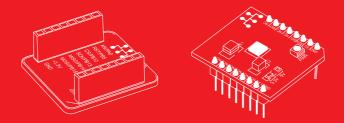
Click boards™

A new idea is just a click away

Adding a new functionality to your design was never so easy. Sensors? Displays? Wireless transceivers? Motor control? Connection ports? Encoders? Or how about speech recognition, thunder detection, fingerprint scanning?

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CONNECTIVIT WIRELESS

Page 4

tel UG95 S2-W1941-U7104 SN:MP75316N40000 IMEI:86578902003337 CE220

OVECTEL

UG95 UG95EA - 128 - STD

3G click (USA) 5V 3.3V SPI 12C

UART GPIO PWM AN

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

MSRP - \$8900 MIKROE-2296



3G click (EU/AUS) 5Va 3.3V SPI 12C UART GPIO PWM AN UG95 3G UMTS/HSPA

module. With SIM card slot, Audio/Mic jack, micro USB port.

MSRP - \$8900 MIKROE-2226



3G SARA click

5V 3.3V SPI 12C UART GPIO PWM AN

With UMTS/HSPA cellular modem the u-blox U201, from the SARA series.

MSRP - \$9900

MIKROE-2244



4G LTE click (EU) 5V 3.3V SPI 12C

UART GPIO PWM AN

It features the LARA-R211 multimode cellular module from u-blox.

MSRP - \$11500 MIKROE-2527



4G LTE-NA click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$11500 MIKROE-2535



6LoWPAN C click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$26⁰⁰ MIKROE-2219



6LoWPAN T click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

TI's CC2520, 2.4GHz ZigBee®/IEEE 802.15. RF transceiver.

MSRP - \$2600 MIKROE-2218



BEE click

5V 3.3V SPI 12C UART GPIO PWM AN

Microchip's MRF24J-40MA 2.4 GHz IEEE 802.15.4 radio transceiver module.

MSRP – \$29⁰⁰ MIKROE-987



BLE 3 click

5V 3.3V SPI I2C

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

MSRP - \$3900 MIKROE-2471 WIRELESS CONNECTIVITY



BLE 2 click

5V **3.3V** SPI I2C **UART GPIO** PWM AN

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

MSRP - \$30⁰⁰ MIKROE-1715 Page 5

WIRELESS CONNECTIVITY

Page 6

BLE P click

RIE

C

5V 3.3V SPI 12C

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

MSRP - \$25⁰⁰ MIKROE-1597



Bluetooth click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$39⁰⁰ MIKROE-958



BT Audio click

5V 3.3V SPI I2C

With RN52 Bluetooth audio module and onboard 3.5mm jacks for a mic and a speaker.

MSRP - \$4900 MIKROE-2399



CC3100 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4900 MIKROE-2336



ccRF click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2200 MIKROE-1435



ccRF 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$3600



EnOcean click

5V 3.3V SPI 12C UART GPIO PWM AN

With TCM 310 transceiver - bidirectional gateway for EnOcean's 868 MHz radio systems.

MSRP - \$3900 MIKROE-1908



EnOcean 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

With TCM 515Z transceiver, based on the 2.4 GHz IEEE 802.15.4 radio standard.

MSRP - \$3900 MIKROE-2521



GNSS click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4600 MIKROE-1850



GNSS 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$3900 MIKROE-1887

Page 7

CONNECTIVI

WIRELESS CONNECTIVITY

Page 8





5V 3.3V SPI 12C

Carries SIM33ELAGNSS module with an integrated antenna and an external antenna connector.

MSRP - \$39⁰⁰ MIKROE-1895



GNSS 4 click 5V 3.3V SPI 12C UART GPIO PWM AN

It features SAM-M8Q patch antenna module from u-blox.

MSRP – \$4400 MIKROE-2045



GNSS 5 click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$4100 MIKROE-2670



GPS click

5V 3.3V SPI I2C

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

MSRP - \$4900 MIKROE-1032



GPS 3 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4400 MIKROE-1714



GSM-GPS click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With SIM808, GSM/GPRS and GPS module. Two antenna connectors, SIM card slot, a micro USB connector.

MSRP - \$85⁰⁰ MIKROE-2382



GSM click

5V 3.3V SPI 12C

With quad-band GL865-QUAD GSM/ GPRS module, onboard antenna connector and SIM card socket.

MSRP - \$4900 MIKROE-1298



GSM 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$4400 MIKROE-1375



GSM 3 click

5V 3.3V SPI I2C UART GPIO PWM AN

With SIM800H quadband GSM/GPRS module. 85.6 kbps GPRS data transfer.

MSRP - \$5700 MIKROE-1720



age 9

GSM/GNSS click

988866666666666666

Q1-A0490-MC8005

MC60CA - 04 - STD MC60CAR01405

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$79⁰⁰ MIKROE-2439

WIRELESS CONNECTIVITY

Page 10



GSM/GNSS 2 click 5V 3.3V SPI 12C

UART GPIO PWM AN

With SIM868 quadband GSM/GPRS module. GPS/GNASS location tracking with GSM.

MSRP - \$6900 MIKROE-2440



IQRF click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4300 MIKROE-2586



IQRF 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4900

MIKROE-2587



IR Beacon click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2100 MIKROE-1939

Loo



IR click

5V 3.3V SPI I2C

Features TSOP38338 IR 38 kHz receiver module as well as QEE113 IR emitting diode.

MSRP - \$9⁵⁰ MIKROE-1377



IrDA2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$25⁹⁰ MIKROE-1195



LoRa RF click

5V 3.3V SPI 12C

UART GPIO PWM AN

With RN2483 LoRa Sub-

Radio Modem.

MSRP - \$5400

MIKROE-1997

GHz, 433/868 MHz Europe-

an R&TTE Directive Assessed



LoRa RF 2 Click 5V 3.3V SPI 12C UART GPIO PWM AN

With RN2903 915 MHz Radio Modem compliant with regulations for use in the USA, CA, AU, NZ.

MSRP – \$54⁰⁰ MIKROE-2225



M-BUS RF click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP – \$54⁰⁰ MIKROE-2048



NFC click

5V 3.3V SPI 12C UART GPIO PWM AN

With near field communications controller PN7120 IC from NXP.

MSRP - \$34⁰⁰ MIKROE-2395 Page 11

e 11

WIRELESS CONNECTIVI

WIRELESS CONNECTIVITY

Page 12



NFC Tag 2 click

5V 3.3V SPI I2C

Carries NT3H1101 NTAG I2C energy harvesting NFC Forum Type 2 Tag from NXP.

MSRP - \$1200 MIKROE-2462



NFC Tag click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$1200 MIKROE-1726



nRF C click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1900 MIKROE-1304



nRF S click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$19⁰⁰ MIKROE-1836



nRF T click

5V **3.3V SPI** 12C UART **GPIO** PWM AN

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

MSRP - \$16⁰⁰ MIKROE-1305



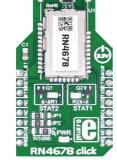
RFid click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2900 MIKROE-1434



RN4678 click

5V 3.3V SPI I2C

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

MSRP - \$2900 MIKROE-2545

RRSI PARENT PARENT

RN4870 click

5V 3.3V SPI I2C

It carries RN4870 Bluetooth® 4.2 low energy module from Microchip.

MSRP – \$33⁰⁰ MIKROE-2543



RN4871 click

5V 3.3V SPI I2C

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

MSRP – \$33⁰⁰ MIKROE-2544



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SPIRIT click

(Ind) R1

SPIRIT

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

OGIC SEI

(-)

-

clic

R2 (100)

With SP1ML 868MHz ultra low-power RF module. Memory: 16 kB RAM and 128 kB Flash.

MSRP - \$3900 MIKROE-2568

CONNECTIVIT WIRELESS

Page 14



tRF click

5V 3.3V SPI 12C UART GPIO PWM AN

With Telit's LE70-868 - a 868 MHz transceiver module with embedded stack.

