105, a highly

front end (AFE) device

from Analog Devices.

MSRP - \$390

MIKROE-3102

configurable photometric

#### harrista LightRanger 4 Click

Measures an accurate distance based on a ToF with VL53L1X rangefinder module. MSRP - \$2400 MIKROE-3176



Uses the Simblee™

enabled RFD77402

ToF sensor module

from RF Digital.

MSRP - \$2400

MIKROE-3103

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LightRanger 3 Click

#### Load cell Click

With the HX711, a 24bit analog to digital converter (ADC), for weight scale applications. MSRP - \$1200 MIKROE-3168



#### **Microwave 2 Click**

Detects movement by utilizing the NJR4265RF2C1, an intelligent 24GHz microwave motion sensor.

MSRP - \$550 MIKROE-3187



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IrThermo 3 Click

Uses the MLX90632

FIR sensor from Mel-

temperature sensor.

MSRP - \$2700

MIKROE-3121

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Call and a state

CO 2 Click

CO El click

With the SPEC amperomet-

ric, 3SP CO 1000 gas sensor

which electrochemically

reacts with the (CO).

MSRP - \$5200

MIKROE-3196

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

MSRP - \$1500 MIKROE-3190



3D Hall 2 Click











#### Accel 6 Click

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







#### **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 - \$1500 MIKROE-3030

MSRP - \$1800 MIKROE-3020



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

MSRP - \$1600

measurement, with the

Equipped with the MiCS-5524, a

compact metal oxide

ICP-10100 sensor. MSRP - \$1500 MIKROE-3328

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MIKROE-2338

**Altitude 3 Click** 

1.01 iii 😇 Altitude El cik Allows high-resolution barometric pressure







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MIKROE-3097



Alcohol 2 Click

The LMP91000, a highprecision integrated analog front-end IC

MSRP - \$5200



NO2 Click

The 3SP-N02-20 gas sensor from SPEC Sensors, which can sense NO2 concentration up to 20ppm.

MSRP - \$5200 MIKROE-3098

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NDIR CO2 Click

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

MSRP - \$14900 MIKROE-3134



Hall Current 3 Click

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

MSRP - \$1900 MIKROE-3118



**NAME** 

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The BPS230, a relative

humidity and tempera-

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

Interface, by Bourns.

MSRP - \$1600

MIKROE-3342

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

MSRP - \$29° MIKROE-3240



#### Magnetic linear Click

Which utilizes the HMC1501, a magnetic field displacement sensor IC.

MSRP - \$1800 MIKROE-3274



#### 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



#### Hall Current 4 Click Designed to measure relatively high current

by using the integrated ACS70331 sensor. MSRP - \$180



MIKROE-3308



IR Grid El cli

IR Grid 2 Click

It is equipped with the

MLX90640, a 32x24 IR

array sensor which con-

tains 8 Kbit EEPROM.

MSRP - \$75°

MIKROE-3194

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With the AEAT-8800-024,

an integrated 10 to 16-

bit programmable angu-

lar magnetic encoder.

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Angle 4 Click



**MAGNETO 4 Click** The AS5311, a high resolution magnetic linear encoder by ams.

MSRP - \$2200

MIKROE-3522

MSRP - \$1700 MIKROE-3657

sensor IC Texas Instruments.

MSRP - \$900

**Thermo 15 Click** The NCT75, a high

with the 2-Wire interface, from ON Semiconductor.

MIKROE-3662

MSRP - \$900 MIKROE-3658

12.00 Thermo 16 Click The TMP235, a high accuracy temperature

accuracy temp. sensor IC









MAGNETO 7 Click The BM1422AGMV, a 3-axis magnetic sensor IC from ROHM Semiconductor.



Temp&Hum 10 Click Temp&Hum 11 Click The HDC1080, a low power humidity and temperature digital sensor from TI.

MSRP - \$1300 MIKROE-3469

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The HDC2080, a Low Power Humidity and Temperature Digital Sensor from TI.

MSRP - \$2100 MIKROE-3636

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Temp&Hum 12 Click



Temp&Hum 13 Click The HTU21DF, a digital

relative humidity sensor with temp. output from TE connectivity. MSRP - \$1200

MIKROE-3635

essure 🗟 d Pressure 6 Click Allows readings in the range from 300hPa up to 1300hPa, with the BM1386GLV sensor.

MSRP - \$1800

MIKROE-3216

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Temp&Hum 5 Click The HIH6130, a relative humidity and temp. sensor with I<sup>2</sup>C Interface,

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Ser les les

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





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.

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Temp-Log 4 Click

Featuring the SE97B IC,

EEPROM.

MIKROE-3329

MSRP - \$1200

an accurate temperature sensor IC with integrated

MSRP - \$12° MIKROE-3600



MIKROE-3107

#### Color 5 Click

**Ultrasonic 2 Click** 

Equipped with the PGA460,

based on SONAR principle.

a highly-integrated

MSRP - \$29°

MIKROE-3302

system-on-chip (SoC),

Features the P12347-01CT, a color and proximity sensor from Hamamatsu company. MSRP - \$1600



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**Proximity 9 Click** 

integrated proximity and

ambient light sensor from

Vishay Semiconductors.

MSRP - \$900

MIKROE-3465

The VCNL4040, a fully

#### Hall Current 6 Click The ACS723(LLCTR-05AB-T), a high-accuracy, galvanically

isolated current sensor IC, from Allegro Microsystems. MSRP - \$1800 MIKROE-3443



#### Temp-Log 5 Click

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**Smart DOF Click** 

The BN0080, a System

in Package (SiP) sensor

MSRP – \$2600 MIKROE-3457

produced by Hillcrest Labs.

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

MIKROE-3442



Temp-Log 6 Click The MAX6642, a ±1°C, SMBus/I2C compatible local/remote temp. sensor by Maxim Integrated.

MSRP - \$900 MIKROE-3437



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6DOF IMU

6DOF IMU 4 Click

6-axis MEMS Motion-

Tracking™ IC from TDK

The ICM-20602, a

Invensense.

MSRP - \$160

MIKROE-3410

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Temp&Hum 6 Click With the ENS210 sensor. Equipped with the Si7021-A20, an An ultra-accurate temperature and relative accurate and reliable humidity sensor (RH). sensor IC.

MSRP - \$12° MIKROE-3270

F -12 -----Hum 2 Temp&Hum 7 Click

MSRP - \$1600

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MSRP - \$1500

MIKROE-3685

MIKROE-3272

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

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MSRP - \$1900 MIKROE-3263



**Pressure 7 Click** Features an digital barometric pressure and temperature sensor labeled as MS5837.

MSRP - \$49° MIKROE-3246



**Remote Temp Click** Gyro 3 Click The EMC1833 from Microchip, a specifically designed IC, measuring remote temperature.

With the I3G4250, a three-axis digital

MSRP - \$2500 MIKROE-3449

gyroscope.





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





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



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**Ambient 3 Click** 

The AS7225, a cali-

from ams AG.

MSRP - \$2500

MIKROE-3686

brated XYZ chromatic

smart lighting director



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

MSRP - \$1400 MIKROE-3566





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**Ambient 5 Click** 

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**Ambient 6 Click** The AS5311, a high resolution magnetic linear encoder by ams.

MSRP - \$9° MIKROE-3444



**Ambient 7 Click** The SFH 5701 A01, an accurate light-intensity sensor from Osram Opto Semiconductors.

MSRP - \$900 MIKROE-3601



**Ambient 8 Click** The LTR-329ALS-01, a high accuracy ambient light sensor (ALS) from LiteOn.

MIKRDE-3452



MSRP - \$900



6DOF IMU 8 Click The ISM330DLC, a 3D accel. and 3D gyro. with digital output for industrial applications, by STMicroelectronics.

MSRP - \$2100 MIKROE-3447



The INA114, a precision

instrumentation ampli-

fier (IA) by Burr Brown<sup>®</sup>,

a division of TI.

MSRP - \$3900

MIKROE-3359

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#### ECG 4 Click

The BMD101, specialized bio-signal sensing System-on-Chip (SoC), from NeuroSky.

MSRP - \$3500 MIKROE-3427



**Thermostat 2 Click** The G6D series PCB power relay, from Omron.





**Opto Encoder 2 Click** The AK09970N, a low power 3D magnetic sensor, from AsahiKASEI (AKM).

barometer IC in water-resistant package. MSRP - \$1500 MIKROE-3603

Pressure 8 Click The MPRLS0025PA00001A, an accurate compensated pressure sensor,

by Honeywell.

MSRP - \$2100

MIKROE-3338



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

MSRP - \$1500 MIKROE-3441



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

MSRP - \$24° MIKROE-3411



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

MSRP - \$2900 MIKROE-3466

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MSRP - \$26° MIKROE-3634





- $\sim$ ECG 5 Click The AD8232, an integrated heart rate monitoring front-end,

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by Analog Devices. MSRP - \$3500

MIKROE-3446



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



absolute digital output



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







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With the MLX90380, a monolithic contactless sensor IC module.

