

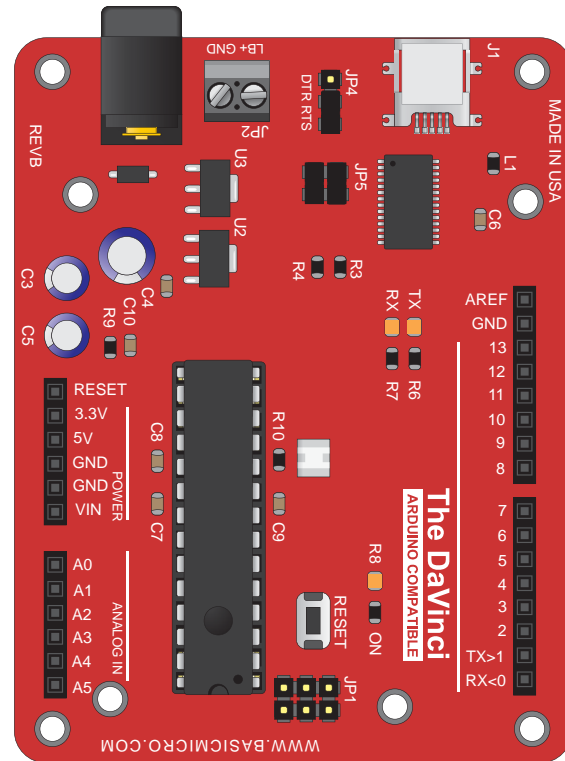
ORION

ROBOTICS

The DaVinci
Data Sheet

Feature Overview:

- 100% Arduino Compatible
- 2.1mm Power Jack
- Screw Terminal For Power
- MiniUSB For Shield Clearance
- Dual Mount Pattern
- Jumper Selected Reset
- Low Profile Capacitors
- Easy To Mount Form Factor
- 500mA 3.3V Regulator



