SD/MMC Shield
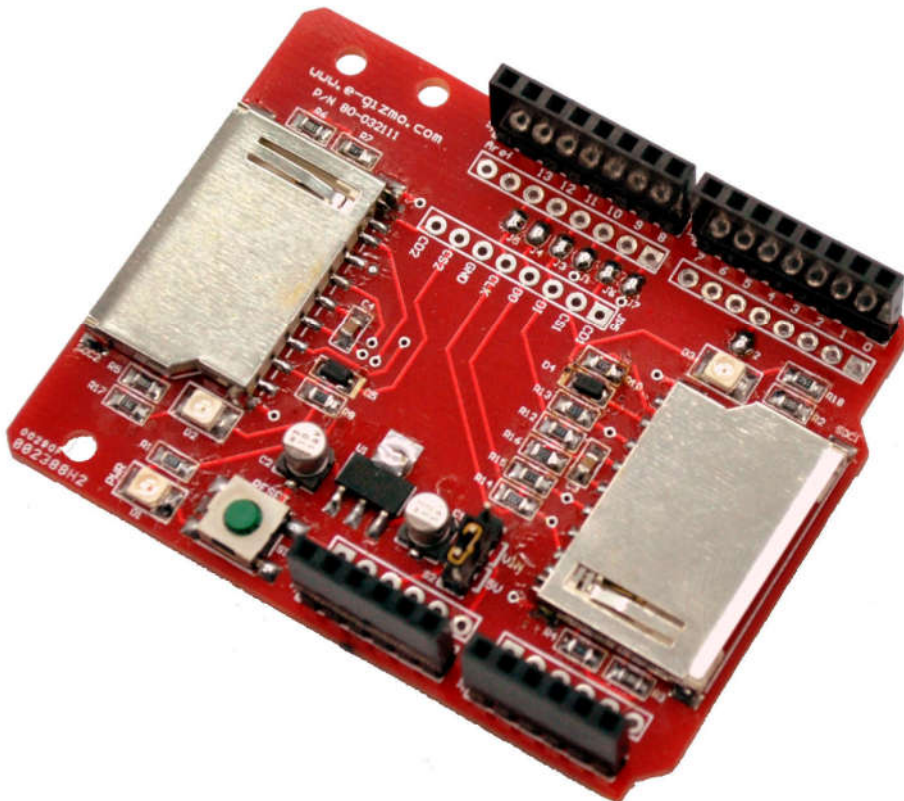
gizDuino compatible card shield for SD/MMC card read and write applications. Two card sockets allows user applications to work on two SD/MMC at a time. Uncommited I/O pin gives user the freedom to assign I/O to his/her liking.