MSRP - \$5900 MIKROE-1535



WiFi 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

With HLK-M30 module. Can be set up with either a static or dynamic IP address.

MSRP - \$2900 MIKROE-1768



WiFi 3 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2700 MIKROE-1769



WiFi 4 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4900

MIKROE-1913



WiFi 5 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2900



WiFi 6 Click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP – \$69⁰⁰ MIKROE-2043



WiFi 7 click

5V 3.3V SPI 12C

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

MSRP - \$29⁰⁰ MIKROE-2046



WiFi ESP click 5V 3.3V SPI I2C

UART GPIO PWM AN

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

MSRP - \$15⁰⁰ MIKROE-2542



WiFi PLUS click

5V 3.3V SPI 12C

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

MSRP – \$45⁰⁰ MIKROE-1135 WIRELESS CONNECTIVITY

Page 15

WiFly click

WiFlu

antenova[®] A5887 1447 G2M5477-02.6

5V 3.3V SPI 12C UART GPIO PWM AN

ì

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

MSRP - \$6900 MIKROE-1937



Page 16

XBEE click

5V 3.3V SPI 12C

Xbee® and Zigbee-compliant XB-24CZ7PIS-004 module with a PCB antenna.

MSRP - \$5900 MIKROE-1599



NANO GPS click5V3.3VSPII2CUARTGPIOPWMAN

With Nano Hornet, world's smallest GPS module with an integrated antenna.

MSRP – \$45⁰⁰ MIKROE-1912



AnyNet 2G click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

WiFi module with integrated IPv4 TCP/ IP stack and built-in network protocols.

MSRP - \$6900 MIKR0E-2747



ccRF 3 click

5V 3.3V SPI 12C UART GPIO PWM AN

Carries the CC1120 high-performance RF transceiver for narrowband systems from TI.

MSRP - \$3600 MIKROE-2389





10DOF click

5V 3.3V SPI I2C

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

MSRP - \$4900 MIKROE-2073



3D Hall Click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2500 MIKROE-1987



3D Motion click

5V 3.3V SPI I2C

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

MSRP - \$5900 MIKROE-1877

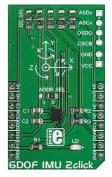


6DOF IMU click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$49⁰⁰ MIKROE-1298



6DOF IMU 2 click 5V 3.3V SPI 12C

UART GPIO PWM AN

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

MSRP - \$24⁰⁰ MIKROE-2337



9DOF click

5V **3.3V** SPI **I2C** UART **GPIO** PWM AN

LSM9DS1 inertial measurement module - 3D accelerometer, gyroscope and magnetometer.

MSRP - \$2400 MIKROE-1941



Accel click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1900 MIKROE-1194



Accel 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$19⁰⁰ MIKROE-1905



Accel 3 click 5V 3.3V SPI 12C

UART GPIO PWM AN H3LIS331DL 3-axis linear

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

MSRP - \$2100 MIKROE-2102



Air quality click 5V 3.3V SPI 12C UART GPIO PWM AN

MQ-135 sensor for detecting gases - ammonia, nitrogen oxides, benzene, smoke, CO2.

MSRP - \$16⁵⁰ MIKROE-1630 SENSORS



Air quality 2 click

5V 3.3V SPI I2C UART GPIO PWM AN

iAQ-Core that measures VOC levels and provides CO2 equivalent and TVOC equivalent predictions.

MSRP - \$79⁰⁰ MIKROE-2529



RTD click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$19⁰⁰ MIKROE-2815



Altitude click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$1450 MIKROE-1489



Ambient click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$900 MIKROE-1890



Ambient 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

TI's OPT3001 ambient light sensor. Measures the visible part of the

light spectrum. MSRP – \$14⁰⁰ MIKROE-1903



Angle 3 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1800 MIKROE-2755



BAROMETER click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-1817



Bi Hall click5V3.3VSPI12C

UART <mark>GPIO</mark> PWM AN

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

MSRP - \$1200 MIKROE-1646



CO click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$16⁵⁰ MIKROE-1626



Color click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$15⁰⁰ MIKROE-1438

COLOR E click

Color 2 click

5V 3.3V SPI I2C

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

MSRP - \$1600 MIKROE-1988



Color 3 click 5V 3.3V SPI 12C UART GPIO PWM AN

With TCS3771 color sensor and a narrow beam Infrared LED.

MSRP – \$17⁰⁰ MIKROE-2103



Compass click

5V 3.3V SPI I2C

It features LSM303DLHC ultra compact high performance e-compass module.

MSRP - \$2500

MIKROE-1386



Compass 2 click5V3.3VSPII2CUARTGPIOPWMAN

With AK8963 3-axis electronic compass based on the Hall effect. 14-/16bit selectable resolution.

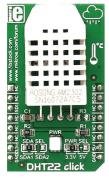
MSRP – \$25⁰⁰ MIKROE-2264



Current click5V3.3VSPI12CUARTGPIOPWIMAN

With INA196 current shunt monitor, MCP3201 12-bit ADC, MAX6106 voltage reference.

MSRP - \$24⁰⁰ MIKROE-1396



DHT22 click

5V 3.3V SPI 12C UART GPIO PWM AN

With DHT22 temp. and humidity measurement sensor. Hum. 0-100%. temp. -40 to +80° C.

MSRP - \$2400 MIKROE-1798



Diff pressure click

5V 3.3V SPI 12C UART GPIO PWM AN

MPXV5010DP pressure sensor. Designed for comparing 2 pressure measurements.

MSRP - \$5900 MIKROE-2387



Earthquake click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$6900 MIKR0E-2561



ECG click

5V 3.3V SPI 12C UART GPIO PWM AN

It measures the electrical activity of a beating heart through electrodes taped to the skin.

MSRP - \$3900 MIKROE-2455



ECG 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

Tracks the patterns of your beating heart. It carries ADS1194 16-bit delta-sigma ADC.

MSRP - \$4900 MIKR0E-2507

SENSORS

	Z D2 R6400 C4(000) R6100 R101000	01 03 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
C17 (0) () C18 (0) () C19 (0) () C19 (0) () C16 (0) () R19 (0) ()		
C14 R26(0) C10(0) C9 (0) R20 00 E C8 (0) S R22 00 S R20 00	010 010 010 010 010 010 010 010 010 010 010 010	C1R2C2 R2
6 27 6 27 6 27 6 27 7 204 6 27 7 204 6 3 7 204 6 3 7 204 6 3 7 204 6 3 7 204 6 3 7 204 7 200 7 2		
C C C	MG clic	



EMG click

5V 3.3V SPI 12C UART GPIO PWM AN

Measures the electrical activity produced by the skeletal muscles.

MSRP - \$2900 MIKROE-2621

Environment click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$3400 MIKROE-2467



Fever click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1100

MIKROE-2554



FLAME click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1200 MIKROE-1820

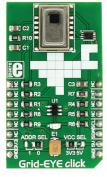


Force click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2500 MIKROE-2065



Grid-EYE click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

8x8 thermal array sensor-detector that carries AMG8853 infrared array sensor.

MSRP – \$79⁰⁰ MIKROE-2539



GYRO click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2500 MIKROE-1379



Hall current click

UART GPIO PWM AN

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

MSRP – \$34⁰⁰ MIKROE-1578



HDC1000 click

5V 3.3V SPI I2C UART GPIO PWM AN

It's a humidity (and temperature) measurement click carrying the HDC1000 sensor.

MSRP - \$1900 MIKROE-1797



Heart rate click

5V 3.3V SPI 12C UART GPIO PWM AN

With Maxim's MAX30100 integrated pulse oximetry and heart-rate sensor.

