

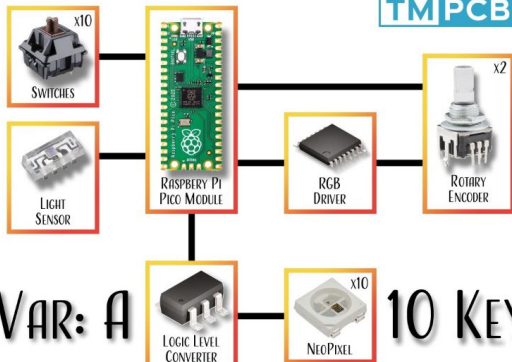
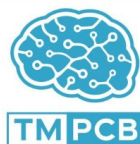
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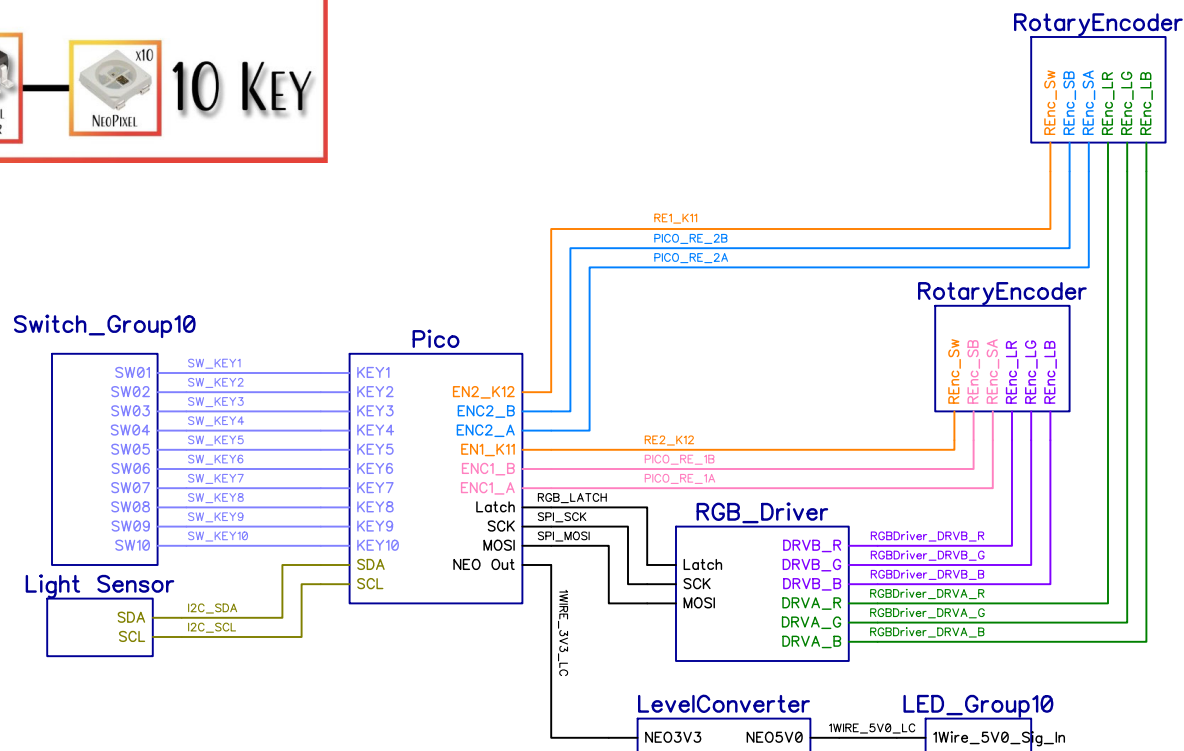
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TEACHMEPCB.COM
PICO MACROKEYPAD



1.0.1 Rearranged pins on hierarchical blocks to allow a diagram with no crossovers. Net connections PICO to RE changed



Variation A of the Pico Macro Keypad utilizes switches directly connected to the Pico.



