MAKER–NANO
Simplifying Arduino for Projects
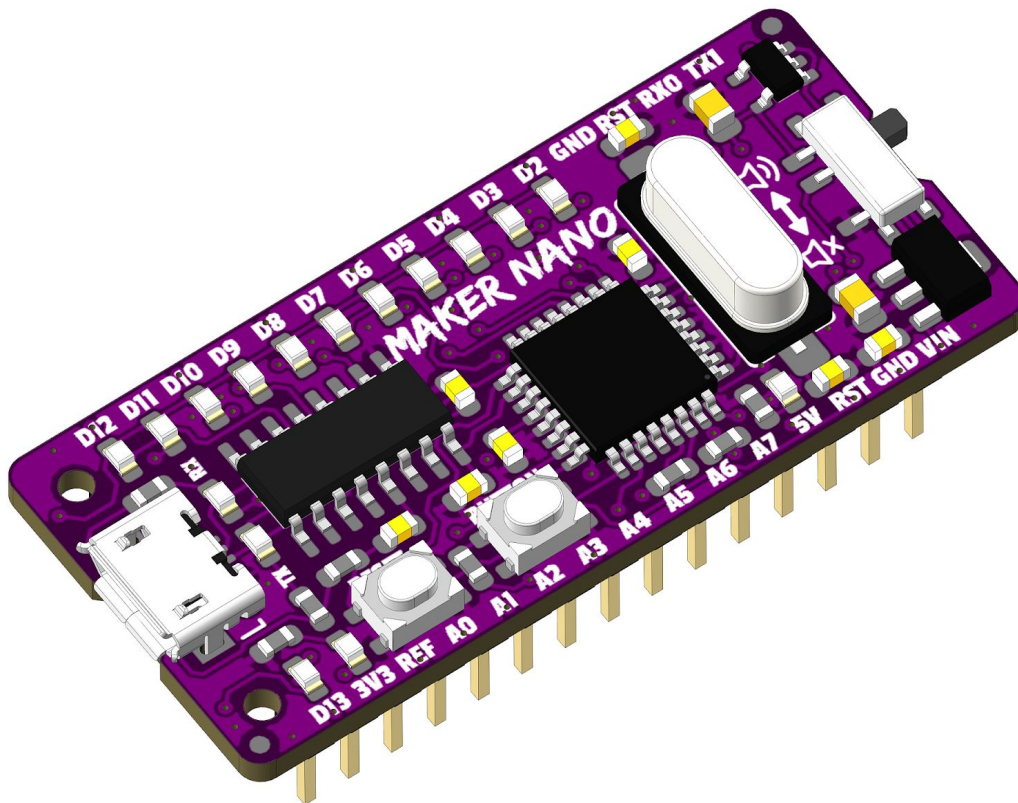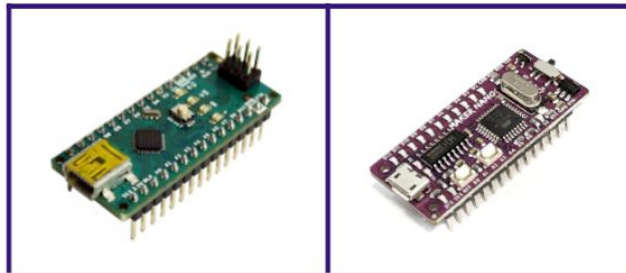

Datasheet

Rev 1.0
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1. ARDUINO NANO 3.X vs MAKER NANO

FEATURES	ARDUINO NANO 3.X	MAKER NANO
Microcontroller	ATmega328P	ATmega328P
Programming IDE	Arduino IDE	Arduino IDE
Operating Voltage	5V	5V
Digital I/O Pins	20	20
PWM	6	6
Analog Input	8 (10-bit)	8 (10-bit)
UART	1	1
SPI	1	1
I2C	1	1
External Interrupt	2	2
Flash Memory	32KB	32KB
SRAM	2KB	2KB
EEPROM/Data Flash	1KB	1KB
Clock Speed	16MHz	16MHz
Power Supply	Vin or USB	Vin or USB
Vin Voltage	7 - 12V	7 - 30V
USB to Serial Chip	FTDI FT232RL	CH340C
Programmable LED	1x at Pin D13	12x at Pin D2 - D13
Programmable Push Button	No	1x at Pin D2
Piezo Buzzer	No	1x at Pin D8
Dimension	18 x 45mm	21 x 46mm