MSRP - \$1900 MIKROE-2000 Page 25

SENSORS

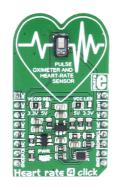
SHI7000 PULSE OXIMETER AND SENSOR PLESSOR PLES

Heart rate 3 click

5V 3.3V SPI I2C UART GPIO PWM AN

SFH7050 pulse oximetry and heart rate monitoring module, and AFE4404 IC for bio-sensing.

MSRP - \$3900 MIKROE-2036



 Heart rate 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Carrie the MAX30101 high-sensitivity pulse oximeter and heartrate sensor.

MSRP - \$2100 MIKROE-2510



HTU21D click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2100 MIKROE-1687



Hydrogen click 5V 3.3V SPI 12C UART GPIO PWM AN

It carries MQ-8 sensor for hydrogen (H2). Sensor's detection range 100-10000ppm of H2.

MSRP - \$15⁰⁰ MIKROE-1629



Illuminance click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$16⁰⁰ MIKROE-1688



IR distance click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With GP2Y0A60SZOF distance measuring sensor. Measuring range 10-150 cm.

MSRP - \$2500 MIKROE-1991



IR eclipse click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1500 MIKROE-1711



IR reflect click 5V 3.3V SPI 12C UART GPIO PWM AN

Carries GP2S700HCP reflective photo interrupter and an onboard potentiometer.

MSRP - \$1200 MIKROE-1882



IR Sense click 5V 3.3V SPI 12C UART GPIO PWM AN

With AK9750 quantumtype IR sensor. Detects the temperature of objects and people in motion.

MSRP - \$2700 MIKROE-2677



IrThermo click 3.3V

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With MLX90614ESF-BAA IR thermometer module, factory calibrated in wide temperature range.

MSRP - \$2900 MIKROE-1361 SENSORS



IrThermo click 5V

5V 3.3V SPI I2C

With MLX90614ESF-AAA IR thermometer module, factory calibrated in wide temperature range.

MSRP - \$29⁰⁰ MIKROE-1362



 IrThermo 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

It is a non-contact temperature measurement solution, with an infrared thermopile sensor.

MSRP - \$2000 MIKROE-1888



LDC1000 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With inductance-to-digital converter IC and a detachable sensor. For short range inductive sensing.

MSRP - \$3500 MIKROE-1583



Light click 5V 3.3V SPI 12C UART GPIO PWM AN

Used to measure ambient light intensity, with PD15-22CTR8 PIN photodiode.

MSRP - \$1800 MIKROE-1424



LightHz click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$17⁹⁰ MIKROE-990



LightRanger click 5V 3.3V SPI 12C UART GPIO PWM AN

It's a proximity sensor carrying VL6180X IC. Also works as an ambient light sensor.

MSRP - \$2400 MIKROE-1897



LightRanger 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

With VL53L0X IC, the world's smallest Timeof-Flight ranging and gesture detector sensor.

MSRP - \$2400 MIKROE-2509



LIN HALL click 5V 3.3V SPI 12C UART GPIO PWM AN

Carries MLX90242 linear Hall sensor IC. Measures magnet's strength and distance.

MSRP - \$1700 MIKROE-1648



Line Follower click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$15⁰⁰ MIKROE-1999



LPG click

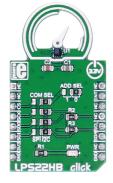
 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With MQ-5 sensor for detecting liquefied petroleum gas leakage. Detection range 200-10000 ppm.

MSRP - \$15⁰⁰ MIKROE-1587 SENSORS

SENSORS



LPS22HB click

5V 3.3V SPI I2C

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

MSRP - \$1500 MIKROE-2665



LSM303AGR click 5V 3.3V SPI 12C UART GPIO PWM AN Measures acceleration

and magnetic field characteristics. Carries LSM303AGR module.

MSRP - \$1800 MIKROE-2684

K -
P
<u>● 2</u> (•) 6 (•) 6 <u>2</u> (•) ● 3 (•) 6 <u>1</u> 2 ADD SEL 20
LSM6DSL click

LSM6DSL click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-2731



MAGNETO click5V3.3VSPI12C

UART GPIO PWM AN

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

MSRP - \$3600 MIKROE-1886



MAGNETO 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$29⁰⁰ MIKROE-1938



Manometer click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP – \$79⁰⁰ MIKROE-2237



Manometer 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$3900 MIKROE-2550



Methane click5V3.3VSPII2CUARTGPIOPWMAN

With MQ-4 sensor for methane (CH4). Detection range 200-10000ppm of CH4.

MSRP - \$1500 MIKROE-1628



MOTION click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

It's a motion detector sensitive only to live bodies with PIR500B, a pyroelectric sensor.

MSRP - \$1300 MIKROE-1589 SENSORS

Page 31

MPU IMU click 5V 3.3V SPI I2C UART GPIO PWM AN

Carries MPU-6000 integrated 6-axis motion tracking device and a DMP (Digital Motion Processor).

MSRP - \$3900 MIKROE-1577

Graceful movement. Quantified.

3D Motion click with 9-axis sensor fusion hub



SENSORS

Page 33

Pressure 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$6900



Ozone 2 click

MPU S DOF clic

MPU 9DOF Click

5V 3.3V SPI 12C

UART GPIO PWM AN

9150 system in package,

the world's first 9-axis

motion tracking device.

Carries the MPU-

MSRP - \$4200

5V 3.3V SPI 12C UART GPIO PWM AN

With M0131 sensor for Ozone (03). Detection range 10-1000 ppm of 03.

MSRP - \$3700



Pollution click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4900 MIKROE-2516

Pressure click 5V 3.3V SPI 12C UART GPIO PWM AN

essure clic

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

MSRP - \$2500

MIKROE-1422



Pressure 3 click

5V 3.3V SPI I2C

With DPS310 digital barometric pressure sensor. Range 300-1200 hPa.

MSRP - \$2000 MIKROE-2293



SV 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$1700 MIKROE-1445



Proximity 2 click5V3.3VSPII2CUARTGPIOPWMAN

With MAX44000, an IC that integrates an ambient light and a proximity sensor. Range 0.03-65.535 lux.

MSRP - \$1900



REED click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$700 MIKROE-1998



RF Meter click5V3.3VSPII2C

UART GPIO PWM AN

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

MSRP – \$4400 MIKROE-2034

SENSORS



Shake2Wake click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$3900 MIKROE-1942



SHT click

5V 3.3V SPI I2C

Temperature and humidity sensor SHT3x-DIS. -0 to 100% RH, 40 to 125°C temp. range.

MSRP - \$2600 MIKROE-2101

SHT1x click 5V 3.3V SPI I2C UART GPIO PWM AN

Digital humidity and temperature sensor SHT11. Not recommended for newer designs.

MSRP - \$1300 MIKROE-949



Smoke click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With MAX30105 optical sensor for smoke detection. Sensor's inherent resolution 0.0625°C.

MSRP - \$1900 MIKROE-2560



Stretch click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Measures stretch forces with conductive rubber cord - 40-160 ohms per cm resistance.

MSRP - \$3500 MIKROE-2064



Temp&Hum click5V3.3VSPII2C

UART GPIO PWM AN

With HTS221 temp. and relative humidity sensor. Measurement accuracy is ±1°C in 0-60°C range.

MSRP - \$16⁰⁰ MIKROE-1971



THERMO click5V3.3VSPI12C

UART GPIO PWM AN

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

MSRP – \$2900 MIKROE-1197



THERMO 2 click

5V **3.3V** SPI I2C UART **GPIO** PWM AN

With DS1825, a digital thermometer IC with a unique 64-bit address. –10°C to 85°C, ±0.5°C accuracy.

MSRP - \$1500 MIKROE-1840



Thermo 3 click

5V 3.3V SPI I2C

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

MSRP - \$900 MIKROE-1885



THERMO 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

It carries digital temperature sensor and thermal watchdog. Range from -55 °C to +125 °C.