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	Overview	01 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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REVISIONS

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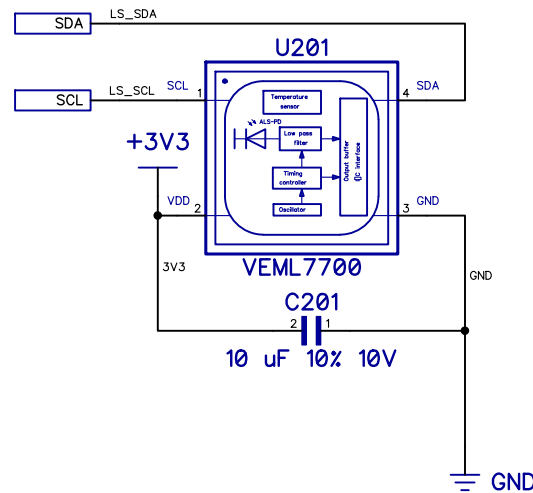
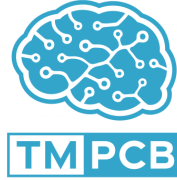
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TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	Light Sensor	02 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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REVISIONS

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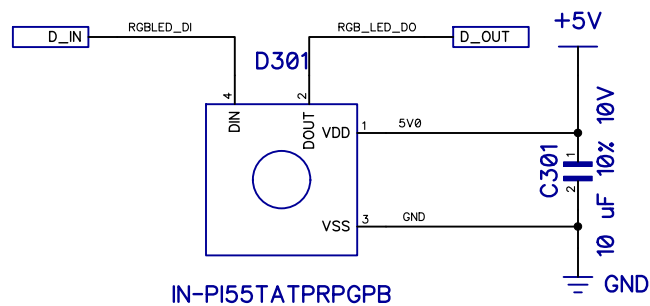
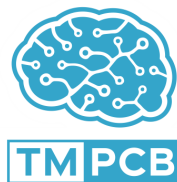
D