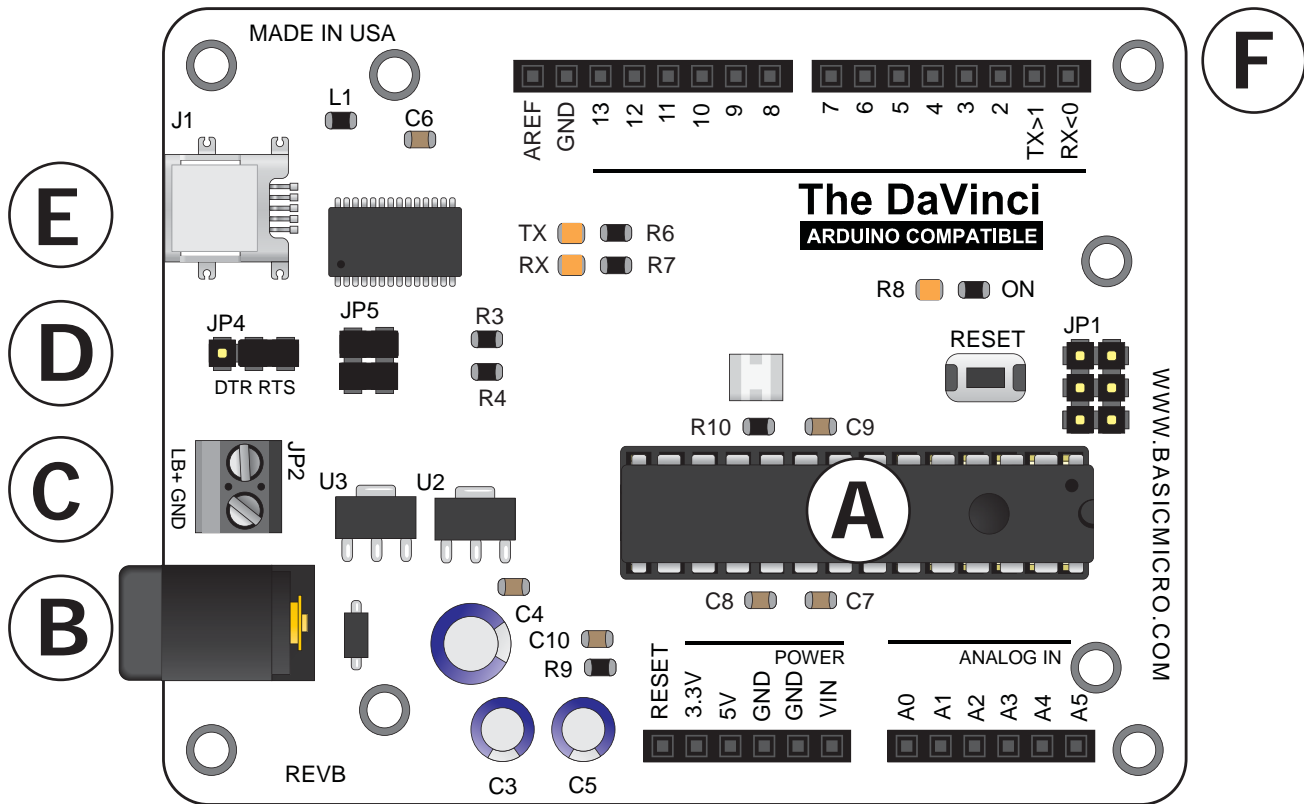
The DaVinci

The new DaVinci is a 100% Arduino compatible board. It was designed to support standard shields and work in robotics systems. The main features are the improved regulators, low profile capacitors, low profile USB connector and screw terminals for power. The low profile parts prevent interference with all shields. The additional mount pattern fits a standard mount for currently available robots.

The DaVinci ships with a pre-programmed socketed Atmel. The reset control can be set by jumper to DTR or RTS control. Standard TX , RX and ON leds are on board. Improved regulators were used to decrease drop out voltages. The TX / RX from the Arduino can be removed from circuit to isolated the Arduinos only UART.

