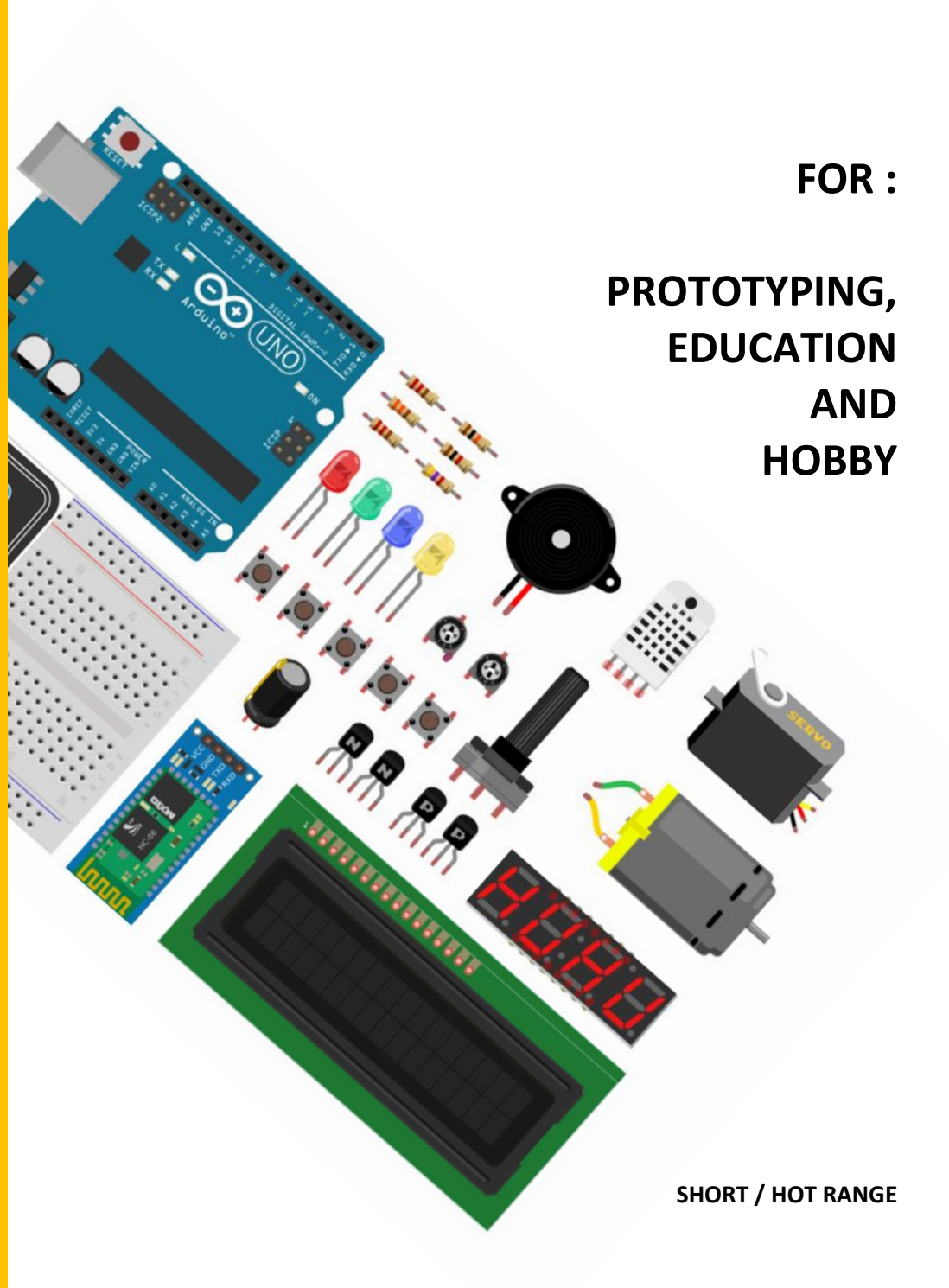


DEVELOPMENT BOARDS, MODULES & ACCESSORIES

FOR :