MSRP – \$900 MIKROE-2632



THERMO 5 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$11⁰⁰ MIKROE-2571



Thermo 6 click

5V 3.3V SPI I2C

Ambient temp. measurement device, based on the MAX31875 temp. sensor.

MSRP - \$900 MIKROE-2769



THERMO K click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$2400 MIKROE-2501



Thermostat click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$19⁰⁰ MIKROE-2273



Thunder click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Detects the presence and proximity of lightning activity with AS3935 lightning sensor.

MSRP - \$3500 MIKROE-1444 SENSORS

Tilt click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With RPI-1035, a 4-directional optical tilt sensor left, right, backward, forward movement.

MSRP - \$1290 MIKROE-1834



TILTnSHAKE click 5V 3.3V SPI I2C UART GPIO PWM AN

With MMA8491Q IC, a 3-axis digital accelerometer. Can function as a 45 ° tilt sensor.

MSRP - \$1900 MIKROE-1853



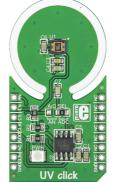
UNI HALL click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With US5881 unipolar Hall-effect switch sensitive to the North Pole magnetic fields.

MSRP - \$1200 MIKROE-1647



UV click

5V 3.3V SPI 12C

With ML8511 IC that is sensitive to UVA and UVB rays. Outputs either analog or digital signals.

MSRP - \$2400 MIKROE-1677



UV 2 click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$19⁰⁰ MIKROE-2378



UV 3 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

An advanced ultraviolet (UV) light sensor with VEML6070 UVA light sensor.

MSRP - \$900 MIKROE-2736



Vibra sense click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1800 MIKROE-1927



Water Detect click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$9⁰⁰ MIKROE-2786



Weather click5V3.3VSPII2CUARTGPIOPWMAN

With BME280 integrated environmental unit. Detects humidity, pressure, and temperature.

MSRP – \$2200 MIKROE-1978



SENSORS

Page 39

Angle click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$16⁰⁰ MIKROE-2030



Thermo J click5V3.3VSPII2C

5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$2400 MIKROE-2811



DHT22 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2200 MIKROE-2818



IrDA 3 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2600 MIKROE-2871

Microwave click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2500 MIKROE-2781



Proximity 3 click 5V 3.3V SPI 12C

UART GPIO PWM AN

Intelligent proximity and light sensing device - high sensitivity long distance PS and ALS.

MSRP - \$17⁰⁰ MIKROE-2801

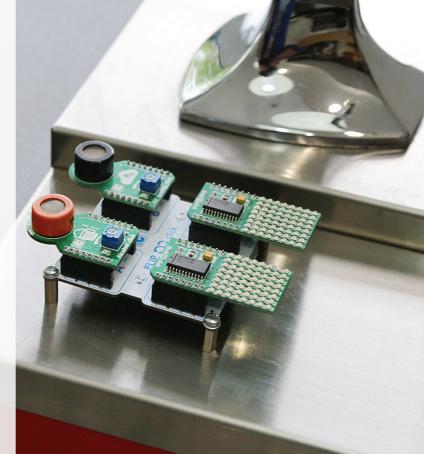




Alcohol click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$15⁰⁰ MIKROE-1586



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1-Wire I2C click

5V 3.3V SPI I2C

Converts I2C to 1-wire with DS28E17 1-Wireto-I2C master bridge from Maxim Integrated.

MSRP - \$2200 MIKROE-2750



 4-20 mA R click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2600 MIKROE-1387 4-20 mA T click

UART GPIO PWM AN

Easy solution for adding 4-to-20mA industry standard communication protocol to your design.

MSRP - \$2600 MIKROE-1296



ATA6563 click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP – \$20⁰⁰ MIKROE-2334



ATA663211 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$19⁰⁰ MIKROE-2335



CAN Isolator click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$3900 MIKROE-2627



CAN SPI click 3.3V

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2100 MIKROE-986



CAN SPI click 5V5V3.3VSPI12CUARTGPIOPWMAN

Adds CAN connectivity with SPI interface. With MCP2551 CAN transceiver circuit.

MSRP - \$21⁰⁰ MIKROE-988



DALI Click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$25⁰⁰ MIKROE-1297



ETH Click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With ENC28J60, a 28-pin, 10BASE-T stand-alone Ethernet controller with an on-board MAC & PHY.

MSRP - \$2400 MIKROE-971 INTERFACE



ETH WIZ click

5V 3.3V SPI 12C

With W5500, a 48-pin, 10/100 BASE-TX standalone Ethernet controller. Standard RJ-45 connector

MSRP - \$1900 MIKROE-1718



EXPAND click 5V 3.3V SPI 12C UART GPIO PWM AN

Expands the number of input-output lines with Microchip's 16-bit I/O expander MCP23S17.

MSRP – \$1200 MIKROE-951



Expand 2 click

5V 3.3V SPI I2C

Expands the number of input-output lines with Microchip's 16-bit I/O expander MCP23017.

MSRP - \$1200 MIKROE-1838

Expand 3 click 5V [3.3V] SPI [12C

UART GPIO PWM AN

With DS2408, an 8-channel programmable I/O expander from Maxim Integrated.

MSRP - \$19⁰⁰ MIKROE-1874



EXPAND 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1400 MIKROE-1910



Fiber Opt click

5V 3.3V SPI I2C

Adds fiber-optic communication with IF-D91 fiber-optic photodiode, IF-E97 fiber-optic LED diode.

MSRP - \$34⁰⁰ MIKROE-1940



FTDI click

5V 3.3V SPI I2C

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

MSRP - \$2900 MIKROE-1421

I2C 1-WIRE click

I2C 1-Wire click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$2800 MIKROE-1892 I2C Isolator click5V3.3VSPII2CUARTGPIOPWMAN

isolator clic

0000

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

MSRP - \$1800 MIKROE-1878



I2C Isolator 2 click5V3.3VSPII2CUARTGPIOPWMAN

Provides I2C lines and power isolation for slave devices with ADM3260 dual I2C isolator.

MSRP - \$2400 MIKROE-2609

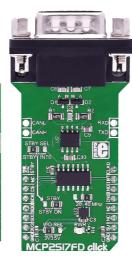
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MCP2003B click

5V 3.3V SPI I2C

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

MSRP - \$1800 MIKROE-2227



 MCP2517FD click

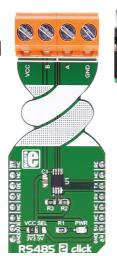
 5V
 t
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

 With MCP2517FD CAN
 FD controller
 CAN

and ATA6563 highspeed CAN transceiver.

MSRP – \$25⁰⁰ MIKROE-2379



RS485 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

Carries MAX3471 half-duplex transceiver for lithium battery-powered RS-485/ RS-422 applications.

MSRP - \$1800 MIKROE-2700



C1

P

PWF

ONST

Microchip's CAN FD Transceiver with Wake-Up Pattern. Compliant with CAN 2.0 and CAN FD.



RS485 click 3.3V

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1800 MIKROE-989





MCP25625 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$24⁰⁰ MIKROE-2228



RS485 click 5V

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Carries the ADM485 differential line transceiver from Analog Devices.

MSRP - \$1800 MIKROE-925



PS/2 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$900 MIKROE-1576



PWM click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$14⁹⁰ MIKROE-1898



SPI Isolator click5V3.3VSPI12C

UART GPIO PWM AN

Carries ADuM4154 5kV digital isolator optimized for a serial peripheral interface (SPI).

MSRP – \$29⁰⁰ MIKROE-2583 INTERFACE



5V 3.3V SPI 12C

UART GPIO PWM AN

With ADM2682EBRIZ,

a 5 kV RMS signal and

power isolated RS-485

transceiver.

MSRP - \$4900

RS485 Isolator click RS232 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1500 MIKROE-1582



USB I2C click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

5V3.3VSPII2CUARTGPIOPWMAN

Microchip's MCP2210 USB-to-SPI protocol converter with GPI0 as well as USB MINI B connector.