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TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	ADDR RGB LED	03 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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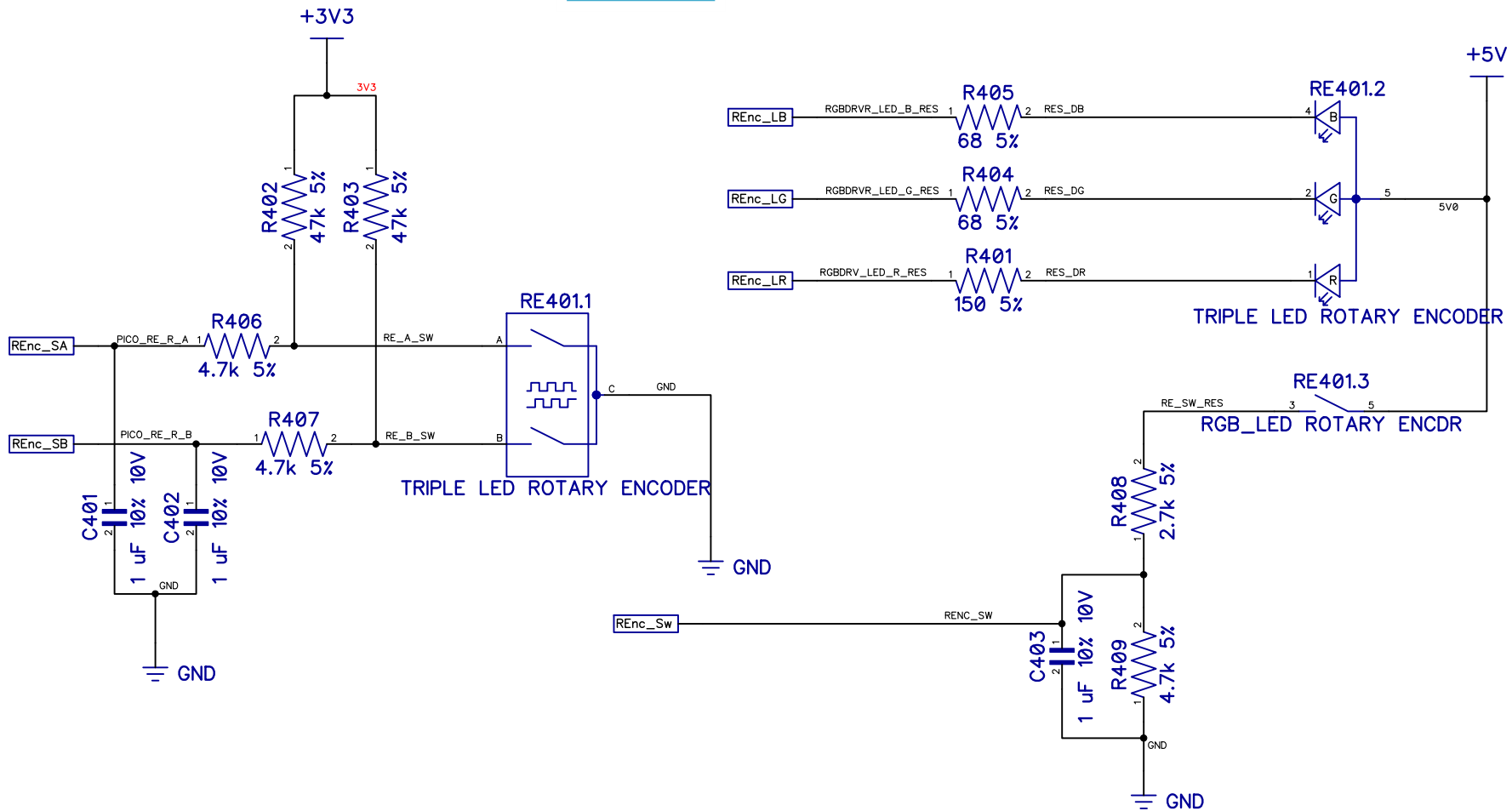
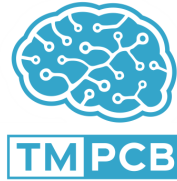
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REVISIONS



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	RotaryEncoder	04 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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REVISIONS

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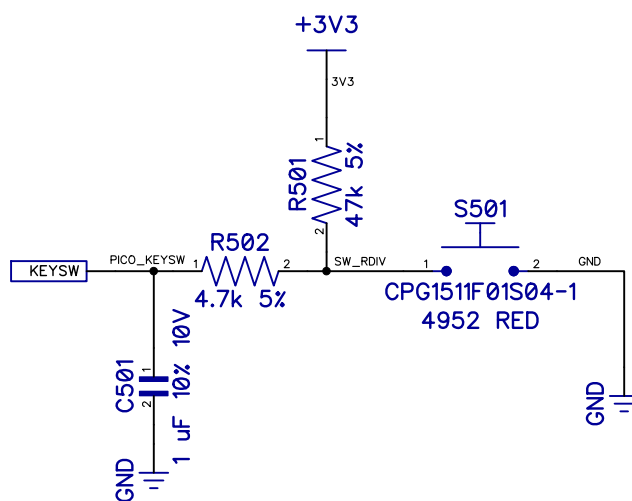
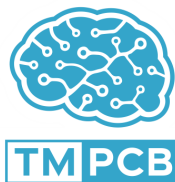
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TMPCB Pico Macrokeypad