PROTOTYPING,
EDUCATION
AND
HOBBY



SHORT / HOT RANGE



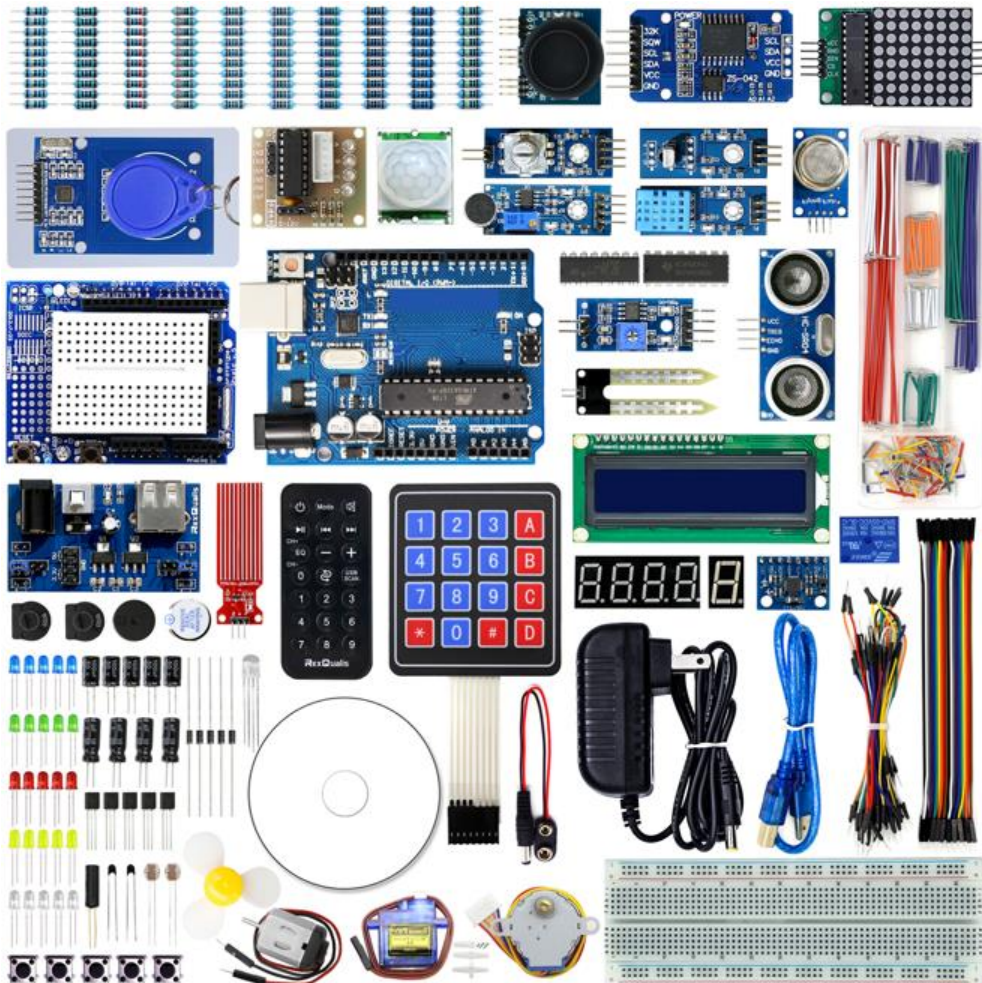
MANTECH

WWW.MANTECH.CO.ZA

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C - OUTPUT BOARDS / DEVICES	D - INTERFACES / DISPLAYS
	
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G - TOOLS	H - CONSUMABLES & PARTS
	
I – MECHANICAL PARTS	www.mantech.co.za
	<p>THIS IS A SHORT FORM CATALOGUE</p> <p>COMPLETE RANGES OF ALL OUR PRODUCTS, ARE AVAILABLE IN STORE AND ON OUR WEBSITE.</p> <p>www.mantech.co.za</p>

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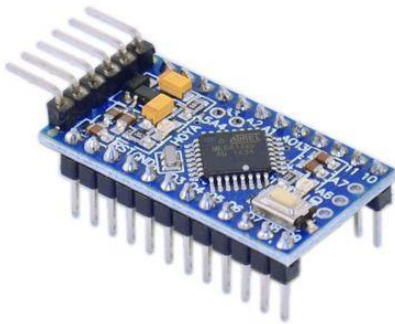
A - CONTROLLERS / CPU DEVELOPMENT / PROTOTYPING BOARDS