2. BOARD LAYOUT & FUNCTION
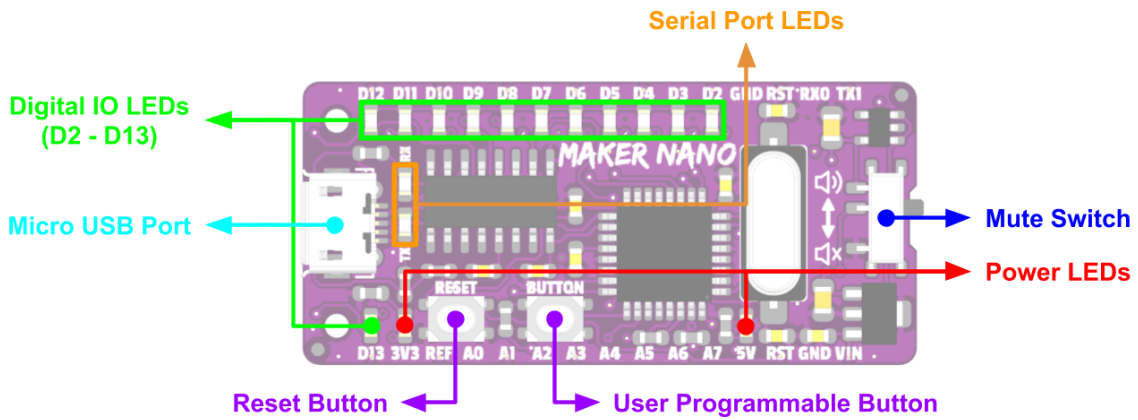
Figure 1: MAKER-NANO Board Functions (Top)

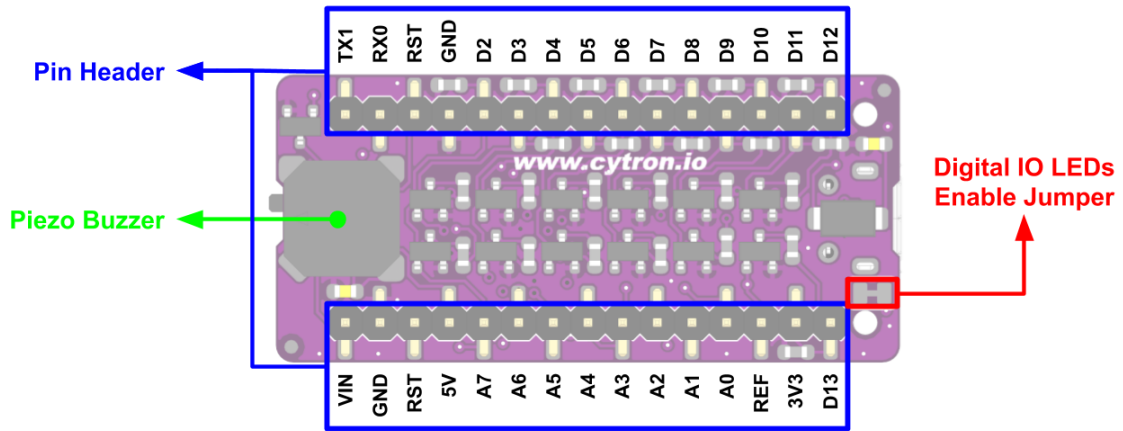| Function	Description
Power LEDs	LED indicator for 3V3 and 5V. Turn on when powered up.
Digital IO LEDs (D2-D13)	LED indicator for digital IO D2 - D13. Turn on when the IO state is high.
Serial Port LEDs	LED indicator for USB serial port activity. ● TX : Turn on when data is transmitted from Maker Nano. ● RX : Turn on when data is received by Maker Nano.
Micro USB Port	Used to upload Arduino program from PC. Can be used for debugging purpose too (Serial Monitor).
Mute Switch	Used to mute the piezo buzzer if pin D8 is used for other purpose.
Reset Button	Press to reset the Maker Nano.
User Programmable Button	Connected to pin D2 internally. Accessible from the user program.

Table 1: MAKER-NANO Board Functions (Top)

Figure 2: MAKER-NANO Board Functions (Bottom)

Function	Description
Pin Header	Used for external connection. Compatible with original Arduino Nano.
Piezo Buzzer	Programmable piezo buzzer. Can be used to play tone or melody.
Digital IO LEDs Enable Jumper	Cut the trace to disable the digital IO LEDs. This can be done to save power or reduce the distraction from digital IO LEDs.

