USB-power module

This is a very simple board performing the following functions:

- USB B socket (main USB (slave) and +5V power)
- USB A socket (for USB host)
- Toggle switch for USB host
- 3.5mm jack for footswitch/gate or other input/output (audio?)
- Headers to draw +5V directly off the USB power buss.

Schematic

BOM v1.0

Type	Qty	Value	Package	Parts	Mouser	Reichelt	Conrad	Other	Notes
Resistors									
	2	22R 5%	1206	R1, R2					
	1	330R 5%	1206	R3					
	2	10k 5%	THT	R4, R5					
Diodes									
	1	1N4148	THT						
	1	TVS	SOT-143	TVS1	PRTR5V0U2X,215				
Transistor									
	1	BC337	TO-92	T1					
Switch									
	1	SPDT		SW1	1101M2S3AV2BE2	SS 13LSP			Mouser one is better quality
					1101M2S4AV2BE2				Longer actuator (recommended).
Headers									
	1	1*2	male						
	5	1*3	male						
	1	1*5	male						or wire directly
Sockets									
	1	USB B	horizontal	USB1	538-67068-7041	USB BW			
	1	USB A	upright	USB2	538-89485-8000				
	1	3.5mm		SOCK1	CUI SJ1-3535NG				other variants are possible (different pins switched etc.)
Hardware									
	2	M3 PCB mount		534-7695					

Versions

v1.0: first release.

Assembly

License

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