- **ARDUINO UNO REV3 (R3)**
- BASED ON ATmega328.
- WITH 14 DIGITAL I/O
- 6 PWM OUTPUTS
- 6 ANALOG INPUTS
- 16MHz

13M2047-A

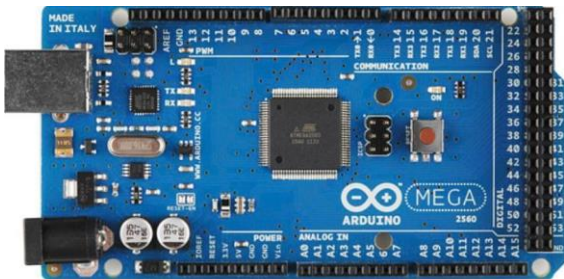
ST-1025-BL / 160068



- **ARDUINO PRO MINI**
- BASED ON ATmega328.
- WITH 14 DIGITAL I/O
- 6 PWM OUTPUTS
- 6 ANALOG INPUTS
- 16MHz

15M8301

MB0010 / 180630



- **ARDUINO MEGA**
- BASED ON ATMEGA2560
- WITH 54 DIGITAL I/O
- 15 PWM OUTPUTS
- 16 ANALOG INPUTS
- 16MHz

15M8300

MB0013 / 180690

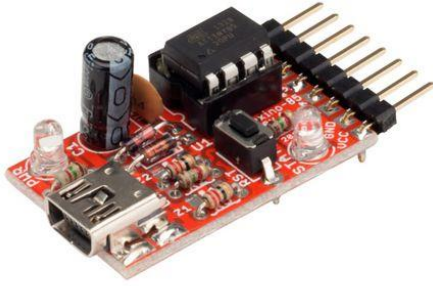


- **ARDUINO NANO BOARD 3.0**
- 14 DIGITAL I/O
- 8 ANALOGUE I/O
- RX/TX TTL PORT
- 6 PWM PORTS
- 5V TO 9V OPERATION

15M8286

MB0083 / 180818

A - CONTROLLERS / CPU DEVELOPMENT / PROTOTYPING BOARDS



- **ATMEL BASED ARDUINO BOARD**
- **BASED ON AT-TINY85**

330M0894

OLIMEXINO-85-ASM



- **RASPBERRY Pi 3 B+ SBC**
- **SINGLE BOARD COMPUTER**

330M4976

Raspberry Pi 3 Model B+

**FOR ADDITIONAL DETAILS
CONSULT OUR WEBSITE**

WWW.MANTECH.CO.ZA

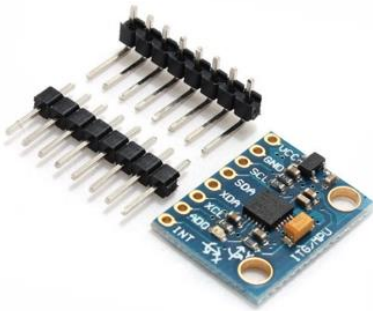
**WE HAVE MULTIPLE
WAREHOUSE LOCATIONS**

**FOR OUR FULL RANGE OF PRODUCTS
GOTO : WWW.MANTECH.CO.ZA**

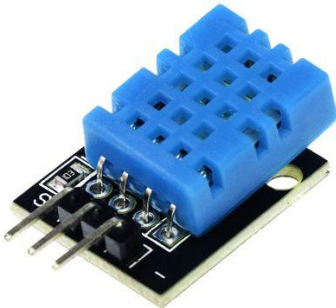
- **Johannesburg**
- **Durban**
- **Cape Town**
- **Hong Kong**
- **Braga**
- **Guimaraes**
- **Lisbon**
- **And more...**

B - INPUT BOARDS / DEVICES

- **ULTRASONIC REFLECTIVE OBJECT SENSOR**
- BASED ON HC-SR04
- PING DESIGN
- IDEAL FOR ROBOTICS / VEHICLES

15M8275**MD0017 / 180749**

- **GYROSCOPE / ACCELEROMETER BOARD**
- BASED ON MPU6050 PROCESSOR
- MEMS 3-AXIS
- I2C INTERFACE

15M0251**MPU-6050 / 170230**

- **TEMPERATURE AND HUMIDITY SENSOR**
- BASED ON DHT11
- 5VDC OPERATION
- 0 TO 50 DEG-C, 20% TO 90% RH
- ONE WIRE INTERFACE
- IDEAL WITH dht11.h LIBRARY

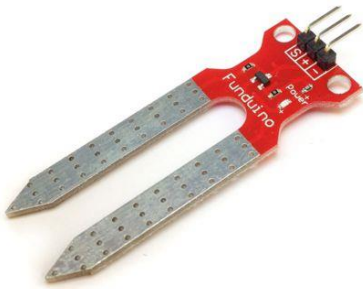
15M4068**KY0015 / 180436**

- **REAL TIME CLOCK MODULE**
- BASED ON THE DS3231 IC
- FITTED WITH BATTERY
- I2S INTERFACE

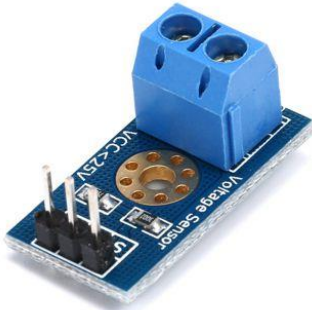
15M0263**81066 / 170076**

B - INPUT BOARDS / DEVICES

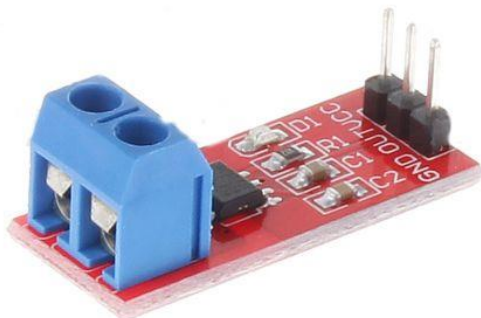
- **PIR MOTION DETECTOR SENSOR BOARD**
- **PASSIVE INFRARED SENSOR**
- **FITTED WITH FRESNEL LENS**