MSRP - \$1390 MIKROE-1204



USB UART 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Provides USB isolation and carries the AD-UM4160BRWZ USB port isolator.

MSRP - \$39⁰⁰ MIKROE-2674



USB UART click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$13⁹⁰ MIKROE-1203



ATA663254 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1600 MIKROE-2872



BroadR-Reach click

5V **3.3V SPI** 12C UART **GPIO** PWM AN

For realizing network in harsh environments that require reliable Ethernet-based open network.

MSRP - \$69⁰⁰ MIKROE-2796

Bate FB1 Bate FB1 UT Bate FB1 Bate FB1 UT Bate FB1 Bate F

USB UART 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

USB to asynchronous serial data transfer interface. With FT232RL, USB-to-UART interface module.

MSRP - \$13⁹⁰ MIKROE-2810



RS232 Isolator click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$56⁰⁰ MIKROE-2864 Dage 49

INTERFACE

INTERFACE

Page 50



OBDII click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$4790 MIKROE-2452

RS485 3 click

R5485 E clic

U1

alim

R7

e

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Sas

6

20 20 X

AD NC NC NC NX

The click is intended to be used as UART to RS422/ RS485 communication interface.

MSRP - \$2000 MIKR0E-2821



16x12 G click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$30⁰⁰ MIKROE-2758



16x9 G click

5V 3.3V SPI I2C

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

MSRP - \$34⁰⁰ MIKROE-2520



4Dot-Matrix R click 5V 3.3V SPI 12C

UART GPIO PWM AN

Displays 4 char. of 5x7 dot size. With SL02016 module and MCP23017 I2C port expander.

MSRP - \$59⁰⁰ MIKROE-2706



4X4 RGB click

5V 3.3V SPI I2C

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

MSRP - \$19⁰⁰ MIKROE-1881



7-SEG RGB click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$29⁰⁰ MIKROE-2734 DISPLAY



7seg click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

2-digit seven-seg display. With two 74HC595 8-bit serial-in, parallel-out shift registers.

MSRP - \$1000 MIKROE-1201

5v 3.3v SPI I2C UART GPIO PWM AN

¥@

With a matrix of 70 blue LEDs driven by a pair of 8-bit serial-in, parallel-out shift registers.

MSRP – \$15⁰⁰ MIKROE-2789

7x10 G click 5V 3.3V SPI I2C UART GPIO PWM AN

With a matrix of 70 green LEDs driven by a pair of 8-bit serial-in, parallel-out shift registers.

MSRP - \$1500 MIKROE-2705

R3 R8
•R4
QZ 3.3V 5V 20
7xIO R click

7x10 R click5V3.3VSPII2CUARTGPIOPWMAN

With a matrix of 70 red LEDs driven by a pair of 8-bit serial-in, parallel-out shift registers.

 7x10 Y click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With a matrix of 70 yellow LEDs driven by a pair of 8-bit serial-in, parallel-out shift registers.

MSRP - \$15⁰⁰ MIKROE-2790

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8x8 B click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1800 MIKR0E-1307



8x8 G click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-1306

SUBSEREE CORRE 8x8 R click 8x8 R click

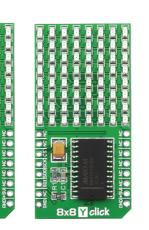
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žC

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-1295



8x8 Y click

5V 3.3V SPI 12C UART GPIO PWM: AN

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

MSRP - \$1500 MIKROE-1294

DISPLAY

Page 53

Matrix G click

B

0

• • •

5V 3.3V SPI 12C UART GPIO PWM AN

Matrix G clic

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

MSRP - \$2900 MIKROE-2246

BarGraph click

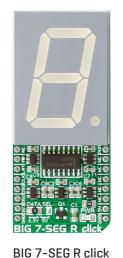
 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

BarGraph click

With 10-segment JSB-R102510Z light bar display and two 74HC5 95 8-bit shift registers.

MSRP - \$1200 MIKROE-1423



5V 3.3V SPI 12C UART GPIO PWM AN With SC10-21SR-WA seven-segment display and parallel-OUT shift register 74HC595.

MSRP - \$1900 MIKROE-2269 337

eINK click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With an adapter for connecting eINK displays, with a 24pin ribbon cable.

MSRP - \$5900 MIKROE-2659



EVE click

5V 3.3V SPI I2C

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

MSRP - \$3900 MIKROE-1430



LCD mini click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Displays 2x16 monochrome characters on an LMB162XFW LCD display.

MSRP - \$1900 MIKROE-2453



LED Flash click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Functions as a high power LED flash, and carries the CAT3224 flash LED driver.

MSRP - \$3400 MIKROE-2479



LED Flash 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

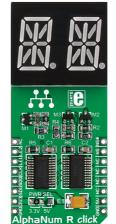
MSRP - \$1900 MIKROE-2830



Led ring R click 5V 3.3V SPI 12C UART GPIO PWM AN

With a ring of 32 red LEDs driven by four 74HC595 serial-in, parallel-out shift registers.

MSRP - \$16⁰⁰ MIKROE-2153



AlphaNum R click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$15⁰⁰ MIKROE-1864



AlphaNum G click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$15⁰⁰ MIKROE-1851 DISPLAY

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$\underline{0}$	
\square	

Matrix R click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$29⁰⁰ MIKROE-2245



Matrix RGB click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP – \$2400 MIKROE-2239



OLED B click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2400 MIKROE-1650



OLED C click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2900 MIKROE-1585



OLED Switch click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$9900 MIKROE-2449



OLED W click 5V 3.3V SPI I2C UART GPIO PWM AN

Carries a 96x39px white monochrome passive matrix OLED display.

MSRP - \$2400 MIKROE-1649



OSD click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

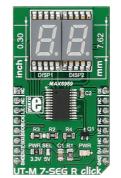
MSRP - \$3500 MIKROE-1366



UT-L 7-SEG R click 5V 3.3V SPI 12C UART GPIO PWM AN

With two SMD ultra-thin LED 7-SEG displays and MAX6969 constant-current LED driver.

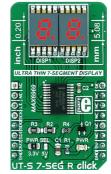
MSRP – \$4400 MIKROE-2034



UT-M 7-SEG R click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP – \$20⁰⁰ MIKROE-2746



UT-S 7-SEG R click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$20⁰⁰ MIKROE-2840 DISPLAY

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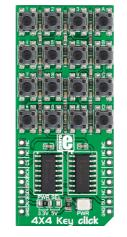


2x2 Key click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$900 MIKROE-2152



4x4 Key click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP – \$11⁰⁰ MIKROE-1889



Button G click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$9⁹⁰ MIKROE-2040



Button R click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$9⁹⁰ MIKROE-1901



Cap Extend click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With SX8633, capacitive button touch controller. 12 pins for connecting capacitive inputs.

MSRP - \$18⁰⁰ MIKROE-2238



CapSense click

5V 3.3V SPI 12C UART GPIO PWM: AN

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

MSRP - \$1600 MIKROE-1446



COUNTER click

5V 3.3V SPI 12C UART GPIO PWM AN

Counter click carries an LS7366R 32-bit quadrature counter.

MSRP - \$2500 MIKROE-1917



Fingerprint click

5V 3.3V SPI 12C UART GPIO PWM AN

Solution for adding biometric security to your design.