MSRP - \$1500 MIKROE-3310

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

MSRP – \$1200 MIKROE-3690



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6DOF IMU 7 Click

performance, 6-axis

MSRP - \$1600

MIKROE-3776

The ICM-20649, a high-

MEMS MotionTracking<sup>™</sup>

IC from TDK Invensense.

The TLI5012B E1000 is a 360° angle sensor and the analog multiplexer 74HCT4053.

MSRP - \$1700 MIKROE-3815



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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

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6DOF IMU 11 Click

accelerometer, tri-axis

The KMX63 a tri-axis

magnetometer, and

temp. sensor.

MSRP - \$2100

MIKROE-3869

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

MSRP - \$1900 MIKROE-3822



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

MIKROE-3700



MSRP - \$3900



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Accel 13 Click

The KMX63 a tri-axis

magnetometer, and

temp. sensor.

MSRP - \$1200

MIKROE-3742

accelerometer, tri-axis

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

MSRP - \$1200 MIKROE-3710







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Accel 8 Click

The MPU6050, a

motion tracking

Invensense

MSRP - \$1900

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**Presence Click** 

from CaliPile<sup>™</sup> multi-

MSRP – \$27<sup>0</sup> MIKROE-3575

The TPiS 1S 1385. a device

function IR sensor series

MIKROE-3341

sensor IC, from TDK

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Acoil IE clic

triaxial acceleration

sensor from Bosch

Sensortech.

MSRP - \$1700

MIKROE-3440

Accel 11 Click

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**Proximity 7 Click** The ADPS9930, a digital ambient and proximity sensor, by Broadcom (Avago Technologies).

by Excelitas Technologies. MSRP – \$1400 MIKROE-3330



**Proximity 8 Click** The VCNL36687S, a proximity sensor with VCSEL in a single package,

MSRP - \$1300 MIKROE-3439

from Vishay.

Accel 12 Click The BMA456, a digital The MC3216, a lownoise and low power 3-axis accelerometer, from mCube.

MSRP - \$900 MIKROE-3464







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







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

MSRP - \$1300 MIKROE-2938

ENSORS

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#### **Heart Rate 8 Click**

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

MSRP - \$2900 MIKROE-3218



MIKROE-3290

**IR Click** 

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

MSRP - \$2100 MIKROE-3934



#### IrDA2 Click

Features TSOP38338 IR With TFDU4101 infrared 38 kHz receiver module transceiver module and MCP2120 infrared encoder/decoder.

> MSRP - \$2590 MIKROE-1195



**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





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

MSRP - \$1200 MIKROE-3742



**Proximity 10 Click** The SI1143, a pho-The RPR-0521RS, a tometric sensor for digital ambient and the ambient light and proximity detection.

MSRP - \$1600

MIKROE-3455

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 TLE5501 it's an

angle sensors for

any kind of angular

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

position sensing. MSRP - \$1700 MIKROE-3769

#### 6DOF IMU 10 Click Thermo 9 Click Features the KMX62-Features the TSYSO1, 1031 a 6 Degrees-ofa digital temperature

Freedom inertial sensor

from Kionix.

nectivity. MSRP - \$1200 MIKROE-3983

sensor from TE Con-



**Proximity 13 Click** Based on SI1153-AB09-GMR IC from Silicon Labs that can be used as an proximity, and gesture detector.

MSRP - \$1300 MIKROE-3991





MSRP - \$1900 MIKROE-3724

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**Thermostat 3 Click** 



Proximity 11 Click

proximity sensor, by ROHM Semiconductor.



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

MSRP - \$1500 MIKROE-3685

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

CAMERA did

MSRP - \$3900 MIKROE-1816



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

MSRP - \$900 MIKROE-1890





Load Cell 2 Click Features NAU7802

24-Bit Dual-Channel ADC For Bridge Sensors.

MSRP - \$900 MIKROE-4047

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processing from MEMSIC. MSRP - \$900 MIKROE-4063



MSRP - \$14900

MIKROE-4046

ECG 6 Click

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

MIKROE-4061



#### 6DOF IMU 3 Click

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

MSRP - \$700 MIKROE-4086



**Motion 4 Click** Features EKMC1603111, a PIR motion sensor accelerometer, and 3-axis from Panasonic

Corporation. MSRP - \$2900 MIKROE-4078



Features 7-Axis from TDK.

MSRP - \$1900 MIKROE-4089



6DOF IMU 5 Click ICM-20789 chip



**Index Counter Click** 

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

MSRP - \$700 MIKROE-4005





Feature the BG51 radiation sensor is based on an array of custom-

MSRP - \$1600 MIKROE-4039

Thermo 17 Click The TMP451-01, a highaccuracy, low-power remote temp. sensor monitor with a built-in local temp. sensor.

MSRP - \$900 MIKROE-3994





**Heater Click** Set and control exact PCB

HOT ZONE



Texas Instruments.



**VCP Monitor Click** The NA260AIPWR, a digitaloutput, current, power, and voltage monitor with an I2C

and SMBus<sup>™</sup>interface.



6DOF IMU 12 Click With the FSS015NGT The BMI270 IC, a low Honeywell's FSS-SMT power inertial mea-Series force sensor. surement unit, from

Bosch Sensortec. MSRP - \$1500 MIKROE-4073

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Motion 2 Click

Based on EKMC1607112, PIR motion sensor from Panasonic Corporation.

MSRP - \$290 MIKROE-4059



Motion 3 Click

Based on EKMC1606112, PIR motion sensor from Panasonic Corporation.

MSRP - \$2400

MIKROE-4049





Ambient 11 Click With the VEML6035, a low power, high sensitivity, I2C

BG51SM TEVISO.COM





























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The SHT31-ARP, a high

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**SHT AN Click** 

MIKROE-3984



**Color 10 Click** 

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

MSRP - \$700 MIKROE-3997

SENSORS Page 59



**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





The BMX055, a 9-axis sensor for the detection of movements, rotations, and magnetic heading.

MSRP - \$1600 MIKROE-4153

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#### Ammonia Click

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

MSRP - \$5500 MIKROE-4151



Light mix-sens Click

The TMD37253 IC, a

MSRP - \$700

MIKROE-4148

proximity measurement,

color sense (RGBC+IR), and

digital ALS device, from AMS.

#### Hydro Probe Click

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

MSRP - \$900

MIKROE-4131



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Force 4 click

Based on HSFPA-

force sensor from

Alpsalpine.

MIKROE-4193

MSRP - \$2900

R003A piezoresistive

#### Accel 14 Click

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

MSRP - \$3200 MIKROE-4185



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AMS-AG.

MIKROE-4165

MSRP - \$2400

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Spectrometer Click

Uses the AS7341 IC,

11-Channel Spectral

Sensor Frontend from

#### **Thermostat 4 Click**

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

MSRP - \$150 MIKROE-4194



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

MSRP - \$800 MIKROE-4190



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Surface temp Click

With the ADT7420 - an

accurate 16-Bit Digital

I2C temp. sensor from

Analog Devices.

MSRP - \$1900

MIKROE-4205



**Barometer 3 Click** 





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**TMR mix-sens Click** 

With three different

RedRock<sup>™</sup> TMR mag-

Coto Technology

netic sensors.

MSRP - \$1900

MIKROE-4106

#### Thermo 14 Click

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





#### **UVB Click**

Based on GU-VB-C31SM, a Digital UV Sensor from GENUV Technology. MSRP - \$2400

MIKROE-4145

220nm up to 280nm. MSRP - \$4500 MIKROE-4144

Accel 10 Click "femto" accelerometer.

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**Scanner Click** 

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

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220 - 200 nm

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**UVC Click** 

MSRP - \$2400 MIKROE-4108



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MSRP - \$900

MIKROE-4112

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from TDK Invensense MSRP - \$1500 MIKROE-4128

9D0F 2 Click

a high performance,

Based on the ICM-20948,

9-axis MotionTracking<sup>™</sup> IC



Altitude 4 Click

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

MSRP - \$1200 MIKROE-4127

ENSORS ഗ Page 61



spectrum in the range of



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







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

MSRP - \$1800 MIKROE-4270

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

MSRP - \$1200 MIKROE-4294



#### Force 5 Click

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

MIKROE-4305



#### Temp&Hum 14 Click

The SHT40, high-accuracy ultra-low-power 16-bit relative humidity and temperature sensor. MSRP - \$1500

MIKROE-4306



#### Thermo 20 Click

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

MSRP - \$700 MIKROE-4316



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

MSRP - \$700 MIKROE-4348



### **PHT Click**



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Force Sensing Resistor IC

from Interlink Electronics.

Force 3 Click

MSRP - \$2500

MIKROE-4149

#### 6DOF IMU 13 Click

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







#### Surface temp 2 Click

**Air quality 7 Click** The MiCS-VZ-89TE, an integrated sensor module a 16-bit I2C temfor indoor air quality monperature sensor from itoring from Amphenol.

10.00

MSRP - \$3200

MIKROE-4196

Analog Devices. MSRP - \$1600 MIKROE-4266

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Magneto 8 Click Based on the FSR 400 se-

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

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MSRP - \$1500 MIKROE-4204

6DOF IMU 14 Click The ICM-42688-P, high precision 6-axis MEMS motion tracking device, from TDK InvenSense.