15M7189**KE0054 / 180482**

- **SOIL MOISTURE SENSING BOARD**

15M8274**MD0021 / MD0021**

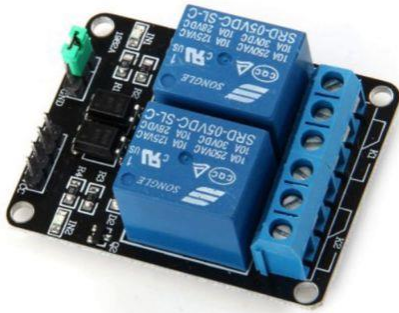
- **VOLTAGE INTERFACE / SENSOR BOARD**
- **0 – 25V DC INPUT**
- **244mV resolution**

15M5002**170640**

- **AC/DC CURRENT MEASURING SENSOR BOARD**
- **BASED ON AC712ELC-20 IC**
- **20A**

15M8318**KY0133 / 180709**

C - OUTPUT BOARDS / DEVICES



- **DUAL 5VDC 10A RELAY MODULE**
- OPTO ISOLATED
- 5VDC OPERATION
- 10A 250VAC CONTACTS

15M8281

MD0004 / 180602



- **STEPPER MOTOR WITH DRIVER BOARD 5V**
- BASED ON THE ULN2003 DRIVER IC
- 5V OPERATION
- HIGH TORQUE

15M8269

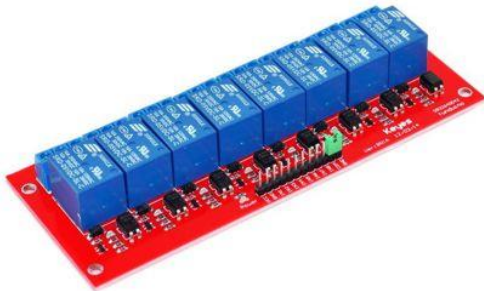
MD0029 / 180721



- **4 CHANNEL 12VDC RELAY BOARD**
- OPTO ISOLATED
- 10A 250VAC CONTACTS

15M9412

170628



- **8 CHANNEL 12VDC RELAY BOARD**
- OPTO ISOLATED
- 10A 250VAC CONTACTS

15M8278

MD0011 / 181052

C - OUTPUT BOARDS / DEVICES

- **MINIATURE BRUSH MOTOR**
- 6VDC 0A18 18,500 RPM

72M0085**SRE-260W-2290-38**

**FOR ADDITIONAL DETAILS, AND MANY
OTHER RELATED PRODUCTS
PLEASE CONSULT
OUR WEBSITE**

- **WWW.MANTECH.CO.ZA**



- **DC BRUSH MOTOR**
- 12VDC 8A 5,500 RPM

82M1491**RS-997SH-7013F**

- **GEARED DC BRUSH MOTOR**
- 12VDC 270RPM
- 2KG.CM TORQUE

72M0126**EGB-380SA-19160**

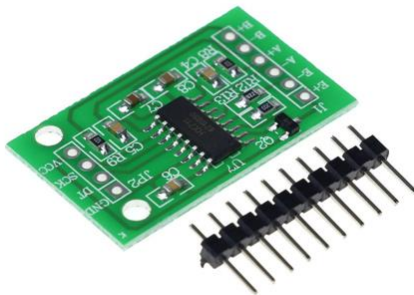
D - INTERFACES / DISPLAYS



- **LCD DISPLAY AND KEYPAD BOARD**
- TWO LINES BY 16 CHARACTER LCD
- SIX MENU BUTTONS
- PLUGS INTO ARDUINO BOARD
- USE **LCD4BIT** LIBRARY
- WITH CONTRAST ADJUSTMENT

14M0834

LCD1602KP / 170410



- **24-BIT A TO D CONVERTER / AMPLIFIER**
- SERIAL DATA INTERFACE
- 5Vnom. OPERATION AMPLIFIER
- IDEAL FOR PRESSURE SENSOR AND WEIGHING SENSOR / LOAD CELL INTERFACE
- BASED ON HX711 CONVERTER

15M0239

X711 / 170229



- **SERIAL / TTL TO USB / RS232 INTERFACE**
- SERIAL OR TTL USB INTERFACE
- BASED ON FT232RL / HW-417 FTDI CHIP

15M0301-A

170042



- **HC-05 BLUETOOTH INTERFACE MODULE**
- 5VDC OPERATION
- SERIAL COMMUNICATIONS
- MASTER / SLAVE MODES
- DIRECT MCU CONNECTION
- TWO WIRE DATA CONNECTION