MSRP - \$5500 MIKROE-1722



IR gesture click 5V 3.3V SPI 12C

UART GPIO PWM AN

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

MSRP - \$1600 MIKR0E-2086



Joystick click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2200 MIKROE-1506

Page 59

HUMAN-MACHINE

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NTERFAC

Page 60

NC NC 3 2 Keulock c

Keylock click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2500 MIKROE-2564



ROTARY B click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1200 MIKROE-1824

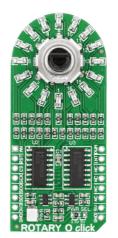
ROTARY G click

5V 3.3V SPI 12C

UART GPIO PWM AN

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

MSRP - \$1200 MIKROE-1822



ROTARY O click 5V 3.3V SPI 12C UART GPIO PWM AN

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

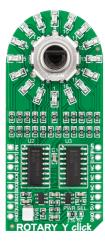
MSRP - \$1200 MIKROE-2380



ROTARY R click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1200 MIKROE-1823



ROTARY Y click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$1200 MIKROE-1825



SpeakUp 2 click5V3.3VSPII2C

UART GPIO PWM AN

A speech recognition click. Set it up to recognize up to 100 commands.

MSRP - \$3400 MIKROE-2375



Thumbstick click5V3.3VSPI12CUARTGPIOPWMAN

A high precision input device with a dual axis, spring return and pushbutton enabled joystick.

MSRP - \$2000 MIKROE-1627



Thumb wheel click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP – \$2900 MIKROE-2366



HUMAN-MACHINE

Page 61

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NTERFAC

TouchClamp click5V3.3VSPII2C

UART GPIO PWM AN

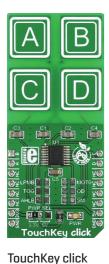
With NXP's MPR121 proximity capacitive touch sensor controller. 7 plated holes for clamps.

MSRP - \$900 MIKROE-2294

HUMAN-MACHINE NTERFACE

Page 62

5V



3.3V SPI 12C

UART GPIO PWM AN

It has four capaci-

tive pads powered

pad detector IC.

MSRP - \$1200

by TTP224, a touch-



TouchKey 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1600 MIKROE-2474

0 Touchpad clic

Touchpad click

5V 3.3V SPI 12C UART GPIO PWM AN

Capacitive touch input device driven by Microchip's MTCH6102 controller.

MSRP - \$1500 MIKROE-1995



Tamper click 3.3V SPI 12C 5V

UART GPIO PWM AN

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

MSRP - \$900 MIKROE-2551



Tamper 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-2552



Using a simple interface

on your computer,

or phrase (up to 5

you need.

vou can record a word

seconds) and assign it

an instruction. Repeat

as many commands as

SpeakUp click

5V 3.3V SPI I2C UART GPIO PWM AN

A speech recognition click. Can recognize over 200 different voice commands.

MSRP - \$39⁰⁰ MIKROE-1534



Sj»eakUp

...understands and obeys

When you put it to work, it listens to what you're saying, matches the sound to one of the pre-recorded commands, and triggers the specified action which the on-board MCU executes.

EEPROM click

5V 3.3V SPI I2C

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

MSRP - \$800 MIKROE-1200



 EEPROM 2 click

 5V
 3.3V
 SPI
 12C

 UART
 GPIO
 PWM
 AN

 With M95M02-DR DIP-8
 DIP-8

socket EEPROM chip with 256 KB of memory from STMicroelectronics.

MSRP - \$1800 MIKROE-1909



EEPROM 3 click 5V 3.3V SPI 12C

UART GPIO PWM AN

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

MSRP - \$1400 MIKROE-1989



EERAM 3.3V click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$14⁰⁰ MIKROE-2728



EERAM 5V click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$14⁰⁰ MIKROE-2729

STORAGE

Page 65

RoHS

Flash click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With EN25Q80B - 8Mb serial Flash memory module. Clock frequency up to 75MHz.

MSRP - \$10⁰⁰ MIKROE-1199



Flash 2 click

5V 3.3V SPI 12C

It carries Microchip's SST26VF064B flash-memory module with 64 Mbits capacity.

MSRP - \$1200 MIKROE-2267



Flash 3 click5V3.3VSPII2CUARTGPIOPWMAN

With ISSI's IS25LP128 IC with 128 Mbit capacity. 50MHz at Normal, 133MHz at Fast Read speeds.

MSRP - \$12⁰⁰ MIKROE-2374

RoHS TT
FRAM click

FRAM click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$15⁰⁰ MIKROE-1486

FRAM 2 click

P

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5V 3.3V SPI 12C

CY15B104Q

(19)1 <u>¥0</u> R4 <u>¥0</u>

U1 C1

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

MSRP - \$19⁰⁰ MIKROE-2768



MAC Address click

5V 3.3V SPI I2C

A unique node address. Carries 24AA025E64 2Kb Serial EEPROM with EUI-64[™] node identity.

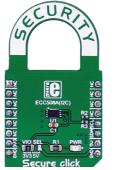
MSRP - \$900 MIKROE-2733



microSD click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1600 MIKROE-924



Secure click 5V 3.3V SPI I2C UART GPIO PWM AN

With ATECC508A cryptographic coprocessor with secure hardware-based key storage.

MSRP - \$900 MIKROE-2522

ATAES132A TUTE CT - REAL

Secure 2 click 5V 3.3V SPI I2C UART GPIO PWM AN

Microchip's ATAES132A, a cryptographic coprocessor with secure hardware-based key storage.

MSRP – \$900 MIKROE-2760



Secure 3 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$900 MIKROE-2761

STORAGE

Page 67

SND 3V3 SDI SDD SCK CS HLD NC -212 冒 PWR SEL SRAM clic

RoHS

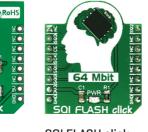
SRAM click

6

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-1902



SQI FLASH click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1390 MIKROE-2828

Page 68



Opto click

5V 3.3V SPI I2C

It features two V02630 dual channel, high speed optocoupler modules.

MSRP - \$2100 MIKROE-1196



RELAY click 5V [3.3V] SPI [12C]

UART GPIO PWM AN

With two G6D1AA-SI-5DC power PCB relay modules. Controls up to 5A, 250V AC/30V DC loads.

MSRP - \$1800 MIKROE-1370



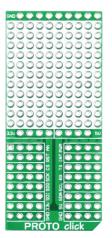
Relay 2 click

5V 3.3V SPI I2C

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

MSRP - \$2600

MIKROE-1899



PROTO click

5V 3.3V SPI I2C UART GPIO PWM AN

10x11 prototyping area and additional power pads for creating custom electronics or Click boards[™].

MSRP - \$4⁵⁰ MIKROE-1507



FLICKER click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

TI's NA556 dual precision timer and Omron's G6D-ASI power PCB relay. ON/OFF 0.1-6 sec.

MSRP - \$1900 MIKROE-2481



Signal Relay click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

It carries four ultra-small GV5-1 PCB relays from Omron. For ON/OFF control.

MSRP - \$2900 MIKROE-2154



UNIQUE ID click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With DS2401 enhanced silicon serial number IC. Provides a unique registration number.

MSRP - \$900 MIKROE-1819 MISCELLANEOUS

Page 69

Page 70



Brushless click

5V 3.3V SPI I2C

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

MSRP - \$3900 MIKROE-2441



Brushless 2 click 5V 3.3V SPI 12C

UART GPIO PWM AN

It carries TI's DRV10964 BLDC motor controller with an integrated output stage.

MSRP – \$2600 MIKROE-2754



Brushless 3 click

5V 3.3V SPI **I2C** UART **GPIO** PWM AN

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

MSRP - \$1900 MIKROE-2766



DC MOTOR click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$1800 MIKROE-1526



DC MOTOR 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

With Toshiba's TB6593F-NG driver IC for direct current motors. Motors' supply voltage 2.5V-13V.

MSRP - \$1700 MIKROE-2699

MOTOR CONTROL

Page 71



Fan 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKROE-2708



DC MOTOR 3 click 5V 3.3V SPI 12C UART GPIO PWM AN

MOTOREIC

80881

ALL IS

6

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With Toshiba's TB-6549FG full-bridge driver for direct current motors. Up to 3.5A with 30V.

MSRP - \$1900

DC MOTOR 4 click 5V 3.3V SPI 12C

UART GPIO PWM AN

With MAX14870 motor driver from Maxim Integrated. Motors' voltage supply 4.5V-36V.