MSRP - \$1200

MIKROE-4231

tracking device. MSRP - \$2400 MIKROE-4330

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Thermo 19 Click

The MAX31825, a digital thermometer with 12-bit temp. measurements.

MSRP - \$900 MIKROE-4295



#### **XSENS MTi-3 Click**

The MTi-3, a module outputting 3D orientation, 3D rate of turn, 3D accelerations, and 3D magnetic field.

MSRP - \$39900 MIKROE-4192









**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.

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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.

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VCT Monitor Click

The LTC2990, a

MSRP - \$1500

MIKROE-4353

high-performance

temperature, voltage,

and current monitor.

MSRP - \$29° MIKROE-4420





ment system.

MSRP - \$8900

MIKROE-4301

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Vibra Sense 2 Click

The LDTM-028K a

vibration sensor, of-

fering high sensitivity

at low frequencies.

MSRP - \$2600

MIKROE-4355

Compass 5 Click

The AK09918C, a 3-axis

with high sensitive Hall

electronic compass

sensor technology.

MSRP - \$1500

MIKROE-4366

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The LTC2986, a high accuracy digital temperature measure-

MIKROE-4458



Load Cell 4 Click

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

MSRP - \$1200



**Oximeter 2 Click** The ADPD144RI, a PPG optical sensor for photoplethysmography detection of blood oxygenation.

MSRP - \$1800 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



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

The SHT40 and SGP40, a high-accuracy best-inclass SHT relative humidity, and a temp. sensor.

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MSRP - \$700

racy ultra-low-power 16-bit relative humidity





length technology. MSRP - \$4500 MIKROE-4299

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The ADPD188BI module

Smoke 2 Click

with optical dual-wave-

MSRP - \$1900 MIKROE-4558





100.000 **RAQ Click** The ZMOD4450, a gas

sensor module used to detect typical gases inside refrigeration applications.

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

the highest level of stability and accuracy from AtlasScientific.

MSRP - \$8900 MIKROE-4297



#### pH Click The pH EZO™, offers



#### A 4 0.68 110 - B (B (B)) 100 in n 10.00

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 ഗ Page 65



### INTERFACE





RS232 El elk

RS232 2 Click

The MAX3237E, a 3V to

5.5V multichannel RS232,

1 Mbit/s line driver/receiver

from Texas Instruments.

MSRP - \$1500

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MIKROE-2897



1-Wire I2C Click

Converts I2C to 1-wire

with DS28E17 1-Wire-

to-I2C master bridge

MSRP - \$2200

MIKROE-2750

from Maxim Integrated.



4-20 mA R Click

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

MSRP - \$2600 MIKROE-1387



#### ATA663211 Click

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



#### CAN SPI Click 3.3V

Adds CAN connectivity with SPI interface. Features SN65HVD230 CAN transceiver circuit.

> MSRP - \$2100 MIKROE-986





#### **CAN Isolator Click**



MSRP - \$1900 MIKROE-2335



MSRP - \$3900 MIKROE-2627

Provides isolated CAN communication. Data rates of up to 1 Mbps. Carries a DB 9-pin male connector.





4-20 mAT Click

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



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

MSRP - \$2500 MIKROE-1297



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**ETH Click** 

MSRP - \$2400

MIKRDE-971

ATTITUTE COMPANY

THE REAL PROPERTY OF

With ENC28J60, a 28-pin,

Ethernet controller with an

ital outr

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10BASE-T stand-alone

on-board MAC & PHY.

Kinkin



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

MSRP - \$1400 MIKROE-1910



LPP COM

ETH WIZ di

With W5500, a 48-pin,

10/100 BASE-TX stand-

alone Ethernet controller.

Standard RJ-45 connector.

**ETH WIZ Click** 

MSRP - \$1900

MIKROE-1718

# $\sim$

**BroadR-Reach Click** For realizing network in harsh environments that require reliable Ethernet-based open network.

MSRP - \$690

MIKROE-2796

MIKROE-2810



**EXPAND Click** 

Expands the number of

input-output lines with

Microchip's 16-bit I/O

expander MCP23S17.

MSRP - \$1200

MIKROE-951

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



THE OWNER WATER

EXPAND E click

Expands the number of

input-output lines with

Microchip's 16-bit I/O

expander MCP23017.

MSRP - \$1200

MIKROE-1838

Expand 2 Click

THURSDAY & STREET

#### RS232 Click

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

MSRP - \$1500 MIKROE-1582





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EXPAND 3 6

**Expand 3 Click** 

8-channel programma-

ble I/O expander from

Maxim Integrated.

MSRP - \$1900

MIKROE-1874

With DS2408, an

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



## **USB SPI Click** Microchip's MCP2210

USB-to-SPI protocol converter with GPIO as well as USB MINI B connector.

MSRP - \$1390 MIKROE-1204



MSRP - \$39°

MIKROE-2674

#### **USB UART 2 Click USB UART Click**

Provides USB isolation Adds serial UART comand carries the ADmunication via USB cable. UM4160BRWZ USB With FT232RL USB-to-UART interface module. port isolator.

> MSRP - \$1390 MIKROE-1203

USB UART de



#### 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 - \$340

MIKROE-1940

MSRP - \$2900 MIKROE-1421

high speed USB 2.0 to UART/I2C/SPI serial interface converter.

**FTDI Click** 

FTDL



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

TA663254

ATA663254 Click

MSRP - \$1600 MIKROE-2872



**OBDII Click** 

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

MSRP - \$900 MIKROE-2452

INTERFACE

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With FT2232H - dual



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.

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SPI Isolator click

SPI Isolator Click

Carries ADuM4154 5kV

for a serial peripheral

interface (SPI).

MSRP - \$2900

MIKROE-2583

digital isolator optimized

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MSRP - \$180 MIKROE-989



### RS485 Click 5V

**I2C Isolator 2 Click** 

Provides I2C lines and

power isolation for slave

devices with ADM3260

dual I2C isolator.

MSRP - \$2400

MIKROE-2609

Carries the ADM485 differential line transceiver from Analog Devices. MSRP - \$1800

MIKROE-925



#### PS/2 Click

Adds keyboard and mouse connectivity. With a standard 6-pin Mini-DIN PS/2 connector. MSRP - \$900

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MCP2SI7FD d

and ATA6563 high-

FD controller

MSRP - \$2500

MIKROE-2379

MCP2517FD Click

With MCP2517FD CAN

speed CAN transceiver.

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MIKROE-1576



5485 B c

Carries MAX3471 half-du-

plex transceiver for lithium

battery-powered RS-485/

RS-422 applications.

MSRP - \$1800

MIKROE-2700

RS485 2 Click

#### **PWM Click**

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

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MSRP - \$1490 MIKROE-1898



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R5485 E d

The Click is intended to be

used as UART to RS422/

RS485 communication

RS485 3 Click

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PWM 2 Click With the LT8500, a 48-Channel LED PWM generator with 12-Bit res. and 50MHz serial interface.

MSRP - \$1900 MIKROE-3148







MCP2542 Click Microchip's CAN FD Transceiver with Wake-Up Pattern. Compliant with CAN 2.0 and CAN FD. MSRP - \$2000

MIKROE-2299

transceiver. MSRP - \$4900 MIKROE-2673

TELEVIS

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**RS485 Isolator Click** 

With ADM2682EBRIZ.

a 5 kV RMS signal and

power isolated RS-485

ISARS Isolator C

operation up to 1 Mb/s. MSRP - \$2400 MIKROE-2228



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

MSRP - \$5600 MIKROE-2864



COLORED I



transceiver. High speed



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

FACE Ц Ľ

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Page 73



Isolated dual transceiver Click - secure and easy UART to RS232 conversion, with galvanic isolation.



Skywire<sup>™</sup> Click Adapter Click, which hosts NimbeLink/Skywire<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



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

Riverdi cli

**Riverdi Click** 

An adapter for

MSRP - \$900

MIKROE-2100

connecting Riverdi

mikroBUS<sup>™</sup> socket.

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TFT displays to a

MSRP - \$800 MIKROE-2880



**RiBUS Click** 

An adapter for connecting

any Riverdi TFT displays to

a mikroBUS<sup>™</sup> socket over

the RiBUS connector.

MSRP - \$900

MIKROE-3642

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.

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MCP2518D Click

The ATA6563, a high-speed

MCP2518FD, CAN FD control-

CAN transceiver and the

ler both ICs by Microchip.

MSRP - \$2500

MIKROE-3060

**FERRER** 

MSRP - \$1500 MIKROE-3063





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RS485 4 Click

MSRP - \$3900

MIKROE-3395

The ADM2795E, a dual

channel RS485 driver/receiv-

er, with the ICoupler® isolation

technology, by Analog Devices. support, from NXP.

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#### 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



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**UART I2C/SPI Click** 

The SC16IS740, 64 bytes

FIFOs, and IrDA SIR built-in

of transmit and receive

MSRP - \$2400

MIKROE-3349

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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.