15M0320

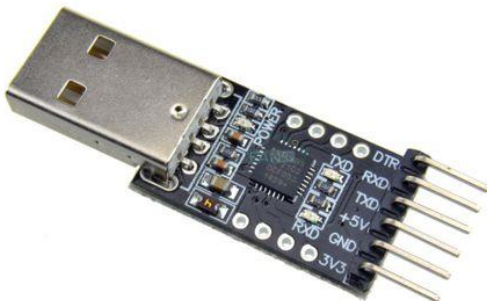
HC-05 / 180182

D - INTERFACES / DISPLAYS

- SERIAL I2C TO PARALLEL INTERFACE FOR LCD
- BASED ON PCF8574
- IDEAL FOR REMOTE DISPLAY
- TWO WIRE DATA COMMUNICATION
- IDEAL FOR LCD1602

15M8248**MD0063 / 180468**

- **ESP-12F WiFi INTERFACE BOARD**
- BASED ON ESP8266
- SERIAL / USB INTERFACE
- Node MCU Lua WiFi
- METAL SHIELDED CASE
- SUPPORTS 802.11 B / G / N PROTOCOL

15M8285**MB0084 / 180489**

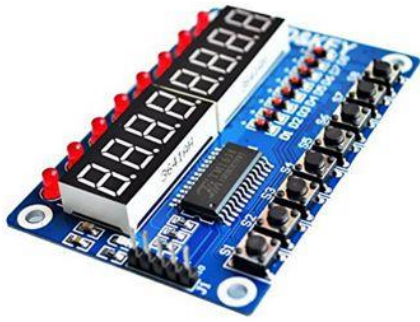
- **USB-2.0 TO TTL UART / SERIAL INTERFACE**
- ALTERNATIVE TO FT232
- BASED ON THE CP2102 IC
- USB TO UART BRIDGE
- 3V AND 5V OPERATION

15M8133**MD0336 / 180575**

- **LCD DISPLAY 2-LINES 16-CHARACTERS**
- 5VDC OPERATION
- USE ARDUINO STANDARD LIBRARY
- LCD1602

15M8440**62520001 / 180448**

D - INTERFACES / DISPLAYS



- **KEYBOARD AND DISPLAY**
- **3-WIRE SERIAL INTERFACE**
- **WITH BUILT-IN I/O EXPANDER**

15M0791

TM1638 / 170252



- **PANEL MOUNT MULTI-DISPLAY**
- **DISPLAY VOLTAGE UP TO 100V**
- **DISPLAY CURRENT UP TO 10A**
- **OTHER RATINGS AVAILABLE**
- **SEE SECTION H FOR LED DISPLAYS**

15M1180

DSN-VC288 / 170425



- **DOT MATRIX LED DISPLAY 8x8**
- **MAX7219 CONTROLLER INCLUDED**
- **USES ONLY 3 I/O**

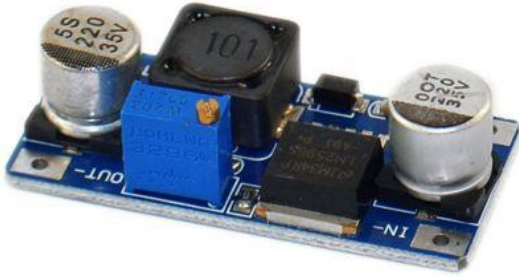
15M8237

MD0088 / 18----

WE STOCK AND SELL OVER 100,000
PRODUCT LINES

ENQUIRE ABOUT OTHER PRODUCTS
THAT WE CAN SOURCE FOR YOU...

E - POWER DEVICES / CONVERTERS



- **DC-DC BUCK CONVERTER BOARD 3A**
- INPUT = 3 TO 40VDC
- OUTPUT = 1.25 TO 35VDC ADJUSTABLE
- OUTPUT CURRENT = 3A
- BASED ON LM2596S
- SWITCH MODE EFFICIENT DESIGN

15M8180

MD0209 / 180595



- **DC-DC CONVERTER BOOSTER**
- IN=0.0 TO 5VDC
- OUT=5VDC / USB
- 600mA

15M8188

MD0183 / 180538



- **DC-DC BUCK CONVERTER BOARD 3A**
- INPUT = 3 TO 26VDC
- OUTPUT = 1.2 TO 24VDC ADJUSTABLE
- OUTPUT CURRENT = 3A
- BASED ON LM2596S
- WITH DISPLAY

15M7001

KE0091 / 180787



- **DC-DC ADJUSTABLE BOOSTER CONVERTER**
- IN=3 TO 34VDC
- OUT=4 TO 35VDC
- 2.5A
- WITH DISPLAY

15M8134

MD0334 / 180964

E - POWER DEVICES / CONVERTERS



- **LITHIUM BATTERY CHARGER BOARD**
- CHARGES AT 1Amp / 4.2V 1%
- Green LED = fully charged
- Red LED = charging
- Parallel charging allowed