MSRP - \$1500 MIKROE-2221

DC MOTOR 5 click 5V 3.3V SPI 12C

UART GPIO PWM AN

With TI's DRV8701 brushed DC motor full-bridge gate driver. Operating voltage supply 5.9V-45V.

MSRP - \$1700 MIKROE-2699

CEILIN

R3IIII

DC MOTOR

0 R4000

0



Fan click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$990 MIKROE-2004



HAPTIC click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2300 MIKROE-2025



PWM driver click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Silicon Labs' Si8711CC one-channel isolator for controlling DC motors with loads up to 10A.

MSRP – \$14⁰⁰ MIKROE-2272

STEPPER click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With A3967SLBT microstepping motor driver with a built-in translator. Max. output drive 30V, ±500 mA.

MSRP - \$1800 MIKROE-1528



STEPPER 2 click

5V **3.3V** SPI I2C UART **GPIO** PWM AN

With A4988 microstepping motor driver. Required external power supply minimum 7V.



STEPPER 3 click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$19⁰⁰ MIKROE-2035



STEPPER 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With TB67S269FTG two-phase bipolar stepping motor driver from Toshiba.

MSRP - \$1900 MIKROE-2748



Brushless 6 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Designed to drive a three-phase sensorless, brushless motor. With ATmega8A from Microchip.

MSRP - \$2700 MIKROE-2847



Fan 3 click5V3.3VSPII2CUARTGPIOPWMAN

Perfect solution for speed control. It can operate in seven discrete speed steps.

MSRP - \$17⁹⁰ MIKROE-2841



Vibro Motor click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Features a compact size Eccentric Rotating Mass (ERM) motor, labeled as C1026B002F.

MSRP - \$1200 MIKROE-2826

Page 74

20W Amp cli

UART GPIO PWM AN

Carries MAX9744 ste-

amplifier from Maxim

Integrated.

MSRP - \$2100

MIKROE-2779

reo class D audio power



2x20W Amp click 2x5W AMP click 5V 3.3V SPI 12C

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1900 MIKROE-2477

AudioAmp

AudioAmp click

5V 3.3V SPI 12C UART GPIO PWM AN

A mono audio amplifier. With TI's LM48100Q-Q1 Boomer[™] Mono, 1.3W Audio Power Amplifier IC.

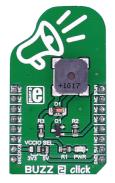
MSRP - \$1400 MIKROE-2368



BUZZ click

5V 3.3V SPI 12C UART GPIO PWM AN

Features a piezo speaker capable of emitting audio signals. Resonant frequency 3.8 kHz.



BUZZ 2 click

5V 3.3V SPI 12C UART GPIO PWM AN

With CMT-8540S-SMT magnetic buzzer transducer. The buzzer's resonant frequency is 4 kHz.

MSRP - \$1200

AUDIO AND VOICE



FM click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2900 MIKROE-1431



GainAMP click

5V 3.3V SPI I2C UART GPIO PWM AN

Carries LTC[®]6912 dual channel, low noise, digitally programmable gain amplifier (PGA).

MSRP - \$1500 MIKROE-2555



Mic click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With SPQ0410HR5H-B surface mount silicon microphone with max. RF protection.

MSRP – \$900 MIKROE-2563



MP3 click

5V 3.3V SPI 12C

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

MSRP - \$21⁹⁰ MIKROE-946



Noise click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2900 MIKROE-2371

Page 76



StereoAmp click

5V 3.3V SPI I2C UART GPIO PWM AN

With 2 TI's LM48100Q-Q1 Boomer[™] single supply, mono, bridge-tied load amplifier ICs.

MSRP - \$24⁰⁰ MIKROE-2454



TextToSpeech click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP – \$39⁰⁰ MIKROE-2253

GainAMP 2 click5V3.3VSPII2CUARTGPIOPWMAN

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

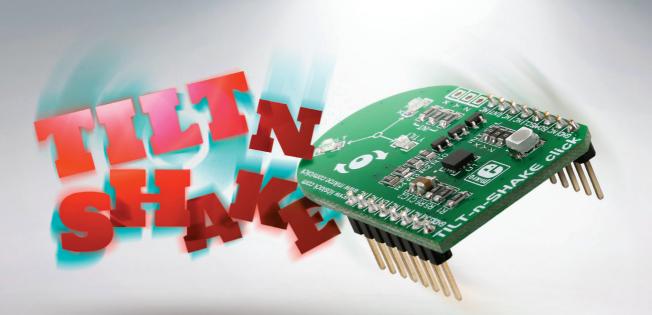
MSRP - \$1500 MIKROE-2859



RadioStation click5V3.3VSPII2CUARTGPIOPWMAN

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

MSRP - \$2500 MIKROE-2822





click board™ with Freescale's unique two-in-one sensor

Page 78

AC Current click

5V 3.3V SPI I2C

Measure alternating currents up to 30A. MCP3201 ADC converter and MCP607 CMOS Op Amp.

MSRP - \$1400 MIKROE-2523



ADAC click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

It's an 8-channel 12bit ADC, DAC and GPIO. With AD5593R configurable ADC/DAC.

MSRP - \$2600 MIKROE-2690



ADC click 5V 3.3V SPI 12C UART GPIO PWM AN

With Microchip's MCP3204 12-bit Analog-to-Digital converter.

MSRP - \$2400 MIKROE-922

PWR SEL VRT C3 P PWR SEL VREF SEL P PR PWR SEL P PR PWR SEL P PR P P P </td
ADC 2 click

ADC 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With MCP3551/3, a 22bit ADC with automatic internal offset and gain calibration.



ADC 3 click 5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP - \$2200 MIKROE-1894



Ammeter click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$24⁰⁰ MIKROE-2377



C Meter click

5V 3.3V SPI I2C

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

MSRP - \$9⁰⁰ MIKROE-2376



SV 3.3V SPI I2C UART GPIO PWM AN

Carries LM2903 IC, has two independent precision voltage comparators. 2 mV offset voltage.

MSRP - \$1200 MIKROE-1915



DAC click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$18⁰⁰ MIKROE-950



Page 79

DAC 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

DAC Pacilic

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

MSRP - \$1900 MIKROE-1918

DAC 3 click

5V 3.3V SPI I2C

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

MSRP - \$18⁰⁰ MIKROE-2038



DIGI POT click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$16⁹⁰ MIKROE-923



DIGI POT 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

Carries a single channel digital potentiometer TPL0501 with 256 wiper positions.

MSRP - \$1690



LEM click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$5900 MIKROE-2553



PAC1934 click 5V 3.3V SPI I2C UART GPIO PWM AN

Carries PAC1934 four channel DC power/ energy monitor from Microchip.

MSRP - \$2900 MIKROE-2735



R Meter click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP – \$2700 MIKROE-2396



Voltmeter click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2400 MIKROE-2436



ADC 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

An advanced analog to digital multichannel converter. It can work in 16bit or 24bit mode.

MSRP - \$65⁰⁰ MIKROE-2879



ADC 5 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$18⁰⁰ MIKROE-2846 MIXED-SIGNAL

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DIGI POT 4 click5V3.3VSPI12C

UART GPIO PWM AN A digitally controlled dual potentiometer,

dual potentiometer, with the resistance of 10KΩ.

MSRP - \$2100 MIKROE-2873



DIGI POT 5 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

A digitally controlled quad potentiometer, with the resistance of $10 \text{K}\Omega$.

MSRP - \$1690 MIKROE-2863

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AVDDIO TAVSSIO

<u>عا</u>

PROGRAMMABLE

ting

UART GPIO PWM AN

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

MSRP - \$2900 MIKROE-2817 Slider click 5V 3.3V SPI 12C UART GPIO PWM AN

Slider click

LD16-LD15-LD14-LD13-LD12-LD1-LD10-1 LD9-1 LD8-1

LD8 LD7 LD6 LD5 LD4 LD4 LD2 LD2 LD1

NC NC NC NC

30

Features a mechanical slide action potentiometer.

