RES-SD module

This is a very simple board performing three functions:

- SD card socket
- Reset button
- Indicator LEDs

Schematic

Connector J16E (SMT male header) carries 3v3 power and data signals for the SD card, along with the Reset and “LED” signals.

The Reset button has a damping capacitor.

The LEDs are connected through limiting resistors. The cathode pins are closest to the edge of the board.

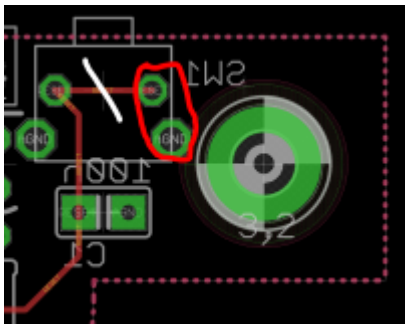
BOM v1.0 **place holder**

Type	Qty	Value	Package	Parts	Mouser	Reichelt	Conrad	Other	Notes
Resistors									
	2	220R 5%	THT	R7A, R8A					
	2	220R 5%	1206	R7B, R8B					
	1	330R 5%	THT	R102					
	4	1k 5%	1206	R7B1-4					
	2	1k 5%	THT	R11, R13					
	1	10k 5%	THT	R12					
	1	220k 5%	THT	R101					
Pots									
	2	10k	6*5mm vert	P1, P2					
Capacitors									
	3	100n	1206	C1A, C1B, C2					
Diodes									
	1	1N4148	THT	as marked					
Transistors									
	1	BC337	TO-92	T1					
ICs									
	2	74HCT125	SOIC	IC1A, IC1B	595-SN74HCT125DR				Ensure **HCT**
	1	74HC595	SOIC	IC2					

Type	Qty	Value	Package	Parts	Mouser	Reichelt	Conrad	Other	Notes
Resistors									
Headers									
	2	1*2	male						
	1	1*3	male						
	1	1*5	male	J1					or wire directly
	9	2*5	male						
	3	2*8	male						
	2	2*25	female						
Hardware									
	4		M3 spacer	8mm(?)					
MCU breakout									
	1	Waveshare Core 407v							

Versions

v1.0: first release. **Important!** v1.0 boards have an error with the Reset switch. All boards should have one trace cut (shown in white), but it is required to bridge a pin with the adjacent mounting pin (as circled in red)



Assembly

The following build order is suggested:

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