15M8218

MD0116 / 180511



- **ENCLOSED SWITCH MODE POWER SUPPLY**
- AVAILABLE IN VARIOUS VOLTAGES
- AVAILABLE IN VARIOUS CURRENTS

372M0256

LRS-150-12



- **DESKTOP SWITCH MODE POWER SUPPLY**
- AVAILABLE IN VARIOUS VOLTAGES
- AVAILABLE IN VARIOUS CURRENTS

372M1107

GST18A12-P1J



WE STOCK THE LARGEST RANGE OF:

**POWER SUPPLIES,
DC-DC CONVERTERS.**

POWERED BY MEAN WELL, MORN SUN AND OTHERS

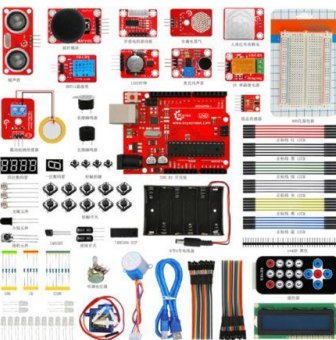
F - KITS & ACCESSORIES



- **ARDUINO STARTER KIT**
- **BASED ON UNO R3**
- **BUILD SIMPLE & COMPLEX PROJECTS**

15M7182

KE0084 / 180393



- **ARDUINO SUPER STARTER KIT**
- **BASED ON UNO R3**
- **BUILD SIMPLE & COMPLEX PROJECTS**

15M7184

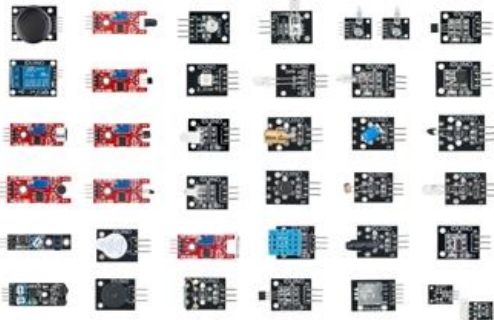
KE0082 / 180469



- **ARDUINO STARTER KIT MEGA 2560**
- **BASED ON THE MEGA 2560 BOARD**
- **BUILD SIMPLE & COMPLEX PROJECTS**

15M7181

KE0085 / 180392



- **ASSORTMENT OF 37 SENSORS KIT**
- **MEASURE OR DETECT GAS, LIQUIDS**
- **MEASURE OR DETECT TEMPERATURE, HUMIDITY, ETC...**

14M2150-M

ST1065 / 170113

F - KITS & ACCESSORIES



- **GEARED MOTOR AND WHEEL KIT**
- 5 - 6VDC
- 65mm DIAMETER WHEEL
- FULL SPEED GEARBOX OUTPUT 230RPM
- DC BRUSH MOTOR MG-6-48

15M2255

AC032 / 160004



- **MOTOR SERVO 180-DEG MICRO ANALOG**
- 4.8 TO 6V OPERATION
- 120Ms / 60-DEGREES
- 1.3KG.CM
- 9g

14M1571

FS90



- **DIGITAL TEMPERATURE PROBE**
- BASED ON DS18B20
- STAINLESS STEEL HEAD

14M0403

DFR0198 / 180993



- **LOAD CELL**
- 0 TO 50Kg
- 10VDC, 1mv/v, 1K-Ohm

15M0305

ALX-50KG / 170031

F - KITS & ACCESSORIES



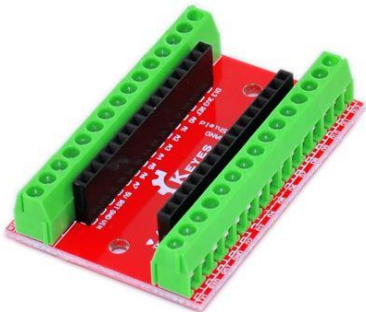
- **DC PLUG BREAKOUT ADAPTOR**
- 2.1mm TO SCREW TERMINALS
- AVAILABLE IN OTHER SIZES
- AVAILABLE IN OTHER CONFIGURATIONS