FEATURES

- 2 available Card Sockets
- Solderable Extension Ports For Protoyping with other microcontrollers
- Solderable I/O Port
- Reset Button
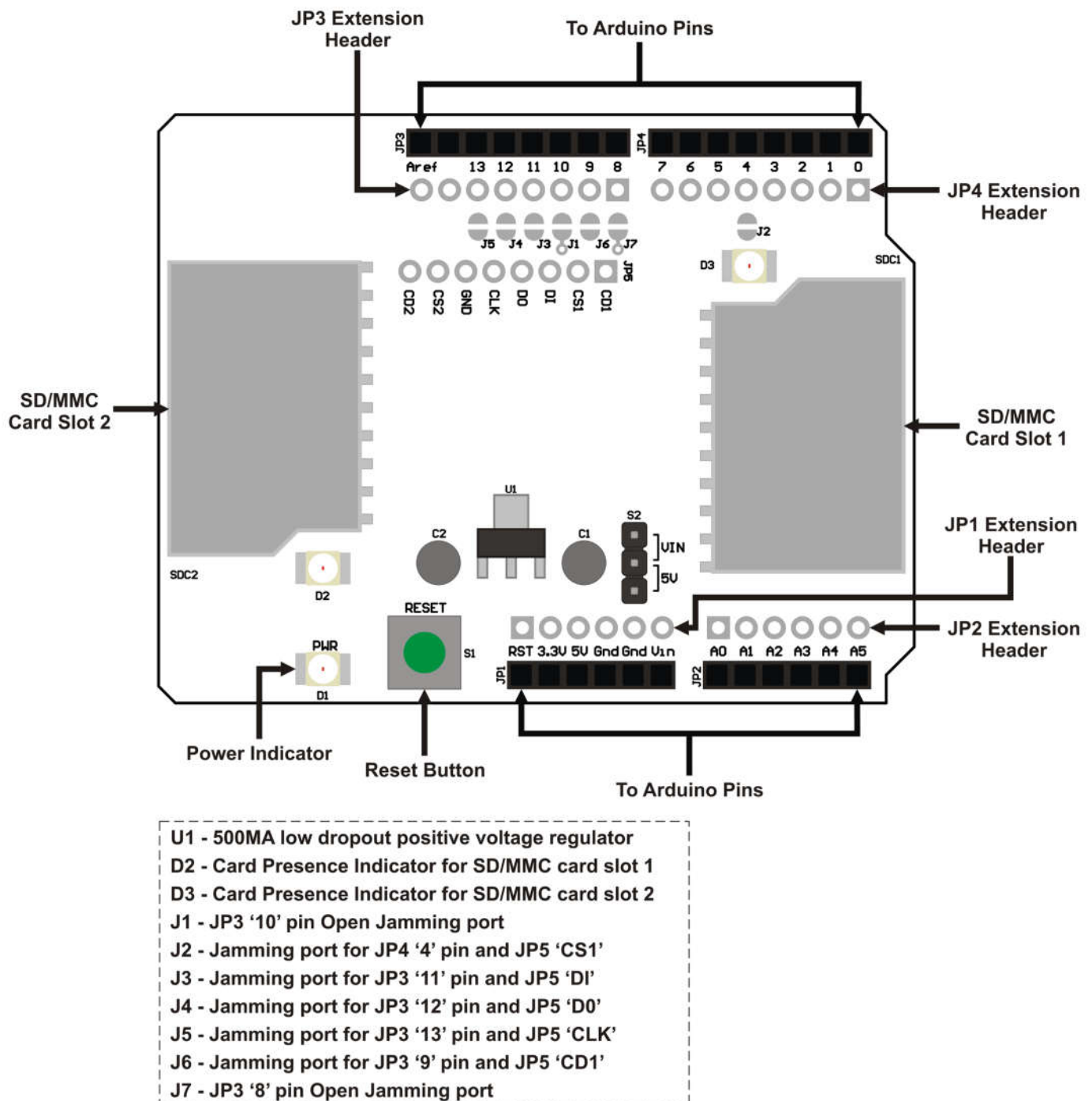
MAJOR COMPONENTS PRESENTATION

Figure 1. *SD/MMC Shield & its major components with details.*

The figure includes the following callouts and legend:

- JP3 Extension Header
- To Arduino Pins
- JP4 Extension Header
- SD/MMC Card Slot 2
- SD/MMC Card Slot 1
- JP1 Extension Header
- JP2 Extension Header
- Power Indicator
- Reset Button
- To Arduino Pins

Labels on board: Aref 13 12 11 10 9 8 ; 7 6 5 4 3 2 1 0 ; J5 J4 J3 J1 J6 J7 ; CD2 CS2 GND CLK D0 DI CS1 CD1 ; SDC2 ; D2 ; PWR D1 ; RESET S1 ; U1 ; C2 ; C1 ; S2 VIN 5V ; RST 3.3V 5V Gnd Gnd Vin ; A0 A1 A2 A3 A4 A5 ; JP1 ; JP2 ; D3 ; J2 ; SDC1

Legend:

U1 - 500MA low dropout positive voltage regulator
D2 - Card Presence Indicator for SD/MMC card slot 1
D3 - Card Presence Indicator for SD/MMC card slot 2
J1 - JP3 '10' pin Open Jamming port
J2 - Jamming port for JP4 '4' pin and JP5 'CS1'
J3 - Jamming port for JP3 '11' pin and JP5 'DI'
J4 - Jamming port for JP3 '12' pin and JP5 'D0'
J5 - Jamming port for JP3 '13' pin and JP5 'CLK'
J6 - Jamming port for JP3 '9' pin and JP5 'CD1'
J7 - JP3 '8' pin Open Jamming port

PIN ASSIGNMENTS

Figure 2. JP5 Uncomitted I/O Port with Port I.D.