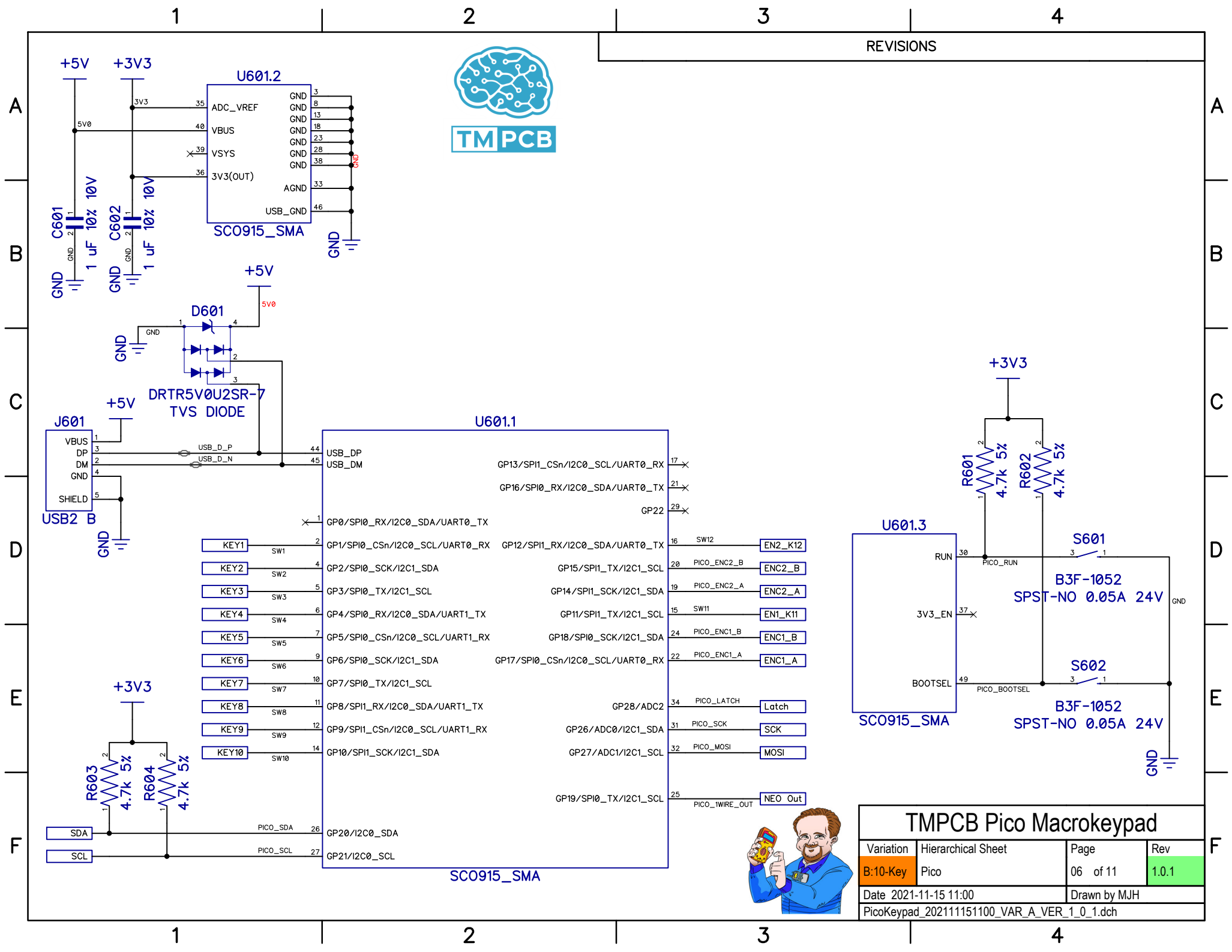
Variation	Hierarchical Sheet	Page	Rev
B:10-Key	SingleSwitch	05 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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TMPCB Pico Macrokeypad			
Variation	Hierarchical Sheet	Page	Rev
B:10-Key	Pico	06 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