MSRP - \$700

MIKROE-3683

101 -17C to \$914

eINK Click -WD **I2C to SPI Click** Click board adapter lt's based around for connection of the two SC18IS602B, an e-paper displays to the I2C-bus to SPi bridge from NXP. MCU over SPI interface.

MSRP - \$1200 MIKROE-3743



MSRP - \$2400

MIKROE-2239

**Terminal Click Matrix RGB Click** The stackable mikroBUS™ Powered by a 32-bit FT900 MCU designed extension board that can be used for testing or specifically for powering com. surveillance. 16x32 RGB LED matrices.

MSRP - \$700 MIKROE-3745



MSRP - \$700 MIKROE-3878

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Demultiplexer.



## MSRP - \$1200 MIKROE-3870



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LIN transceiver with integrated wake-up and protection features. MSRP - \$1200

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It's the TLE7259-3GE,

MIKROE-3816

LIN Click



**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







via the I2C bus.

AL (ALT)AL AN

MSRP - \$700

MIKROE-4048



Features MCP2518FD, CAN FD controller and ATA6563 CAN transceiver.

> MSRP - \$2500 MIKROE-3060

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

MSRP - \$1600 MIKROE-3993



#### **CAN FD 3 Click**

Features TLE9251V, a High-Speed CAN transceiver from Infenion.

MSRP - \$1500 MIKROE-3992



AREA.



The TCA9546A, a quad Features TLE9252V high speed CAN netbidirectional translating switch controlled work transceiver from Infineon.

> MSRP - \$2100 MIKROE-3933

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Analog MUX Click

With the CD74HC4067, a

high-speed CMOS logic

16-channel analog multi-

plexer/demultiplexer.

MSRP - \$700

MIKROE-4111

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#### I2C MUX 2 Click

Uses the TCA9545A, a 4-channel, bidirectional translating I2C switch.

MSRP - \$700 MIKROE-4094



#### RS485 Isolator 2 Click

With the ADM2867E a 5.7 kV rms signal and power isolated full duplex RS-485 transceiver.

MSRP - \$2900 MIKROE-3863





#### CAN FD 4 Click

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

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CAN SO I

MSRP - \$700 MIKROE-4107



Xplained Pro boards have one or more dual row, 20-pin, 100mil female extension header.

MSRP - \$1200 MIKROE-4123



#### E -----444.995 DMI C DMX Click With the ADM2862E - Power Isolated RS-485 Transceiver and

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PIC18F26K42 MCU. MSRP - \$2900 MIKROE-4130





#### 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.







Based on the LTC4331, SPI Extend Click is which is a point-topoint compatible I2C slave device extender.

**I2C Extend Click** 

MSRP - \$1900

MIKROE-4207

MIKROE-4184

2MHz point-to-point SPI bus extender. MSRP - \$1900



**M-Bus Slave Click** Equipped with the TSS721A, a single chip transceiver.

44.22

MSRP - \$1500 MIKROE-4137



**RF Switch Click** 

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

MSRP - \$1400 MIKROE-4168

INTERFACE

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based on LTC4332, a



**Single Wire CAN Click** 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



### 10 PAIN ▦ 11 61.1 10.00 **EXPAND 6 Click** The CY8C9520A, 20-bit I/O The TCA9548APWR, a low expander with EEPROM,

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and 4 independently con-

fig. 8-bit PWM outputs.

MSRP - \$1500

MIKROE-4243

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I2C MUX 3 Click

voltage eight bidirectional translating switches with an active-low reset input.

MIKROE-4244



**EXPAND 7 Click** 

The CY8C9540A, 40-bit I/O A breakout board that expander with EEPROM, and 8 independently config. 8-bit PWM outputs. MSRP - \$2400

MIKROE-4241



#### 8-pin I2C Click

simplifies the connection of MFI devices to the mikroBUS<sup>™</sup> socket. MSRP - \$700

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#### **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.

MSRP - \$1700 MIKROE-4453

틃 1.0 E 100 -----SPI Isolator 2 Click **I2C Isolator 3 Click** The ISO7741, a high-perfor- CPC5902 - a dual

nonee nor

allarren a

isolation up to 5000Vrms.

MSRP - \$1200

MIKROE-4415

mance guad-channel digital optically isolated biisolator capable of galvanic directional logic-bus repeater.

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MSRP - \$1200 MIKROE-4467



#### Fingerprint 3 Click ISO 9141 Click

MIKROE-4331

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

MSRP - \$600 MIKROE-4265



MSRP - \$700

MIKROE-4262

The L9637, a monolithic bus driver designed for serial comm. in automotive diagnostic applications. MSRP - \$700 MSRP - \$1200



#### **CXPI** Click

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MIKROE-4336

The PCA9615, a Fast-The BD41000AFJ-C, a transceiver 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



## ATA6571 Click



#### RS232 Isolator 2 Click UART MUX 2 Click Features the MAX399,

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



#### MSRP - \$2700 MIKROE-4494

a precise CMOS ana-

log multiplexer.

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MSRP - \$3700 MIKROE-2851

Slave Controller with Integrated Ethernet PHYs.





REFERENCE

## EtherCAT Click





**Binho Nova Click** 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

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## **DISPLAY &** LED





#### **OLED B Click**

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

MSRP - \$2400 MIKROE-1650

OLED driver with controller. Various color support. MSRP - \$2900 MIKROE-1585

OLED C did

With PSP27801 OLED

display and SSD1351

**OLED C Click** 

MSRP - \$2400 MIKROE-1649

display.

OLED Wielici

**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

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MSRP - \$3400

MIKROE-2520

With a green 16x9 LED matrix and IS31FL3731 audio modulated matrix LED driver.

with output latch. MSRP – \$15<sup>00</sup> MIKROE-3264





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

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

Page 83



Uses a single 74HC595 IC, a tri-state, serial-in, parallel-out, 8-bit shift-register



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





**7seq Click** 

shift registers.

MSRP - \$1000 MIKROE-1201

2-digit seven-seg display.

With two 74HC595 8-bit

serial-in, parallel-out

### 16x12 G Click

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

MSRP - \$3000 MIKROE-2758

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	8x8 Eclick

### 8x8 B Click

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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

7x10 B Click

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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

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It features MAX7219 8-digit LED display driver module as well as 64 BLUE LEDs. MSRP - \$1800 MIKROE-1307



MIKROE-1306





It features MAX7219 8-digit LED display driver module as well as 64 GREEN LEDs.





MIKROE-1295



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



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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

7x10 Y Click

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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

7x10 R Click

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8x8 Y Click

It features MAX7219 8-digit LED display driver module as well as 64 YELLOW LEDs. MSRP - \$1500 MIKROE-1294





**BarGraph Click** 

R102510Z light bar

MSRP - \$1200

MIKROE-1423

With 10-segment JSB-

display and two 74HC5

95 8-bit shift registers.

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





LED Flash 2 Click It is a powerful flash/ torch Click, featuring the MIC2870 from Mi-





G 7-SEG R d

TE MANAGER

Concessal Pre-

displays, with a 24pin ribbon cable.

MSRP - \$5900 MIKROE-2659













### Led ring R Click

LED ring R click With a ring of 32 red

74HC595 serial-in, parallel-out shift registers. MSRP - \$1600 MIKROE-2153

crochip. MSRP - \$1900 MIKROE-2830







#### **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

Page 85



**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







With NKK Switch IS-C15ANP4 that combines a switch and a full color organic LED display.

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**Matrix R Click** 

Matrix text display with

two red 5x7 matrices

LED display drivers.

MSRP - \$2900

MIKROE-2245

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and two MAX7219 8-bit

e

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**

MIKROE-3078

The NCP5623B, a triple output RGB LED driver, controlled via the I2C interface, from ON Semiconductors. MSRP - \$1500



#### LED Driver 5 Click

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

MIKROE-3297





**LED Driver 6 Click** 

MSRP - \$1500

MIKROE-3400



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



#### **LED Driver 3 Click**

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







The TPS61160A, a white LED driver with PWM brightness

control.

MSRP - \$1500

MIKROE-3037

gent" RGB elements - WS2812 an intelligent control LED light source. MSRP - \$3500

MIKROE-4115

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LEDs. Carries Microchip's MCP1664, a high-voltage step-up LED driver. MSRP - \$2600

MIKROE-2548

(H) \_\_\_\_ MCPI664 dia With 4 high-power white

MCP1664 Click

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t-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

LED 7-SEG displays and MAX6969 constant-current LED driver. MSRP - \$4400 MIKROE-2034

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Star = 0.56

UT-L 7-SEG R click

UT-L 7-SEG R Click

With two SMD ultra-thin

\*\*\*\*\*\*\*\* IT-M 7-SEG R click

UT-M 7-SEG R Click

Add a double 7 segment display to your next project. RED emitting color.

HIMANIN

MSRP - \$2000 MIKROE-2746



### UT-S 7-SEG R Click

For displaying characters on two 7 segment displays. RED emitting color.