14M4212

PC100 / 170587



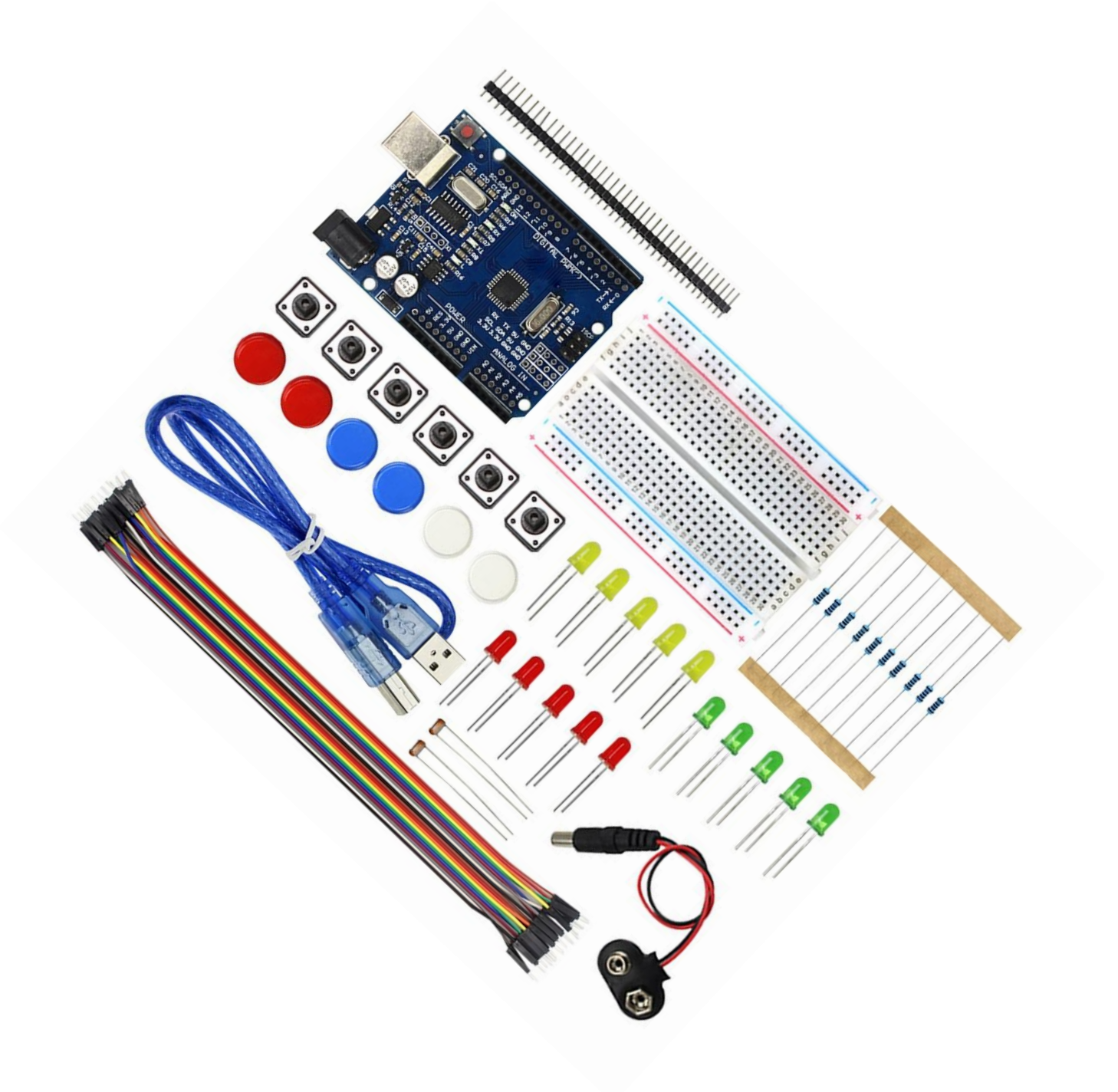
- D-SUB 9-WAY BREAKOUT ADAPTOR
- FEMALE TO SCREW TERMINALS
- AVAILABLE IN OTHER SIZES
- AVAILABLE IN OTHER CONFIGURATIONS
-



- ARDUINO-NANO BREAK OUT BOARD
- HEADER SOCKETS TO SCREW TERMINALS



- ACRYLIC / PERSPEX ENCLOSURE
- FOR ARDUINO UNO



G - TOOLS



- **BREADBOARD 400-HOLES**
- TRANSPARENT
- FOR QUICK PROTOTYPING

15M5539

AC034 / 170170



- **HELPING HANDS AID**
- WITH MAGNIFIER
- WITH LED LIGHT
- ETC...

50M0091

MG16129-C / 181197



- **HAND HELD DIGITAL MULTIMETER**
- 500V 10A AC / DC RATED
- MEASURES VOLT, AMP, OHMS, TEMP
- TESTS DIODES

330M0117

UT33C+ / 170445



- **HAND DRILL CHUCK**
- SUPPLIED WITH DRILL BITS
- 0.3 TO 3.2mm

15M0259

1055545 / 170163

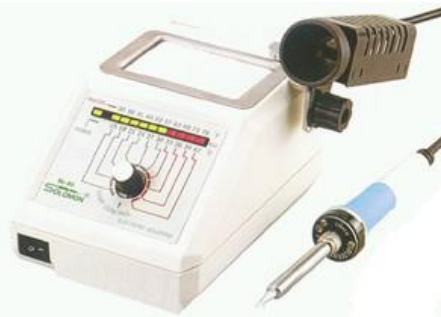
G - TOOLS



- **SOLDER REEL STAND / DISPENSER**
- SOLDER NOT INCLUDED
- HEAVY BASE

82M0410

208 / 170399



- **SOLDERING STATION**
- ADJUSTABLE TEMPERATURE
- 48W

330M0247

SL-20-220VAC



- **SOLDERING IRONS 25 TO 100W**
- AVAILABLE IN DIFFERENT RATINGS

330M0260

SH-812B-220AC-SA



- **SOLDERING TIP CLEANING SPONGE**
- AVAILABLE IN VARIOUS SIZES

15M0243-A

160003

H - CONSUMABLES & PARTS



- **SIL PIN HEADER 40-WAY**
- 20mm HEIGHT
- SQUARE PINS
- 2.54mm PITCH / PIN SPACING
- GOLD PLATED
- IDEAL FOR STACKING BOARDS