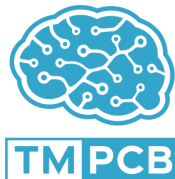
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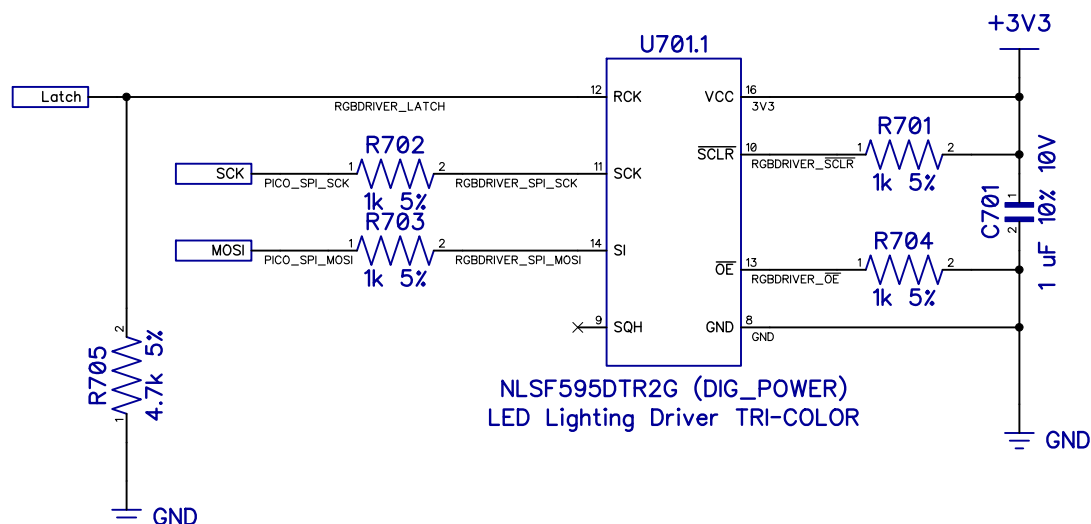
4

REVISIONS

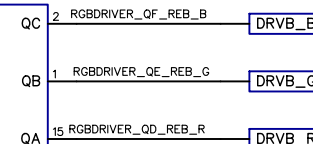


1.0.1 Flipped parts U701.2/3 Vertically and swapped parts 701.2-701.3 to avoid to avoid pin crossing on "overview" sheet

1.0.1 Added R705 a PDR on Latch

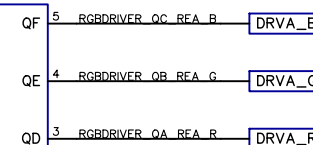


U701.2



NLSF595DTR2G (LED1)
LED Lighting Drivers LOGIC TRI-COLOR LED

U701.3



NLSF595DTR2G (LED2)
LED Lighting Drivers LOGIC TRI-COLOR LED

U701.4



NLSF595DTR2G (LED3)
LED Lighting Drivers LOGIC TRI-COLOR LED



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	RGB_Driver	07 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

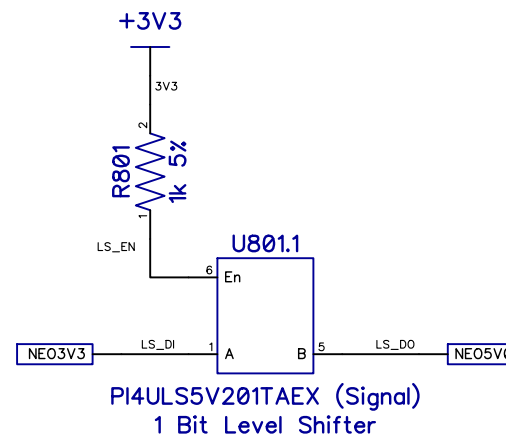
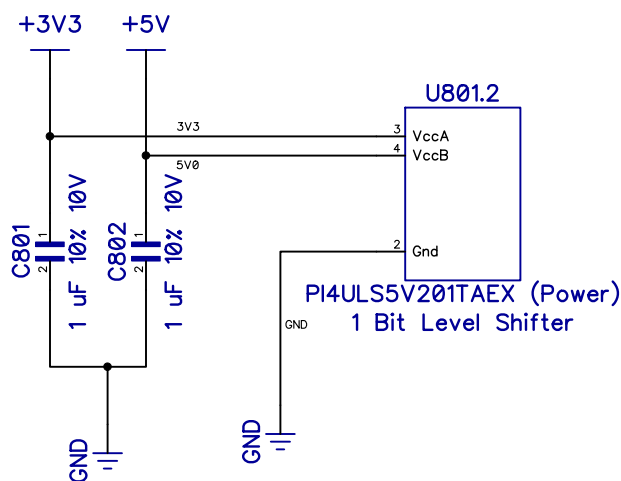
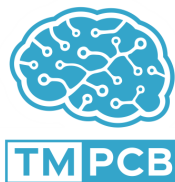
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REVISIONS