MSRP - \$20°C MIKROE-2840







The AL1781, a sin-

MSRP - \$2300

MIKROE-3917

gle-channel PWM dim-

mable linear LED driver

by Diodes Incorporated.

22 -LCD Mane of **LED Driver 7 Click** LCD Mono Click

> The LSO13B7DH03 LCD has an active-matrix memory liquid crystal display module with 128 x128 panel.

ALC: N























**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

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Page 87



A matrix of 100 "intelli-



**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



**Cap Extend 3 Click** With four capacitive sensor pads that can sense

touch through a variety of different materials. MSRP - \$1600

MSRP - \$1500 MIKROE-3202



**TouchKey 2 Click** 

MSRP - \$1600

MIKROE-2474

With 4 capacitive pads powered by Microchip's ATtiny817. Integrated touch QTouch® controller.

MIKROE-2405



Cap Touch 2 Click

A capacitive touch sensing button, which features the CAP1166.

MSRP - \$1500 MIKROE-2964



## 1 0 Cap Touch click **Cap Touch Click** A capacitive touch sensing button, integrated on a Click



Cap Extend Cal

MIKROE-2474

board™. MSRP - \$1600 MIKROE-2888

B

D



TouchKey 3 Click Equipped with advanced capacitive sensors,

QTouch® technology. MSRP - \$1900







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

capacitive proximity and TC from Azoteq. MSRP - \$1500 MIKROE-3677

The IQS263B, ProxSense®

IC, a 3-channel projected



**CAP Wheel Click** 

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

**MSRP – \$15<sup>00</sup>** MIKROE-3203



Page 91



based on the proprietary



SAML Touch Click The ATSAML10, an ul-

tra-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



### **ROTARY Y Click**

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

MSRP - \$1200 MIKROE-1825



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

MSRP - \$1200 MIKROE-1822



**Button PLAY Click** Knob G Click

It is equipped with the Combination of high-CTHS15CIC05ARROW. quality quadrature rotary a capacitive touch encoder, and a LED ring of 24 individual green LEDs. sensor display. MSRP - \$2100

on PLAY did

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



**Joystick Click** A smart navigation key concept based on

contactless, magnetic movement detection. MSRP - \$2200 MIKROE-1506

stick clic

14011201

MSRP - \$2500 MIKROE-2564

MSRP - \$1600 MIKROE-1446



#### 2x2 Key Click

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



#### **Button G Click** 4x4 Key Click

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

> MSRP - \$990 MIKROE-2040

diameter, with a



### MIKROE-2152







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sealed key lock mechanism that can be set in





#### **ROTARY G Click**

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

MSRP - \$1200 MIKROE-2380



MIKROE-1823







BOTARY O ch **ROTARY O Click** With a 15-pulse incremental rotary encoder with detents, surrounded by a

**HUNKE** 

## MSRP - \$1200



a debounce circuit. MSRP - \$900

MSRP - \$1100 MIKROE-1889



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



Page 93



A single pushbutton transparent, 6.8mm in green LED backlight.



**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





Thumb wheel Click

With a 10-position rotary sprocket connected to a 1-Wire 8-Channel Addressable Switch.

MSRP - \$2900 MIKROE-2366

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

MSRP - \$28° MIKROE-3471



TouchClamp Click

With NXP's MPR121

proximity capacitive

MSRP - \$900

MIKROE-2294

touch sensor controller.

7 plated holes for clamps.

#### POT Click

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



#### ProxFusion<sup>®</sup> 2 Click

Thumbstick Click

A high precision input

device with a dual axis,

spring return and push-

button enabled joystick.

MSRP - \$20°

MIKROE-1627

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

MSRP - \$900 MIKROE-3205



101100

**Touchpad Click** 

Capacitive touch

by Microchip's

MSRP - \$1500

MIKROE-1995

input device driven

MTCH6102 controller.

ouchoad di

#### 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



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**TouchKey Click** 

It has four capaci-

tive pads powered

pad detector IC.

MSRP - \$1200

MIKROE-1906

by TTP224, a touch-

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



**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.

MSRP - \$1200 MIKROE-3713



Cap Touch 5 Click

111111111

**Button Power Click** 

With the CTH-S15CIC050N0FF, a capacitive touch sensor display. MSRP - \$190

MIKROE-3740

MSRP - \$1500 MIKROE-3786

controller.

Features the CY-

8CMBR3106S-LQXI

CapSense® Express™



#### **Vibro Motor Click**

With DRV2605 Haptic Driver for ERM and LRA vibration motors. Over 100 haptic effects library.

HAPTIC die

as C1026B002F. MSRP - \$1200 MIKROE-2826

MSRP - \$2300 MIKROE-2025





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**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



Page 95



Features a compact size Eccentric Rotating Mass (ERM) motor, labeled

**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





POT 2 Click

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

MSRP - \$1200

MIKROE-3325





**TouchPad 3 Click** 

Features the MTCH6301, a turnkey capacitive touch controller.

MSRP - \$1100 MIKROE-4382



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POT 3 Click The MCP1501, a

Microchip.

MSRP - \$2500 MIKROE-3691

precision voltage reference IC from



**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.

7

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Provfusion El click

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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





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MSRP - \$2500

MIKROE-3191

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**Excelon-LP Click** 

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

MSRP - \$2500 MIKROE-3104





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 2 Click

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

**EEPROM Click** 

MSRP - \$800

MIKROE-1200

STMicroelectronics. MSRP - \$1800 MIKROE-1909



111 10 00 AAC Address click **MAC Address Click** A unique node address.

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**Globally Uniqu** I'C ma

LIT

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Carries 24AAO25E64 2Kb 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







Flash di

module. Clock fre-

MSRP - \$1000

MIKROE-1199

**Flash Click** 

**EERAM 5V Click** 

With 47C16 EERAM, a 16Kbit SRAM with EEPROM Backup from Microchip.

MSRP - \$1400 MIKROE-2729

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STORAGI



Flash 5 Click

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

MSRP - \$900 MIKROE-3780



#### **FRAM 3 Click**

MSRP - \$900

MIKROE-3817

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





With EN25080B - 8Mb It carries Microchip's SST26VF064B serial Flash memory flash-memory module quency up to 75MHz. with 64 Mbits capacity.

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MSRP - \$1200 MIKROE-2267

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**MRAM Click** 

Uses the MR25H256, a 256 kilobits serial SPI MRAM memory module from Everspin company.

#### MSRP - \$1800 MIKROE-2914



**Dual EE Click** 

**Contains 2 EEPROM** ICs onboard – the AT24CM02, an I2C serial EEPROM.

MSRP - \$1800 MIKROE-3762





4D 69 68 72 6F 45 6C 65 EB 74 77 6E 69 68 61 97 DI

An EEPROM memory

medium with the capacity of 256KB.

MSRP - \$1500 MIKROE-2536

100 le anti E 14 AMbits -HARAN CO

**Resistive Random Access** 

Memory module which

contains the cell array

with 4 Mbits of data.

MSRP - \$1800

MIKROE-3641

**ReRAM Click** 

急級 ٩ FRAM click

FRAM Click

256K (32,768 words x 8 bits) of Ferroelectric Random Access Memory with MB85RS256A module.

MSRP - \$1500 MIKROE-1486



Memory module based on the S25HS512T a 512 Mbit SPI Flash memory module, from Cypress.

MSRP - \$2500 MIKROE-3823



#### Semper Flash Click **SRAM Click**

Provides 1 Mbit of additional SRAM memory, via Microchip's 23LC1024.

MSRP - \$1500 MIKROE-1902



Based on the SST-26VF064B, a 64 Mbit Serial Quad I/O flash device from Microchip.

MSRP - \$1390 MIKROE-2828



**SQI FLASH Click** 



#### EERAM 2 Click

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





SRAM 2 Click

MSRP - \$1500

MIKROE-4178



#### MRAM 2 Click Features the

Based on ANV32A62A SRAM memory from Anvo-Systems Dresden.

> MSRP - \$1900 MIKROE-4232





The S25HL512T, a 512 Mbit SPI/QSPI Flash memory module, from Cypress.

MSRP - \$2500 MIKROE-4028



#### Flash 6 Click

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

MSRP - \$700 MIKROE-4067

STORAGE



Page 101

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



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







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.

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MSRP - \$1200 MIKROE-4421



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The CY14B101J, a

of 8 bits each.

MSRP - \$2400

MIKROE-4441

1-Mbit nvSRAM orga-

nized as 128K words

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**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.

MSRP - \$2700 MIKROE-4497



#### nvSRAM 4 Click

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

MSRP - \$2900 MIKROE-4482

## MISCELLANEOUS





wire serial EEPROM with a, factory-programmed 64bit serial number.

MSRP - \$700 MIKROE-4521



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RAM

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RAM 12 c

nvSRAM 2 Click

the CY14B101Q, a

1Mbit nvSRAM orga-

nized as 128K words

of 8 bits each.

MSRP - \$2400

MIKROE-4423

## The AT21CSO1, a single-



Secure Click

with secure hard-

MSRP - \$900

MIKROE-2522

With ATECC508A cryp-

tographic coprocessor

ware-based key storage.



