CAN-BUS Shield

1. Introduction

CAN-BUS is a common industrial bus because of its long travel distance, medium communication speed and high reliability. It is commonly found on modern machine tools and as an automotive diagnostic bus. This CAN-BUS Shield adopts MCP2515 CAN Bus controller with SPI interface and MCP2551 CAN transceiver to give your Arduino/Seeeduino CAN-BUS capibility. With an OBD-II converter cable added on and the OBD-II library imported, you are ready to build an onboard diagnostic device or data logger.

2. Feature

- Implements CAN V2.0B at up to 1 Mb/s
- SPI Interface up to 10 MHz
- Ariduino/ Freaduino Completely compatible
- Standard (11 bit) and extended (29 bit) data and remote frames
- Industrial standard 9 pin sub-D connector
- Two receive buffers with prioritized message storage
- Operating voltage: DC5-12V
- Size: 78mmx53.5m

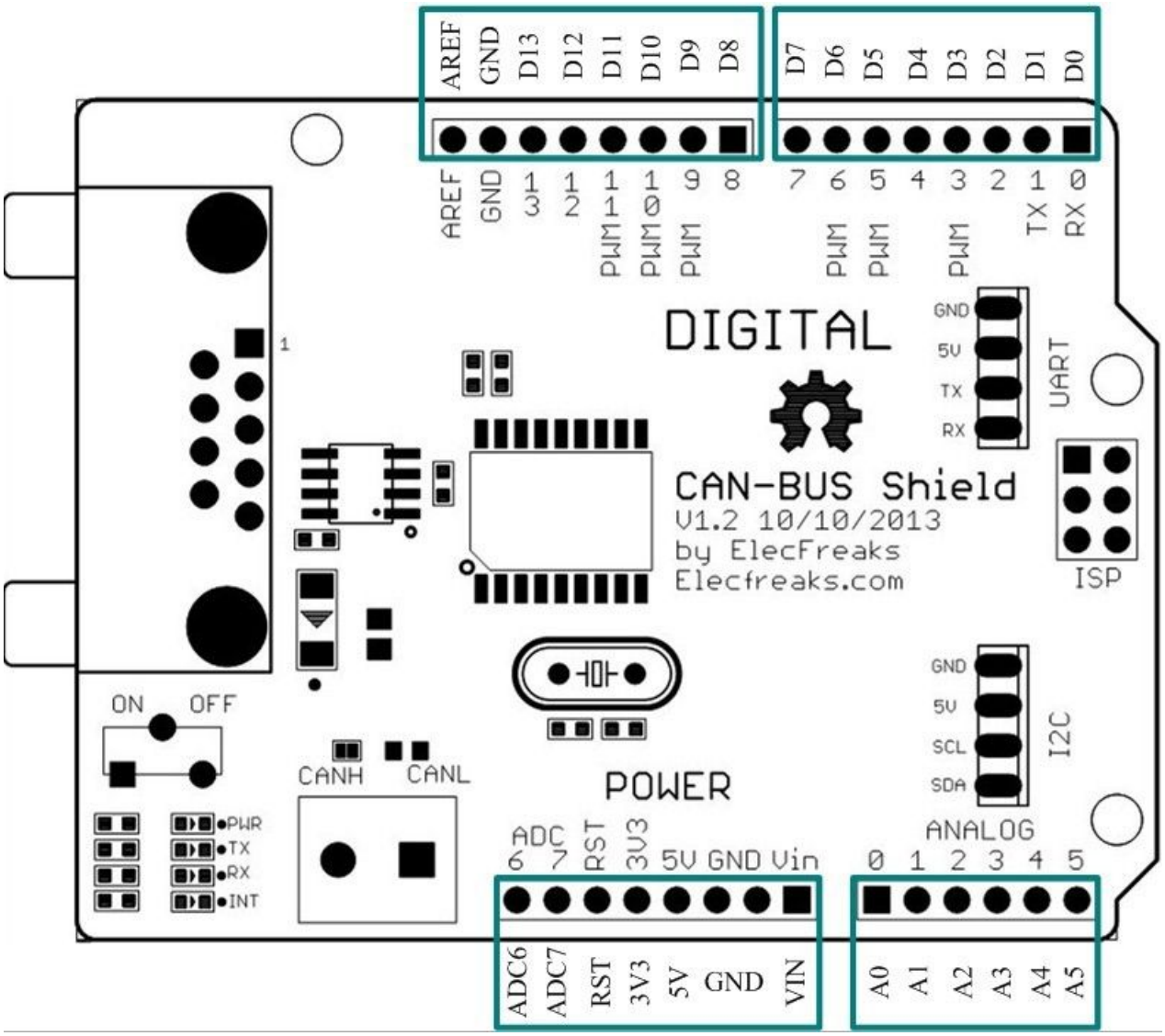
3. Application

- Industrial control
- Car control field

4. Electronic Properties

PARAMETER	MIN	TYP	MAX	UNIT
Supply Voltage	5	-	12	V
Supply Voltage	1.5	100	2000	mA
High Input Voltage	3	3.3	3.6	V
Low-level Input Voltage	-0.3	0	0.5	V