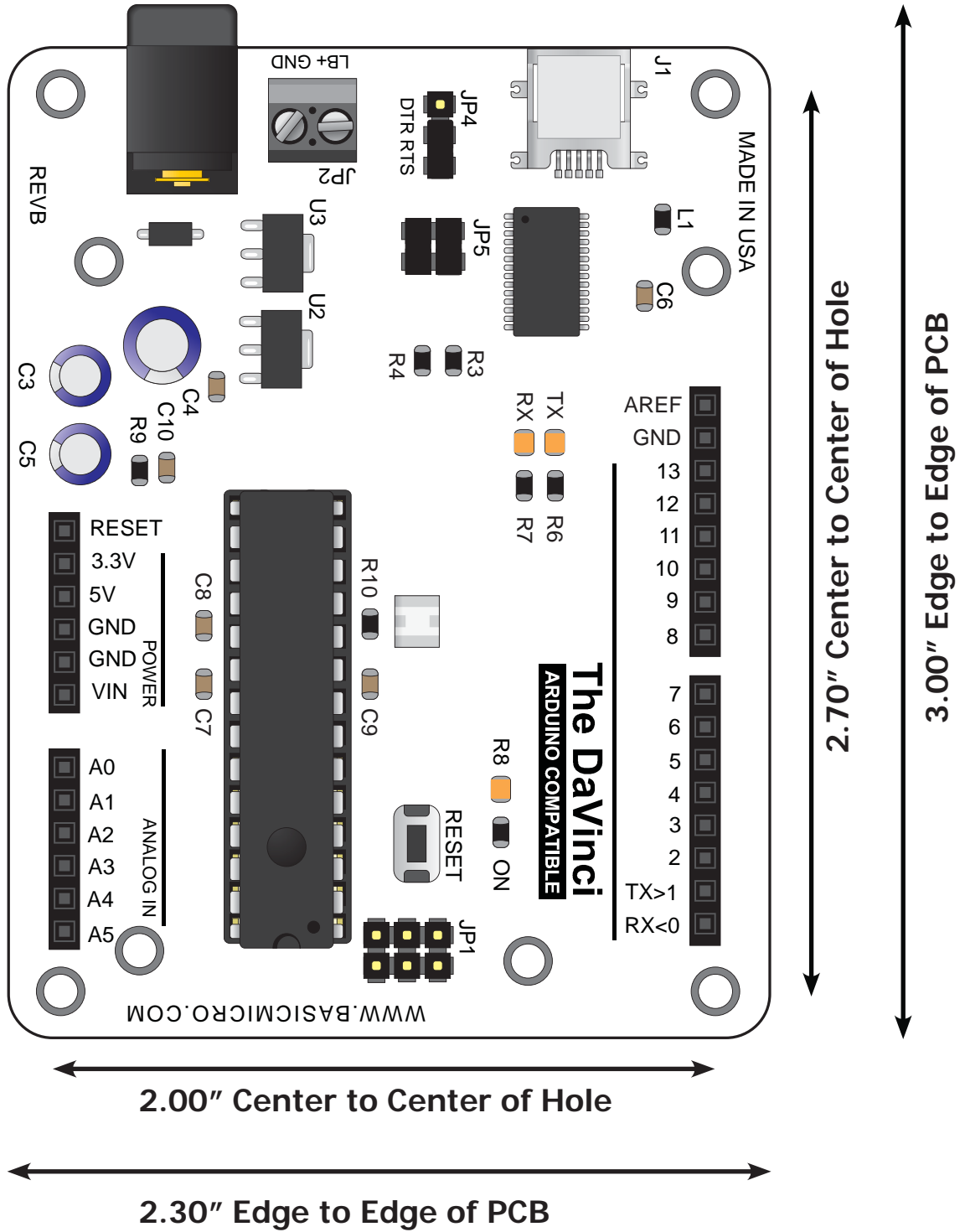
Documentation

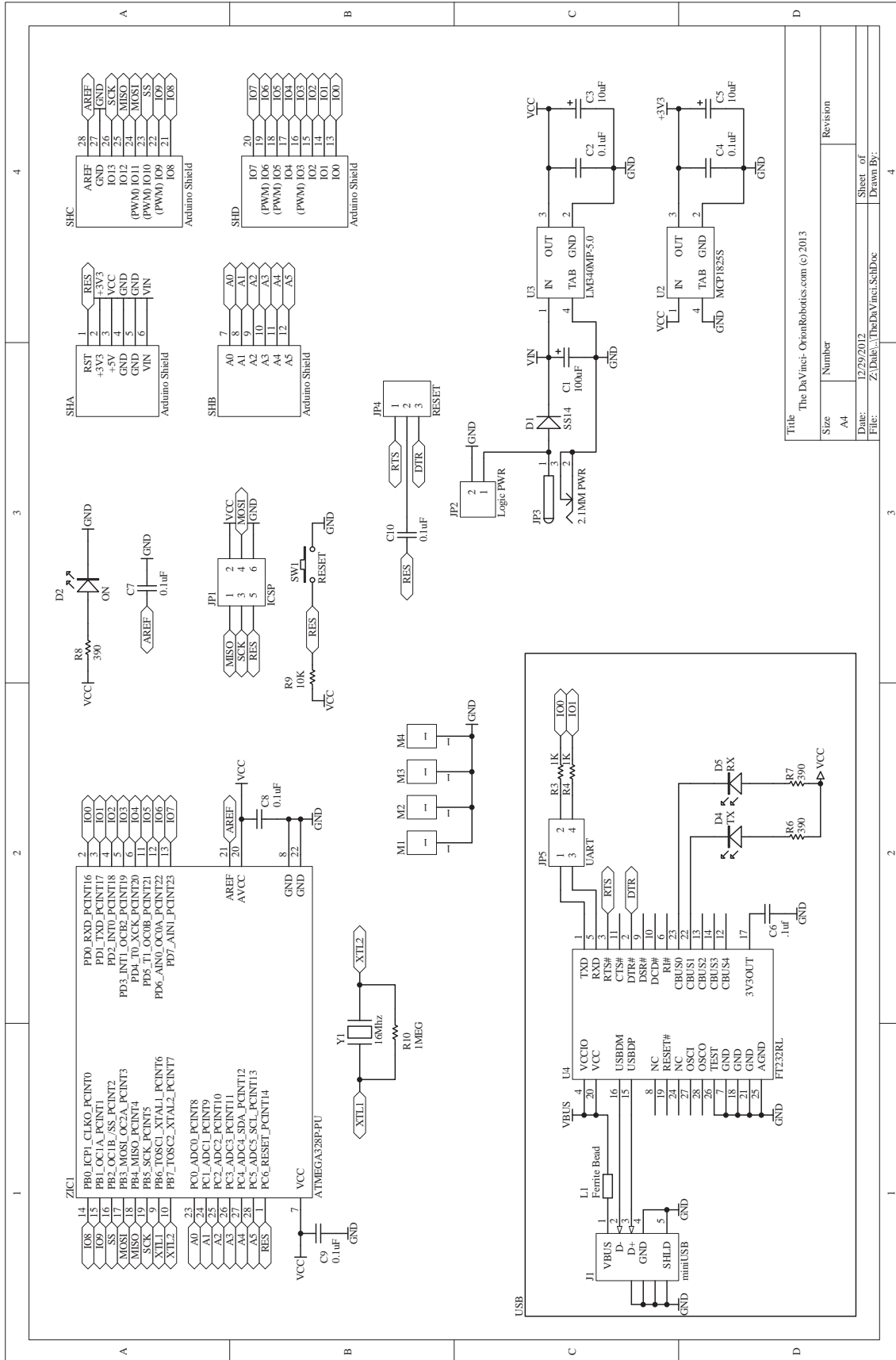
Arduino is a 100% open source solution. Hardware and software. In keeping with that tradition we have included the schematics to this board at the end of this data sheet. All programming documentation is supplied by the Arduino community. The Arduino IDE and programming guides can be downloaded from <http://www.arduino.cc>



Board Overview:

- A - Atmel Microcontroller. Pre-Programmed with Arduino code.
- B - 2.1mm Power Connector
- C - 2 Pin Screw Terminal Power Connector
- D - 3 Pin Header. Jumper Setting for Reset.
- E - MiniUSB Connector.
- F - Alternate Mount Pattern for Robotics.





Electrical Characteristics

Characteristic	Value (Units)
Input Voltage (min - max)	6V - 12VDC
5V Regulator Max	500mA
3.3V Regulator Max	500mA
Current Draw (Idle)	5 mA
I/O Voltages (Low / High)	0.0 V / 5.0V
I/O Logic	TTL
I/O Maximum Current	25 mA sink, 25 mA source Note: Total current for all pins should not exceed 90 mA sink and 90 mA source
Flash	32 KB
RAM	2 KB
EEPROM	1 KB
Temperature Range	-40 to +125 C

Warranty

Orion Robotics Inc warrants its products against defects in material and workmanship for a period of 90 days. If a defect is discovered, Orion Robotics will, at our discretion, repair, replace, or refund the purchase price of the product in question. Contact us at support@orionrobotics.com. No returns will be accepted without the proper authorization.

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Discussion List

A web based discussion board is maintained at <http://www.orionrobotics.com>.

Technical Support

Technical support is made available by sending an email to support@orionrobotics.com. All email will be answered within 48 hours. Support is also available at our online discussion board <http://www.orionrobotics.com>. We are also available by phone.