

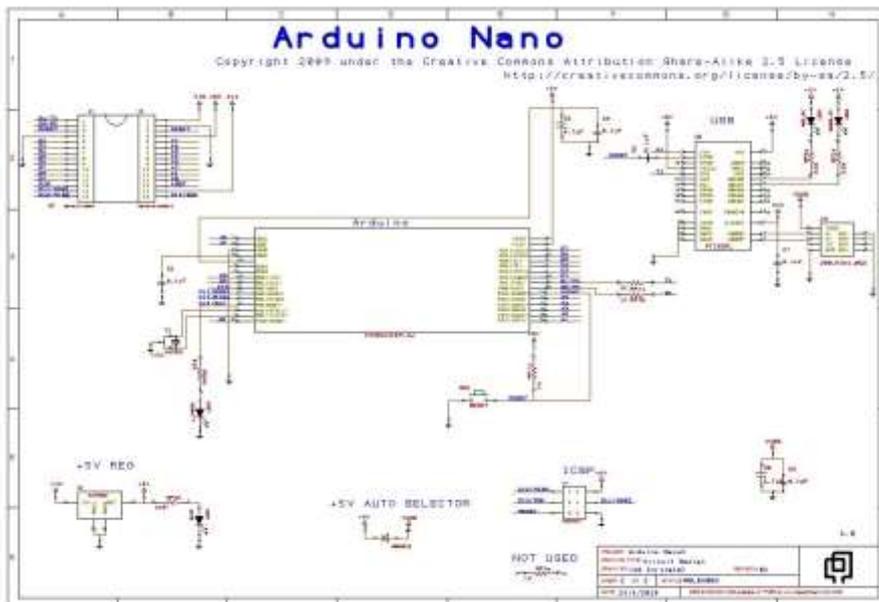
# DesignSpark PCB Reference Design

## Arduino NANO 3.0 (RS Part Number: [696-1667](#))

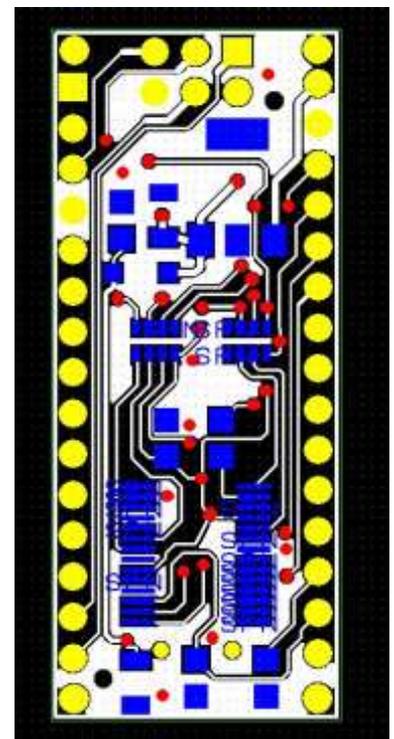
This is a reference design of Arduino NANO 3.0. The Arduino NANO 3.0 was converted into DesignSpark PCB format. Download link of the project files and introduction of Arduino NANO 3.0 could be found in this datasheet.

The Arduino Nano is a small, complete, and breadboard-friendly board based on the ATmega328. It has similar functionality to the Arduino Duemilanove, but in a DIP module package. It lacks only a DC power jack, and works with a Mini-B USB cable instead of a standard one.

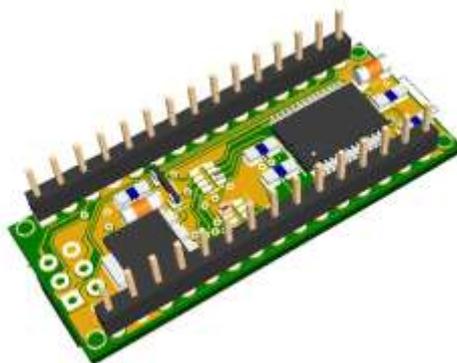
- ATmega328 microcontroller with pre-programmed bootloader
- Input Voltage (recommended): +7 to +12V
- Input Voltage (limits): +6 to +20V
- 32KB Flash Memory (of which 2KB used by bootloader)
- 2KB SRAM
- 1KB EEPROM
- Clock Speed: 16MHz



Schematic of Arduino NANO 3



PCB layout of Arduino NANO 3



**3D view of Arduino NANO 3**

### BOM list of the board (Key Components):

RS Part Number	Manufacturer Part Number	Manufacturer	Description
696-3092	ATMEGA328P-AU	Atmel	AVR Microcontroller
407-0154	TPSA475K020R1800	AVX	Tantalum Electrolytic Capacitor
406-580	FT232RL	FTDI Chip	Universal Asynchronous Receiver & Transmitter
692-0913	LTST-C170TBKT	Lite-On	Blue LED
463-432	MBR0520LT1G	ON Semiconductor	Schottky Diode

### FAQs

#### 1. How can this reference design save your time?

RS provides a full set of schematic and PCB design files for this board to help reducing your product design time. At RS Components we believe in helping our customers innovate. We have removed the undesirable and time consuming factors of the PCB design process, to enable you to invest your time in what you are best at, innovating. Download the files in the project homepage below and freely modify them to suit your product requirements.

#### 2. Why DesignSpark PCB format?

DesignSpark PCB is an award-winning software package for schematic capture and PCB layout, available for FREE from RS Components. Our software is easy to learn and use yet surprisingly powerful. DesignSpark PCB is now widely adopted in the industry as a standard format for design file sharing and collaboration. This is especially useful in the prototyping phase where most of the innovation takes place. Not yet a DesignSpark PCB user? Download our software in conjunction with this reference design from the links below.

DesignSpark Homepage: <http://www.rs-online.com/designspark/electronics/eng/>

DesignShare Homepage: <http://www.rs-online.com/designspark/designshare/eng/>

**Arduino NANO 3 Project Homepage:**

<http://www.rs-online.com/designspark/designshare/eng/projects/217/>