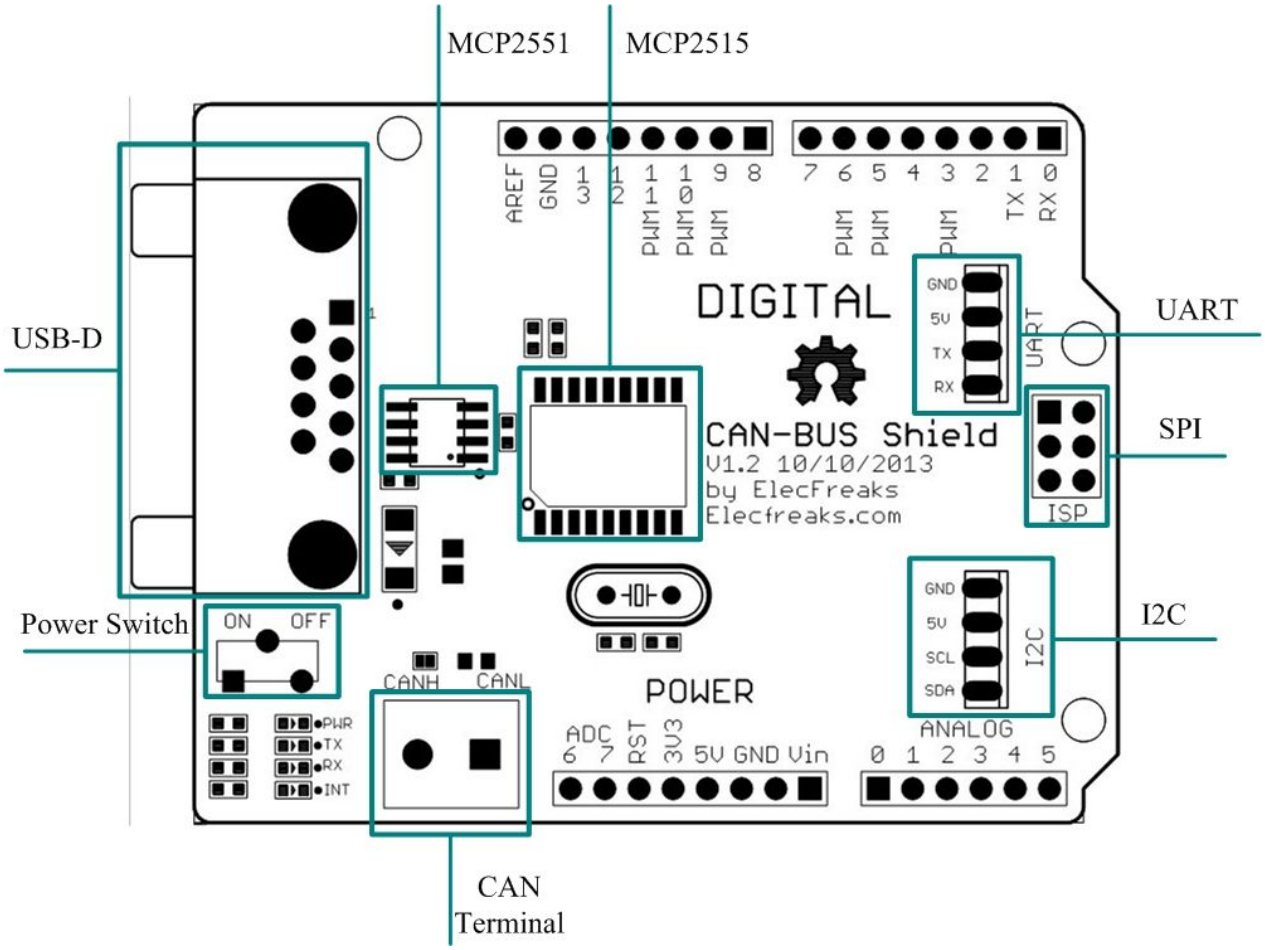
5. Interface Description



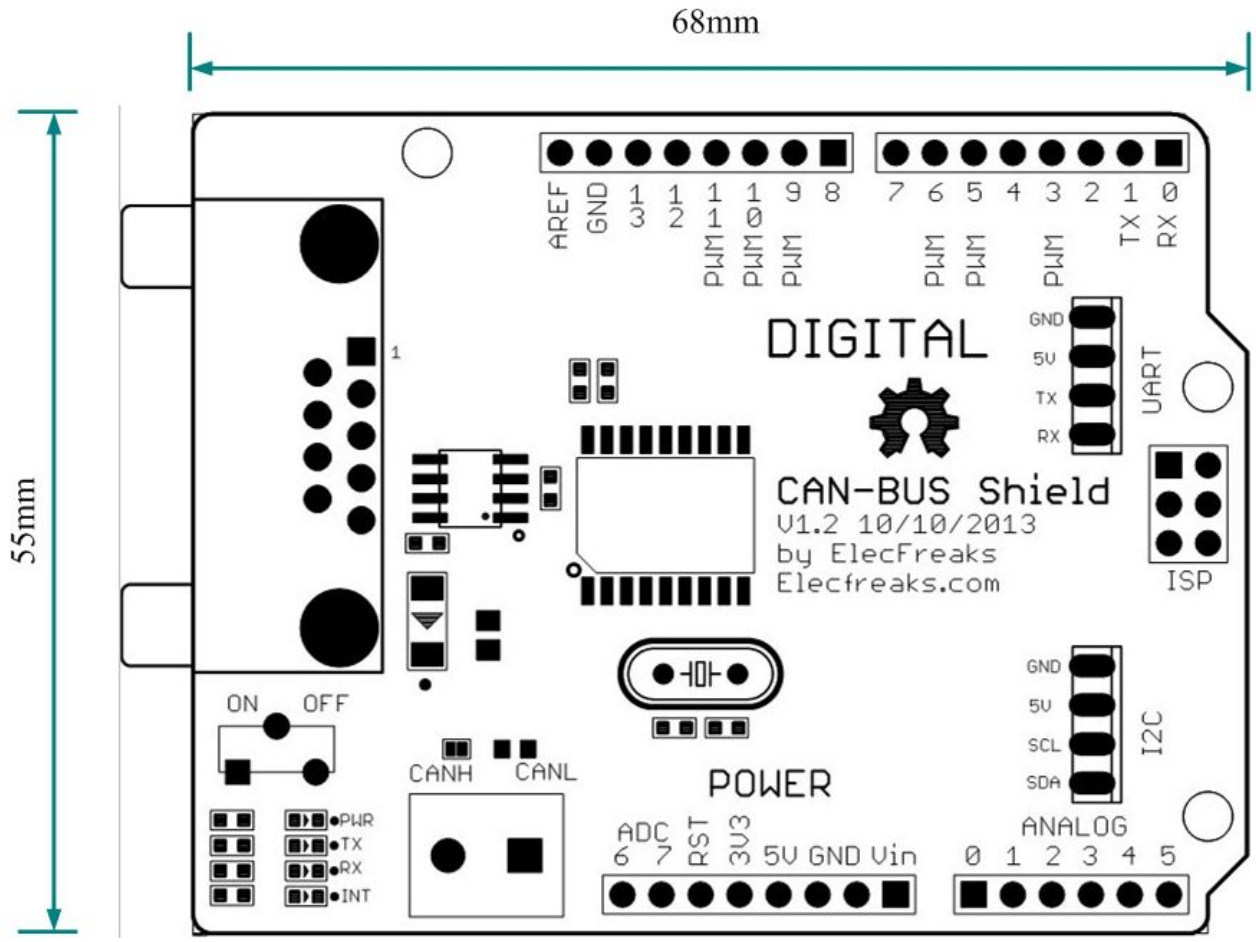
Type	Symbol	Explanation
	D0	Communication Pin RX
	D1	Communication Pin TX
	D2	Arduino Digital Port D2
	D3	Arduino Digital Port D3
	D4	Arduino Digital Port D4
	D5	Arduino Digital Port D5
	D6	Arduino Digital Port D6
	D7	Arduino Digital Port D7
	D8	Arduino Digital Port D8
Arduino pin	D9	Arduino Digital Port D9
	D10	SPI 总线使能信号口
	D11	MOSI SPI Bus Data Input Port
	D12	MISO SPI Bus Data Output Port
	D13	SPI Bus Clock Signal Port
	A0	ArduinoAnalog PortA0
	A1	ArduinoAnalog PortA1

Type	Symbol	Explanation
	A2	ArduinoAnalog PortA2
	A3	ArduinoAnalog PortA3
	A4	ArduinoAnalog PortA4
	A5	ArduinoAnalog PortA5
	RST	Arduino Reset
	AREF	Arduino's AREF
	VIN	Adapter Input Power
	GND	Power Ground
	5V	5V Voltage Supplied By The Motherboard

6. Module Description



7. Dimensions



8.

REVISION	DESCRIPTION	RELEASE DATE
V1.1	Initial version	6/13/2013

9. Contact Information

For more information, please visit: http://www.elecfreaks.com
For sales office addresses, please send an email to: service@elecfreaks.com