14M3673

PHSS40G10-14-3.0-RH



- **SIL SOCKET WITH EXTENDED PINS 6-WAY**
- 15mm PIN LENGTH
- 23mm TOTAL HEIGHT
- 2.54mm PITCH / PIN SPACING
- GOLD PLATED
- IDEAL FOR STACKING BOARDS

14M9276-A

YTS1N06X



- **SIL SOCKET WITH EXTENDED PINS 8-WAY**
- 15mm PIN LENGTH
- 23mm TOTAL HEIGHT
- 2.54mm PITCH / PIN SPACING
- GOLD PLATED
- IDEAL FOR STACKING BOARDS

14M9277

YTS1N08X



- **MULTIPURPOSE SOLDER 0.71mm**

340M0173

60T2-RC-0.71-500G

H - CONSUMABLES & PARTS

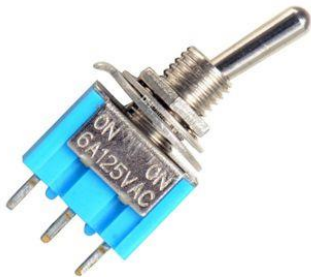
- **JUMPER LEADS**
- MALE TO MALE
- 40-WAY
- 200mm LONG

14M8106-A**JUM-001MMP / 170559**

- **5mm RED LED**
- 3,500 mcd

64M0085**SP1012022-22 / 180457**

- **5mm GREEN LED**
- 130mcd



- **SPDT MINIATURE TOGGLE SWITCH**
- ON-ON
- 3A 250V

H - CONSUMABLES & PARTS



- **NTC THERMISTOR 10K-OHMS**
- OTHER VALUES AVAILABLE
- OTHER SHAPES AVAILABLE
- PTC ALSO AVAILABLE

14M1085-W

MFP-2-103F-3435F / 170474



- **DUAL LED 7-SEGMENT DISPLAY**
- 14mm CHARACTER HEIGHT
- COMMON CATHODE

72M2439

CD-5621AS / 170782



- **TRIPLE LED 7-SEGMENT DISPLAY**
- 14mm CHARACTER HEIGHT
- COMMON CATHODE

35MA003

5631AH / 170826



- **QUAD LED 7-SEGMENT DISPLAY**
- 14mm CHARACTER HEIGHT
- COMMON CATHODE

15M8210

MD0127 / 180726

I - MECHANICAL PARTS

- **STAINLESS STEEL RODS FOR SHAFTS**
- **AVAILABLE IN VARIOUS DIAMETERS**
- **AND IN VARIOUS LENGTHS**

15M6414**180312**

- **THREADED ROD / FEED SCREW**
- **300mm LONG**
- **OTHER SIZES AVAILABLE ON DEMAND**

35M6748-W**T8-2-D8 / 170069**

- **T-SUPPORT BRACKET**
- **ALUMINIUM**
- **AVAILABLE IN VARIOUS SIZES**

15M6303**180295**

- **BEARING MOUNT / SUPPORT FLANGE**
- **AVAILABLE IN MANY SIZES**

72M5167**KP000 / 181018**

I - MECHANICAL PARTS

- **BALL BEARINGS**
- AVAILABLE IN MANY SIZES



- **STEEL BOLTS, NUTS AND WASHERS**
- AVAILABLE IN MOST SIZES
- AVAILABLE IN MOST MATERIALS



- **NYLON / PLASTIC BOLTS, NUTS AND WASHERS**
- AVAILABLE IN MOST SIZES
- AVAILABLE IN MOST MATERIALS



- **METAL OR PLASTIC SPACERS**
- AVAILABLE IN MOST SIZES
- AVAILABLE IN VARIOUS MATERIALS

I - MECHANICAL PARTS

- **FLEXIBLE SHAFT COUPLINGS**
- AVAILABLE IN MANY SIZES



- **FLANGE SHAFT COUPLING**
- AVAILABLE IN MANY SIZES



- **SOLID / BRASS SHAFT COUPLINGS**
- AVAILABLE IN MANY SIZES



- **UNIVERSAL JOINT / SHAFT COUPLINGS**
- AVAILABLE IN MANY SIZES