Table 2: MAKER-NANO Board Functions (Bottom)

3. PINOUT DIAGRAM

Figure 3: MAKER-NANO Pinout Diagram

4. SPECIFICATIONS

No	Parameters		Min	Max	Unit
1	Power Input Voltage (Vin)		7.0	30.0	VDC
2	Digital Input Voltage	Low Level	0	0.5	V
		High Level	1.7	5.0	V
3	Analog Input Voltage		0	5.0	V
4	DC +5V Maximum Current (Including Onboard Usage)		-	100	mA
5	DC +3V3 Maximum Current (Including Onboard Usage)		-	50	mA

Table 3: MAKER-NANO Absolute Maximum Ratings
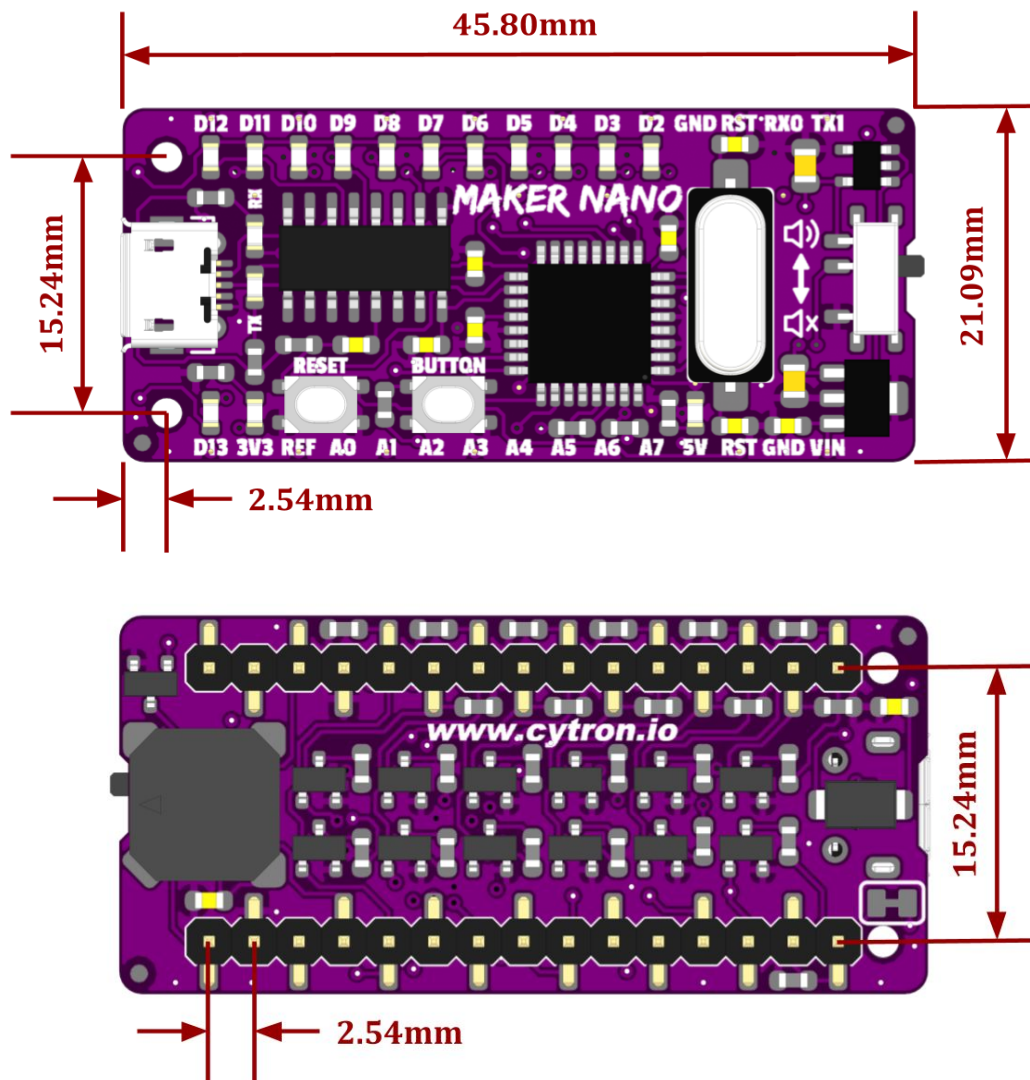
5. DIMENSION

Figure 4: MAKER-NANO Dimension

Prepared by:

Cytron Technologies Sdn Bhd
www.cytron.io
No. 1, Lorong Industri Impian 1,
Taman Industri Impian,
14000 Bukit Mertajam,
Penang, Malaysia.

Tel: +604 - 548 0668
Fax: +604 - 548 0669

Email:
support@cytron.io
sales@cytron.io