Secure 2 Click

MIKROE-2760

Microchip's ATAES132A, a cryptographic coprocessor with secure hardsor with secure hardware-based key storage. MSRP - \$900

MSRP - \$900 MIKROE-2761







Secure 6 Click

The ATSHA204A implements a complete asymmetric key cryptographic

**MSRP – \$7**00 MIKROE-3699



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

MSRP - \$1800 MIKROE-1370









With two G6D1AA-

5A, 250V AC/30V DC loads.



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Secure 3 Click



ware-based key storage.



UA

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



#### **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



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GHARM

FLICKER dia

TI's NA556 dual preci-

G6D-ASI power PCB

00000 100 100 .... 90 90 99 99

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Opto III clic

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MSRP - \$1900

MIKROE-2481

sion timer and Omron's

relay. ON/OFF 0.1-6 sec.

**FLICKER Click** 

## Page 106

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#### Opto 3 Click

88

e -

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

MSRP - \$2100 MIKROE-3319



8888

bad had had had T

C.L DIST

gnal 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

#### Secure SOIC Click

MSRP - \$3900

MIKROE-3788

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





The 08QN50L43020 is an universal socket that supports basically any 8-pin UDFN device.

MSRP - \$6900 MIKROE-3746



#### **Relay 3 Click**

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

MSRP - \$18<sup>00</sup> MIKROE-3357



The LTV-817S, an optocoupler with a high isolation voltage, by LITEON.

MSRP - \$1600 MIKR0E-3337



Opto 2 Click

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

MSRP - \$2500 MIKROE-3015



**Opto Click** 

two VO2630 dual

channel, high speed

optocoupler modules.

It features

MSRP - \$2100

MIKROE-1196

#### 0:0:0 ------223 e 488 1000 te 🗄 d

--ca 300 ALC: NO 1162 -**RNG Click** 

The NC7S14M5X

inverter, and the

**Opto 5 Click** 

Features the FOD4216, a random phase snubberless Triac driver.

MIKROE-4090

MSRP - \$1500 MIKROE-4476

ADS1115 - 16BIT sigma-delta ADC. MSRP - \$1500

An ideal solution for testing and diagnostics of the mikroBUS™ socket pin states. MSRP - \$600 MIKROE-3083

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No.

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INIQUE ID dick

With DS2401 enhanced

silicon serial number

IC. Provides a unique

registration number.

MSRP - \$900

MIKROE-1819

**UNIQUE ID Click** 

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TESTER alla

**TESTER Click** 

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ADC ABC ABC AD mmmm -000 e Opto El click

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

MSRP - \$800 MIKROE-4236

107 Page .



MOTOR CONTROL









**Brushless 6 Click** Fan 3 Click

Designed to drive a three-phase sensorless, brushless motor. With ATmega8A from Microchip. MSRP - \$2700 MIKROE-2847

operate in seven discrete speed steps. MSRP - \$1790 MIKROE-2841

Perfect solution for

speed control. It can

shoot-through protection. MSRP - \$1800 MIKROE-2893



**H-Bridge Click** 

Uses the MC34933, a dual H-bridge driver, from NXP.

MSRP - \$1600 MIKROE-3031



H-Bridge 2 Click

Uses the MPC17510,

an H-Bridge DC motor

driver, with up to 15V

and 1.2A, from NXP.

MSRP - \$1800

MIKROE-3000



5V-16V

Uses the A4941, a three-

driver IC, made by Allegro MicroSystems LLC. MSRP - \$1900

MIKROE-3032





DC Motor 8 Click

The MIC4605, 85V halfbridge MOSFET driver with adaptive dead time and



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



MAGE

phase sensorless fan



Stepper 5 Click

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



Servo Click

A 16-channel PWM

the voltage sensing

servo driver with

circuitry.

MIKROE-3133

MSRP - \$2500



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

MSRP - \$3900 MIKROE-2441



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FAN & click

A two-wire fan driver.

Utilizes the LTC1695,

an I2C fan speed

controller.

MIKROE-3200

MSRP - \$1500

FAN 4 Click

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

MIKROF-2754

MSRP - \$1900 MIKROE-2766



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Advanced PWM

COLUMN ST

MOTORZieli

DC MOTOR 7 Click

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.



DC MOTOR Click With TI's DRV8833RT-YH-Bridge motor driver and TI's 74HC4053 multiplexer. MSRP - \$1800

MIKROE-1526



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The DRV8830. a Low-

Voltage Motor Driver

With Serial Interface,

by Texas Instruments.

MSRP - \$1500

MIKROE-3649

DC MOTOR 11 Click

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**DC MOTOR 9 Click** 

The DR8871. a brushed

internal current sensing,

DC motor driver, with

by Texas Instruments.

MSRP - \$180

MIKROE-3416



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





10101



MSRP - \$1500

MIKROE-2221

(a) (a) (a) (a)

-----DC MOTOR E DC MOTOR 5 Click

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

supply 5.9V-45V. MSRP - \$1700 MIKROE-2699



**PWM driver Click STEPPER Click** Silicon Labs' Si8711CC With A3967SLBT microone-channel isolator for stepping motor driver with

a built-in translator. Max.

MSRP - \$180

MIKROE-1528

controlling DC motors with loads up to 10A. MSRP - \$1400 MIKROE-2272

**STEPPER 2 Click** With A4988 microstepping motor driver. Required external power

MIKROE-1926

supply minimum 7V. MSRP - \$1900

output drive 30V, ±500 mA.





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





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





**STEPPER 4 Click** With TB67S269FTG two-phase bipolar stepping motor driver from Toshiba.

MSRP - \$1900 MIKROE-2748





**Stepper 6 Click** 

The DRV8886, a highly

integrated bipolar step

sensing, from TI.

MSRP - \$2300

MIKROE-3214

motor driver with current

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#### STSPIN220 Click

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

MSRP - \$1700 MIKROE-3545



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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



Fan 6 Click

an RPM based

Algorithm.

MIKROE-3867

MSRP - \$1600

Fan Speed Control

The EMC2103 includes

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### STSPIN820 Click

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

MSRP - \$1700



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**Silent Step Click** The TMC5130 - the uni-

versal high voltage con-

troller/driver for 2-phase

bipolar stepper motor.

MSRP - \$2400

MIKROE-3714

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#### STSPIN233 Click

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

MSRP - \$1700 MIKROE-3546





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Stepper 13 Click

The step motor driver

dual full-bridge motor

IC is the MP6500, a

il.

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driver.

MSRP - \$1500

MIKROE-3736

#### **Driver Click** The TMC2660, a highly integrated bipolar step motor power driver, from the Trinamic company.

MSRP - \$2700 MIKROE-3676





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DC Motor 6 Click

The TB67H451FNG,

brushed DC motor

driver.

MSRP - \$1200

MIKROE-4114

a PWM chopper-type

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**H-Bridge 3 Click** 

The TLE9201SG, an

H-Bridge DC motor

driver, with up to 28V

and 6A, from Infineon.

MSRP - \$1800

MIKROE-3613

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MIKROE-3787

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#### H-Bridge 7 Click

IC, N-channel

H-bridge motor

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

**Stepper 8 Click** 

MSRP - \$1500

MIKROE-4157

MSRP - \$1200 MIKROE-4143

driver.

H-Bridge 4 Click **H-Bridge 5 Click** Contains the Contains the AP1010AEN, which is a MP6515GF-Z, a two channel H-Bridge H-bridge motor driver motor driver. from MPS. MSRP - \$1500

21

MSRP - \$1500 MIKROE-3854

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**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 MOTOR



Page 115



Uses the DRV8876N

Stepper 10 Click

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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





MIGH.

HONE





The ZXBM5210 a Features the high-performance single DRV8874, an integratphase reversible DC motor ed motor driver with drive with speed control. N-channel H-bridge. MSRP - \$900

MSRP - \$1500 MIKROE-4334



DC Motor 15 Click **Driver 2 Click** 

DC

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

MSRP - \$1500 MIKROE-4352



### **H-Bridge 6 click**

Features the VN-HD7008AY, an H-bridge motor driver for automotive DC motor.

MSRP - \$2900 MIKROE-4289





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

MSRP - \$2900 MIKROE-4357



MSRP - \$1200

MIKROE-4454

MIKROE-4333

#### DC Motor 17 Click **Brushless 8 Click**

The TC78B042FTG, a sine-Features the TC78H-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



The TC78B027FTG, a 1-Hall sine-wave PWM controller for three-phase

MSRP - \$1900 MIKROE-4387

**AUDIO &** VOICE



## **Brushless 9 Click**

brushless DC motors.







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

MSRP - \$3900 MIKROE-1534

akUo Pac SpeakUp 2 Click A speech recognition

MSRP - \$3400

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MIC El clic

MSRP - \$1500

MIKROE-3445

MIKROE-2375

With the LM4860, an audio Click. Set it up to recognize up to 100 commands. power to an 8om load.

> MSRP - \$1700 MIKROE-3271

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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



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Audio Amp 4 Click amplifier IC capable of delivering up to 1W of continuous AudioMUX Click Two-band digitally controlled high-quality audio processor with BASS ALC feat. and a 4-channel input selector.