Table 1. JP5 Uncomitted I/O Port with Port I.D. details

I.D.	Description
CD2	Card Detect Switch (Card Slot 2)
CS2	Chip Select (Card Slot 2)
GND	Ground
CLK	Serial Clock
DO	Serial Data Out
DI	Serial Data In
CS1	Chip Select (Card Slot 1)
CD1	Card Detect Switch (Card Slot 1)
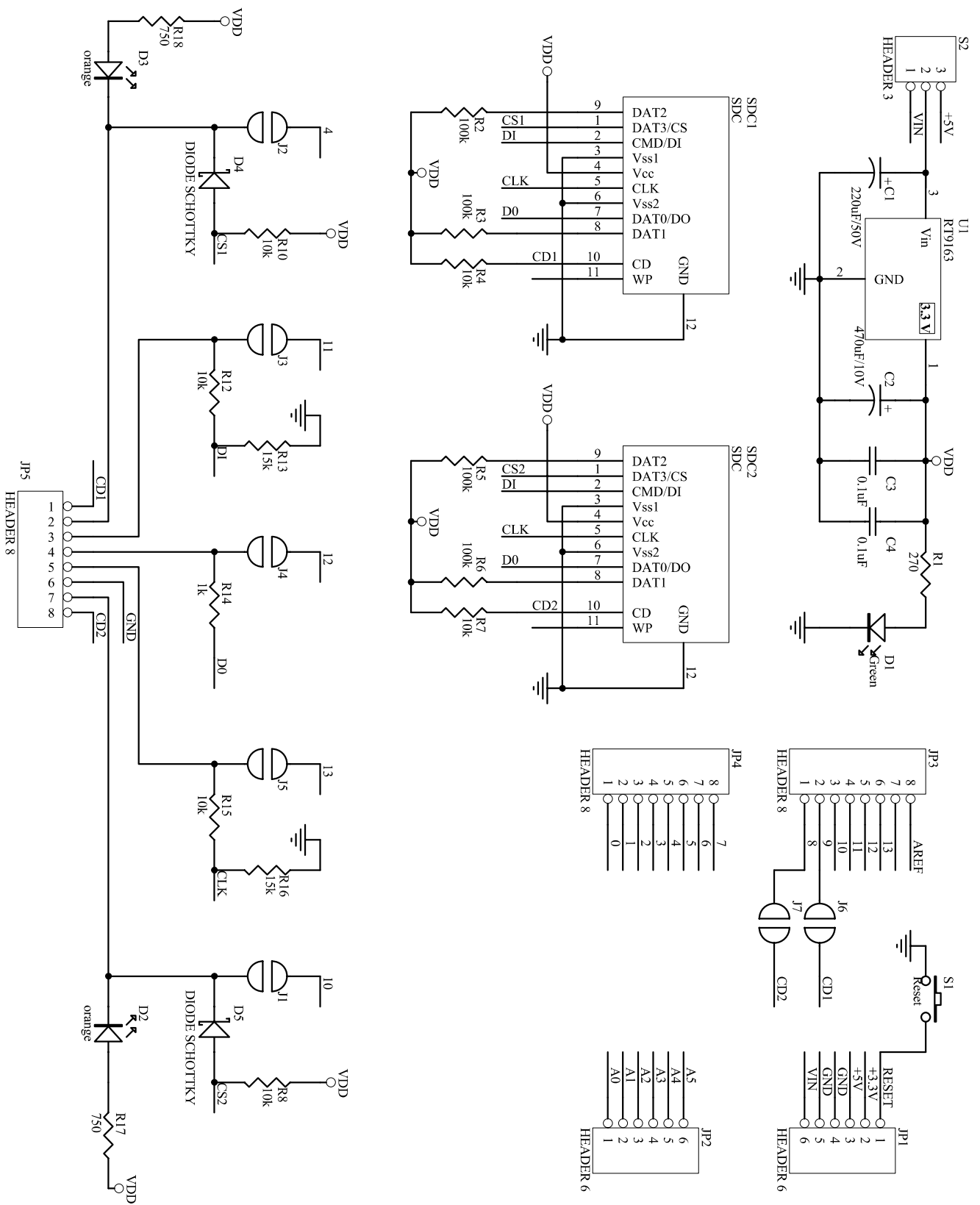
Figure 3. Schematic Diagram of SD/MMC Shield