MSRP - \$2400 MIKROE-2702

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VCC SEL R1 PWR

Boost click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$21⁰⁰ MIKROE-2780



Boost 4 click

5V 3.3V SPI 12C

Carries TI's TPS61230A, a high efficiency fully integrated synchronous boost converter.

MSRP - \$1700 MIKROE-2757



BUCK click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2800 MIKROE-1592



Charger click

5V 3.3V SPI I2C UART GPIO PWM AN

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

MSRP – \$2200 MIKROE-2033



LED driver click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$15⁰⁰ MIKROE-2676 DOWER MANAGEMENT



MCP1664 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$26⁰⁰ MIKROE-2548



 MCP73213 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Carries MCP73213 dual-cell Li-Ion/Li-Polymer battery charge management controller.

MSRP – \$18⁰⁰ MIKROE-2575



MIC23099 click

5V 3.3V SPI I2C

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

MSRP - \$2900 MIKROE-2765



MIC24045 click 5V 3.3V SPI I2C UART GPIO PWM AN Carries MIC24045 SA

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

MSRP - \$1300 MIKROE-2574



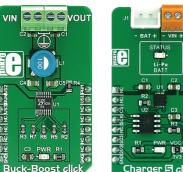
VREG click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2400 MIKROE-2443

DOWER MANAGEMENT

Page 85



Buck-Boost click

VIN

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$2000 MIKR0E-2806



Charger 5 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1600 MIKROE-2848



LED driver 2 click 5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1500 MIKR0E-2807

MCP16331 click 3.3V SPI 12C 5V UART GPIO PWM AN

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

MSRP - \$2200 MIKROE-2762

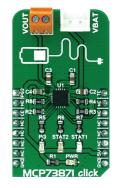
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MCP73871 click

5V 3.3V SPI 12C UART GPIO PWM AN

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

MSRP - \$1600 MIKROE-2858

Page 86



MIC24055 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

Equipped with the MIC24055, high-efficiency buck regulator from Microchip.

MSRP - \$2900 MIKROE-2835



Qi Receiver click 5V 3.3V SPI 12C UART GPIO PWM AN

Utilizes the principles of the inductive coupling for the purpose of wireless power transfer.

MSRP - \$1800 MIKROE-2799 Solar energy click 5V 3.3V SPI 12C

UART GPIO PWM AN

Uses TI's BQ25570 - a nano-power high-efficiency boost charger and buck converter device.

MSRP - \$2700 MIKROE-2814





RTC 6 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$21⁰⁰ MIKROE-2063



TIMER click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With DS1682 total elapsed time recorder from Maxim Integrated. ETC used with the ALARM pin.

MSRP - \$1800 MIKROE-2333



Skywire™ click5V3.3VSPII2CUARTGPIOPWMAN

Adapter click, which hosts NimbeLink/Skywire[™] cellular modems (using stacking headers).

MSRP - \$1900 MIKROE-2405



Adapter click 5V 3.3V SPI I2C UART GPIO PWM AN

Simplifies connection of the add-on boards with IDC10 headers to mikroBUS[™] socket.

MSRP – \$6⁵⁰ MIKROE-1432



Riverdi click 5V 3.3V SPI I2C UART GPIO PWM AN

Riverdi clici

An adapter for connecting Riverdi TFT displays to a mikroBUS[™] socket.

MSRP – \$900 MIKROE-2100

Suosck CS PST

CLOCK AND TIMING

CLOCK AND TIMING/ ADAPTER



PULSE click

5V 3.3V SPI I2C

A pulse generator with precise frequency control. Features NE555 precision timer.

MSRP - \$25⁰⁰ MIKROE-2032



RTC 2 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

With DS1307 serial real-time clock. It's a full binary-coded decimal [BCD] clock/calendar.

MSRP - \$21⁰⁰ MIKROE-948



RTC 3 click

5V 3.3V SPI I2C

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

MSRP - \$2100



RTC 4 click

 5V
 3.3V
 SPI
 I2C

 UART
 GPIO
 PWM
 AN

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

MSRP - \$2100 MIKROE-1891



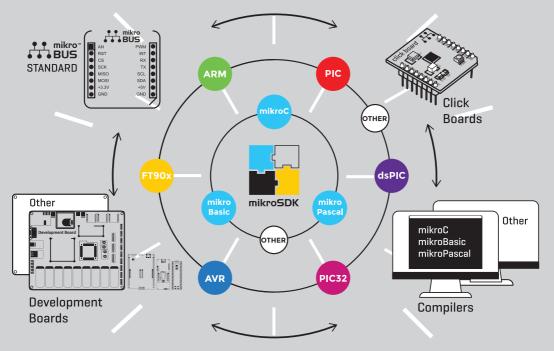
RTC 5 click 5V 3.3V SPI 12C UART GPIO PWM AN

Carries Microchip's MCP79510 real-time clock/calendar.

MSRP - \$21⁰⁰ MIKROE-1990

mikroSDK – MikroElektronika SOFTWARE DEVELOPMENT KIT

mikroe.com/mikrosdk



Clicking on all platforms

Use Click boards[™] with your favorite development platform. A range of Shields bring click connectivity to:

Arduino

Freedom

- BeagleBone Black
- Raspberry Pi

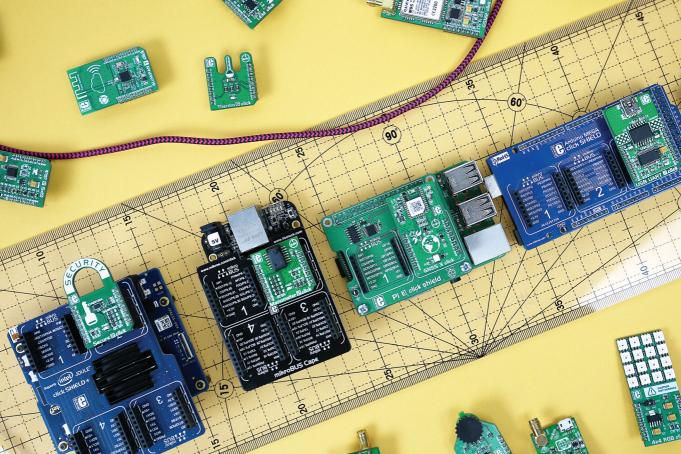
- Launchpad
- Discovery and more...

See them all at: www.mikroe.com/click/shields

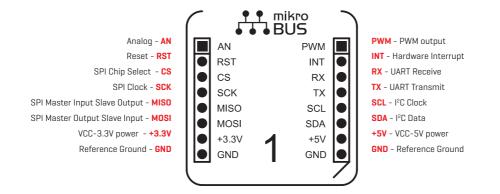
MKRCE-1857

mikroBUS Cape

MSRP - \$890



mikroBUS standard

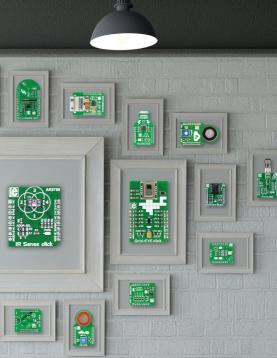


mikroBUS[™] is a simple but effective pinout standard containing all the necessary pins to connect all the different Click boards[™]. There's also a range of mikroBUS[™] shields that bring Click board connectivity to all of today's most popular development platforms (Arduino, Raspberry Pi, BeagleBone, Freedom, Discovery, Micro .NET and more).

Using Click boards™ has many advantages but the **time you will save** is by far the **biggest one!**

MEASURE AND QUANTIFY THE WORLD AROUND YOU!







Even though it was printed recently, the booklet you are holding is probably already outdated. That's because we release new Click boards weekly, sometimes daily. For the most current list of clicks, visit: **www.mikroe.com/click**