MUX a

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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 AUDIO 

Page 119

The ISD3900, a multi-mes-



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





**BUTTE** 

Audio Amp Click

A mono audio amplifier.

With TI's LM48100Q-Q1

Boomer<sup>™</sup> Mono, 1.3W

Audio Power Amplifier IC.

MSRP - \$1400

MIKROE-2368

### 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



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BUZZ E clic

**BUZZ 2 Click** 

MSRP - \$1200

MIKROE-2720

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#### Noise Click

With noise detecting circuitry. Enables you to set a noise detection threshold. MSRP - \$2900 MIKR0E-2371





#### **FM Click**

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

FM click

MSRP - \$29<sup>0</sup> MIKR0E-1431



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

MSRP - \$1500 MIKROE-2555





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

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 MIKROE-4104



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MSRP - \$2400 MIKROE-2454

With S1V30120 speech synthesis IC powered by the Fonix DECtalk® v5 speech synthesis engine.

MIKROE-2253

TextToSpeech Click

MSRP - \$3900

Personal Per Mic old

### **Mic Click**

With SP00410HR5H-B surface mount silicon microphone with max. RF protection.

MSRP - \$900 MIKROE-2563

With a stereo MP3 decoder VS1053. Multiple formats (MP3, MP1, MP2, MPEG4, etc.).













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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 – \$17<sup>00</sup> 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



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### **DTMF Decoder Click**

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

MSRP - \$1600 MIKROE-4579





MSRP - \$900

MIKROE-4390

Features the HT9200A, a dual-tone multi-frequency decoder.

MSRP - \$1500 MIKROE-4298

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Distance:

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MSRP - \$4300 MIKROE-4450

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

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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







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O-PORT moderande

Features proprietary PIXI™ technology. Configurable 20-channel mixed-signal data converter.

MSRP - \$2900 MIKROE-2817

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

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PAC1921 Click

The PAC1921, a high

side power/current

MSRP - \$1700

MIKROE-2910

monitor from Microchip.

**Multimeter Click** 

Has different ICs: amplifiers,

NE555 timer, BCD decoder,

Hh Kôn Kôn Pen

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MSRP - \$5900 MIKROE-2553

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**LEM Click** 

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#### 1-04 1 122 SNS-RAM SNS 1-00 10 mg mmm mun k I THE PARTY P ..... 111 PAC1921 did

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

MSRP - \$2700 MIKROE-2890



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MSRP - \$2100 MIKROE-3016



Measures AC and DC current (up to 200 KHz). With LTS 6-NP current

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

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PAC1934 clk

PAC1934 Click

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MIKROE-2735



V to Hz Click

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

MSRP - \$2700 MIKROE-2889

SIGNAL MIXED

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





**AC Current Click** 

Measure alternating cur-

ADC converter and

MSRP - \$1400

MIKROE-2523

rents up to 30A. MCP3201

MCP607 CMOS Op Amp.

## **Ammeter Click**

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

MSRP - \$24<sup>0</sup> MIKR0E-2377



MSRP - \$900

MIKROE-2376

### **C** Meter Click

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ADAC click

It's an 8-channel 12-

bit ADC, DAC and GPIO.

With AD5593R con-

figurable ADC/DAC.

MSRP - \$1400

MIKROE-2523

ADAC Click

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



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ADC Click

With Microchip's

MCP3204 12-bit

Analog-to-Digital

converter.

MIKROE-2690

MSRP - \$2600

### **Comparator Click**

Carries LM2903 IC, has two independent precision voltage comparators. 2 mV offset voltage. MSRP - \$1200 MIKROE-1915





#### **DAC Click**

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





DAC 2 Click Carries LTC2601CDD, a 16-bit digital-to-analog converter from Linear Technology.

MSRP - \$1900 MIKROE-1918









#### 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 wiper positions.

MSRP - \$1690 MIKROE-2332

A digitally controlled dual potentiometer, with the resistance of 10K**Ω**.

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MSRP - \$2100 MIKROE-2873

ADC 3 Click With MCP3551/3. a 22-With Microchip's MCP3428 16-bit multichannel analog-to-digital converter.

bit ADC with automatic

MSRP - \$2200

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#### DAC 3 Click

Carries Microchip's MCP4726 IC, a 12-bit digital-to-analog converter.

MSRP - \$18° MIKROE-2038

internal offset and gain calibration. MSRP - \$24<sup>01</sup> MIKROE-1893

ADC 2 Click

MIKROE-1894



With the VFC32KU, a voltage-to-frequency and frequency-to-volt-

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Hz to V 2 Click

age converter.

MSRP - \$4200

MIKROE-3126

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(BEE) V to Hz 2 Click With the VFC32KU, a

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

MIKROE-3131











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





to digital multichannel

converter. It can work in



ADC 5 Click

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

MSRP - \$1800 MIKROE-2846

SIGNAL MIXED



Page 127



**DIGI POT 4 Click** 



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

MSRP - \$270 MIKROE-2396



Voltmeter Click

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

MSRP - \$2400 MIKROE-2436



10K**Ω**.

MSRP - \$1690

MIKROE-2863

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DIGI POT 🖡

**DIGI POT 5 Click** 

A digitally controlled

quad potentiometer,

with the resistance of

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#### **MUX Click**

Equipped with the MUX509, a precise analog multiplexing IC.

MSRP - \$1700 MIKROE-3247



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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

### 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.

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**PWR Meter 2 Click** 

Measuring and monitoring

current up to 5A. It carries

voltage up to 24V and

the MCP3910 module.

MSRP - \$1900

MIKROE-3150

MSRP - \$700 MIKROE-3916



The MCP4728, a quad, (DAC) with (EEPROM).

MSRP - \$1200 MIKROE-3707



#### **DAC 4 Click**

12-bit voltage output Digital-to-Analog Convertor

MIKROE-3712



**DAC 5 Click** It's an advanced 10-bit eight-channel digital to

analog converter (DAC) with DAC53608. MSRP - \$15°



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









**DigiVref Click** 

With the MCP1541 it is a perfect solution to be used in various A/D conversion applications.

110

MSRP - \$1500 MIKROE-3334



MSRP - \$5600 MIKROE-3861

into the AD74413R.

input/output solution. MSRP - \$4900 MIKROE-4081

**AD-SWIO Click** 

The AD74412R a

guad-channel soft-

ware configurable

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MS to DC d

**RMS to DC Click** 

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

MIKROE-3311

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MIKROE-3292



## Current S ci **Current 2 Click**

Equipped with an integrated transimped-

MSRP - \$1700



DAC 7 Click

with AD5624R.

MSRP - \$26°

MIKROE-3886



lt's an advanced 12-bit, The DAC8554IPWR, a four-channel digital to 16-bit QUAD channel analog converter (DAC) voltage-output digital





- 125 MI

mable waveform 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



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AN To PWM click Uses OPA365 series op-amps, and the TLV 3201 comparators

MSRP - \$1200 MIKROE-4060

from TI.



AN to PWM 2 Click

Features the LTC6992CS6, a silicon oscillator from Analog Devices.

MSRP - \$2400 MIKROE-4221



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The AMC1204BDWR, Iso-

lated Delta-Sigma Mod-

ulator for Current-Shunt

**ISO ADC Click** 

Measurement.

MSRP - \$1500

MIKROE-4088

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同時外界	ADC IT



Features the AD-S122U04, a 24-bit precision  $\cdot \Sigma$  ADC converter.

MSRP - \$2700 MIKROE-4488





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**ISO ADC 2 Click** 

successive-approxi-

tal converter (ADC).

MSRP - \$4500

MIKROE-4166

Features the AD7091R,

mation analog-to-digi-

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**ISO ADC 3 Click** 

isolation amplifier.

Features the AMC1100, a precision

MSRP - \$1500

MIKROE-4383

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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



#### VCP monitor 2 Click

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

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ADC III

ADC 8 Click

The ADS1115 a high

precision, low-power,

16-bit analog-to-dig-

ital converter (ADC)

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MSRP - \$2100

MIKROE-3394

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MSRP - \$2300 MIKROE-4126



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Based on MCP3564 a

24-bit Delta-Sigma

Analoq-to-Digital

Converter.

MIKROE-4105

MSRP - \$1700

ADC 9 Click

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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

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

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DAQ 3 Click

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#### 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) device.

MIKROE-4432

MSRP - \$2500

a fast and precise system-in-package DAQ signal chain solution.

MSRP - \$7900 MIKROE-4486







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 MIXED

Page 131



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Uses the ADAQ4003,



**Analog MUX 3 Click** 

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

MSRP - \$1200 MIKROE-4580



POWER MANAGEMENT





MIC23099 Click 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,

and dual buck converters. MSRP – \$27<sup>00</sup> MIKROE-2901

management controller. MSRP – \$1800 MIKROE-2575

MCP73213 Click

Carries MCP73213 du-

al-cell Li-Ion/Li-Poly-

mer battery charge

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MSRP - \$2200 MIKROE-2917





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The STBCO8, an 800 mA standalone linear Li-Ion battery charger with thermal regulation.