PCB BOARD PRESENTATION
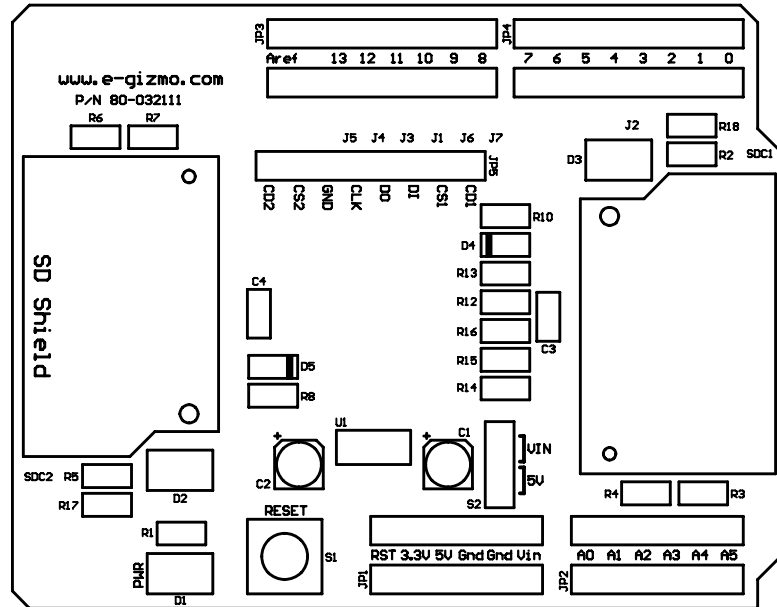
Figure 4. *SD/MMC Shield PCB*
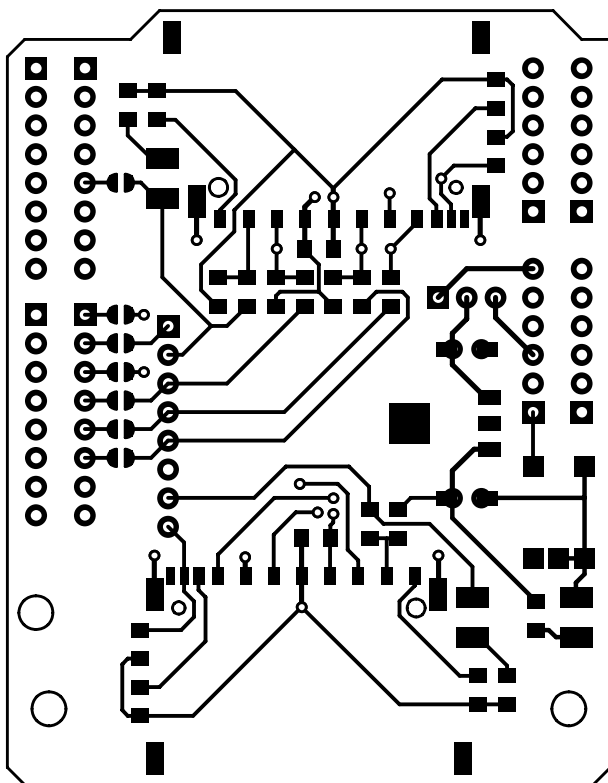*(silkscreen layout)*

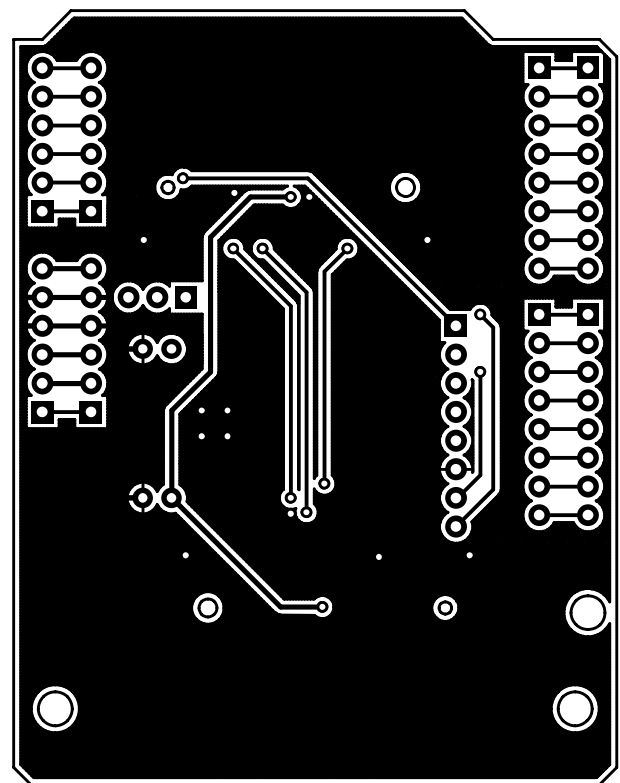**Figure 5.** *SD/MMC Shield PCB*
Copper Pattern (Top Layer)

Figure 6. *SD/MMC Shield PCB*
Copper Pattern (Bottom Layer)