MSRP – \$1700 MIKROE-3049



The L6986HTR is a Works in an inverting configuration, provides a step-down monolithic negative output voltage switching regulator able in respect to the GND. to deliver up to 2 A DC.

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



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

States States

MIC24045 d

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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 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 - \$15<sup>00</sup> MIKROE-3814



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VOUT

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MIC24055 elick

MIC24055 Click

ciency buck regulator

Equipped with the MIC24055, high-effi-

from Microchip.

MSRP – \$29<sup>00</sup> MIKROE-2835

VOUT



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

MSRP - \$27<sup>00</sup> MIKROE-2963



**Qi Receiver Click** 

Utilizes the principles of

the inductive coupling

for the purpose of wire-

less power transfer.

MSRP - \$1800 MIKROE-2799



Features LTC3129-1. a buck-boost DC/DC conversion integrated circuit.

MSRP - \$2000

MIKROE-2806



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Solar energy Click

nano-power high-efficien-

cy boost charger and buck

Uses Tl's BQ25570 - a

converter device.

MSRP - \$2700 MIKROE-2814

#### **Charger 5 Click**

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

MSRP - \$1600

MIKROE-2848





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MIC33153 Click

A DC-DC adjustable

step-down (buck)

converter.

MSRP - \$21<sup>00</sup> MIKROE-2887

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MCP16331 Click

Functions as a non-inverting buck-boost voltage





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

MSRP - \$16°C MIKROE-2858





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**Boost Click** 

regulator.

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

Carries Microchip's

MIC2606, a 2MHz, PWM

DC/DC boost switching

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

MSRP - \$27° MIKROE-3094



down DC-DC converter.

MSRP - \$2600

MIKROE-2997

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

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1007

MSRP - \$2700 MIKROE-3277



boost converter. MSRP - \$1700 MIKROE-2757



**BOOST 2 Click** 

A DC-DC step-up

fixed 5V output.

MSRP - \$1500 MIKROE-2894

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regulator that has a





Uses the LM2596, a 3A, step down voltage regulator working at 150 kHz, from Texas Instruments.

MSRP – \$21<sup>00</sup> MIKROE-3055

**VREG 2 Click** 





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



Page 137



PINE 888 888 Charger click **Charger Click** 

Li-Po/Li-for

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



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**Buck 9 Click** 

Buck E clk

The MP9943, a synchro-

from Monolithic Power

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Systems (MPS).

MSRP – \$21<sup>00</sup> MIKROE-3057

nous step-down converter,

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

MSRP - \$24º MIKROE-3568



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**Buck 10 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 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



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**Buck 11 Click** 

Instruments.

MSRP - \$2100

MIKROE-3438

Buck 🖬 cli

The LMR36015, a syn-

chronous step-down

converter, from Texas

#### Buck 2 Click

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

MSRP - \$16<sup>0</sup> MIKROE-2858



### Buck 3 Click

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

MSRP - \$22° MIKROE-2971



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**Buck 12 Click** 

The MPQ8632, a syn-

chronous step-down

converter, from Mono-

lithic Power (MPS).

MSRP - \$2100

MIKROE-3438

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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** 

**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





The MAX17506, a high efficiency, synchronous step-down DC/DC converter with internal compensation.

MSRP – \$2900 MIKROE-3100



**BUCK 6 Click** 

Integrated.

MIKROE-2957

MSRP - \$1800

Uses the MAX17572, a

converter from Maxim

step down (buck) DC-DC



#### **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

charger IC ideal for portable app. with cell balancing. MSRP - \$1500

MIKROE-3853



**Boost-INV 2 Click** The TPS65131, a positive and negative output DC/DC Converter, from Texas Instruments.

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MSRP – \$2900 MIKROE-3123

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**UPS Click** 

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

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

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The BQ25887 fully integrated 2-cell Li-ion batt.



**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



CGD





**Charger 11 Click** 

The MCP73123 - Lith-

(LiFePO4) batt. charge

management controller.

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ium Iron Phosphate

MSRP - \$1700

MIKROE-3650

MSRP - \$1500 MIKROE-4058



MIKROE-4082

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Charger 12 Click

The MAX1501 - linear

battery charger with

thermal regulation for

portable applications

MSRP - \$1500

MIKROE-3744

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### **PowerBank Click**

Uses MP2632B a highly integrated 3A Lu-ion and Li-polymer battery charger. MSRP - \$1900



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Charger 13 Click

It's a single lithium-ion

[Li+] cell batt. charger

based on the RT-

9532GQW

MIKROE-3748

MSRP - \$1500

#### **PowerBank 2 Click**

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

MSRP - \$1900 MIKROE-4116



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

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**Single Cell Click** 

The MCP16251 synchro-

nous boost req. with true

load disconnect and MC-

P1811A LDO linear req.

MSRP - \$900

MIKROE-3844

MSRP - \$1100 MIKROE-4109



## Power MUX Click Features the

MAX890L, a lowresistance power switch.

MSRP - \$1500 MIKROE-4271





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The TPS61391, a

700-kHz pulse-width

modulating (PWM)

Step-Up converter.

MSRP - \$1500

MIKROE-4287

#### Qi RX Click

The PIC16F15313, a 8-bit MCU that makes a flexible, alternative to the wireless charging solutions.

MSRP - \$33º MIKROE-4345



### **Charger 3 Click**

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

MSRP - \$1200

MIKROE-4449

charger combination. MSRP - \$2900 MIKROE-4479

DC/DC regulator/

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

STUSB4700, an independent USB power delivery controller.

MSRP - \$2500 MIKROE-4328



USB power delivery

controller.

MIKROE-4329

MSRP - \$25<sup>0</sup>



**3xBuck Click** It relies on the TPS65263, a triple synchronous stepdown converter.

MSRP - \$3500 MIKROE-3201

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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



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UPS 3 Click

The LTC3110, a bidirectional buck-boost



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

MSRP - \$150 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







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

MIKROE-1891

MSRP - \$2100 MIKROE-1990

TIMER

**TIMER Click** 

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

RTC5 did

Device Technology. MSRP - \$1500 MIKROE-2993



#### 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 the ALARM pin. NE555 precision timer.

**MSRP – \$2500** MIKROE-2032





chip's MCP79510 real-time clock/calendar.

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**RTC 5 Click** Carries Micro-The ICS501, a LOCO™ PLL clock multipli-

er, from Integrated





**Clock Gen 2 Click** 

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 

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

**MSRP – \$21<sup>00</sup>** 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



**Medicine** 

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**One Shot Click** 

The LTC6993-2, a

monostable multivibrator known as a "one-

shot" pulse generator.

MSRP - \$1900

MIKROE-3877

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**Clock Gen 4 Click** The CS2200-CP, an analog PLL architecture comprised of a Delta-Sigma fractional-N frequency synthesizer.

MSRP - \$1900 MIKROE-4300



MIKROE-4413

#### **Clock Gen 5 Click**

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

MIKROE-4121



#### **RTC 9 Click**

Features the M41T82, real-time clock (RTC) with battery switchover MSRP - \$1200





#### RTC 11 Click

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



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#### Watchdog Click

alone watchdog timer.

Features the TPS3430, a stand-

> MSRP - \$700 MIKROE-4416





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

MSRP - \$2100 MIKROE-947







E cli

curate, I2C real-time

clock (RTC).

MSRP - \$1700

an I2C configurable clock generator.

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MSRP - \$1500 MIKROE-4113

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

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MSRP - \$1700 MIKROE-4171



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I2C interface and power

RIC B of

RTC 7 Click

management.

MSRP - \$1700

MIKROE-2976





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#### 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<sup>™</sup> standard.





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

Every day we introduce a new Click board<sup>™</sup>, but at the same time, we produce at least 40-50 different Click boards™ 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

## mikroBUS<sup>™</sup> standard



we make one new product per d e numb his num

Most peo a trillion is Let us giv is equal to years; an So if we s combinati developm sockets, i

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

577

57 Boards

5 Boards

infineon

19 Boards

15 Boards

QUECTEL

11 Boards

BOSCH

Invented for life

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FTDI

Chip



159 Boards

132 Boards

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Texas Instruments

maxim integrated\_

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SILICON LABS

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Melexis

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RENESAS

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Hanwei 8 Boards



Ublox

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VISHAY. 19 Boards

TOSHIBA

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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-49443



Scan ΩR Code to see them all.









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









## Aleksandar Mitrovic

#### Click boards<sup>™</sup> PRODUCT MARKETING MANAGER

Aleksandar is in charge of our Click board<sup>™</sup> product line. He started his career at Mikroe through internship and later technical support, making his way up to his current position.

This accomplishment requested huge dedication to the work, to the customers and products, all of which he demonstrated during the years of employment at Mikroe. As someone who is taking care of hundreds existing and countless future Click boards<sup>™</sup>, he will be your main contact regardless if you are silicon vendor interested in **Chips4Clicks program** or a regular customer interested in sharing ideas about a new Click board<sup>™</sup>.



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