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	LevelConverter	08 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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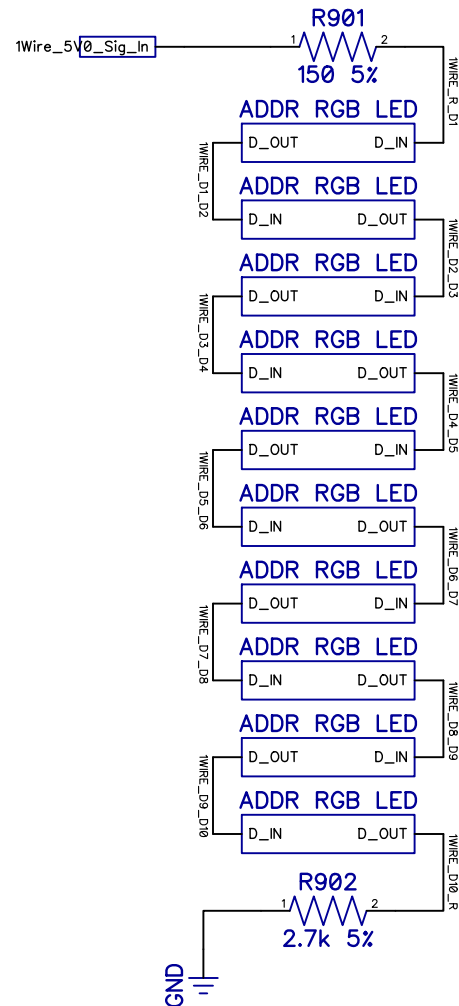
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REVISIONS

1.0.1 Corrected several H-blocks that were reversed in diagram



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	LED_Group10	09 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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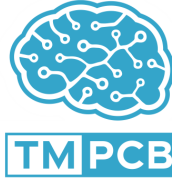
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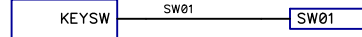
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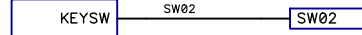
F



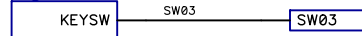
SingleSwitch



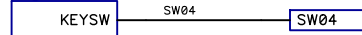
SingleSwitch



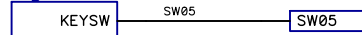
SingleSwitch



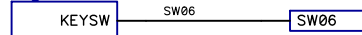
SingleSwitch



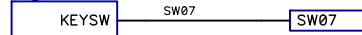
SingleSwitch



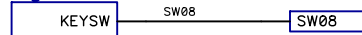
SingleSwitch



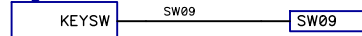
SingleSwitch



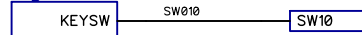
SingleSwitch



SingleSwitch



SingleSwitch



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	Switch_Group10	10 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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#	RefDes	Name	Quantity	Manufacturer	Value	Price	Order Link
1	C201, C301_1, C301_2, C301_3, C301_4, C301_5, C301_6, C301_7, C301_8, C301_9, C301_10	CL21A106KPFNNNG	11	Samsung	10 uF 10% 10V	0.02099 USD	Visit Site...
2	C401_1, C401_2, C402_1, C402_2, C403_1, C403_2, C501_1, C501_2, C501_3, C501_4, C501_5, C501_6, C501_7, C501_8, C501_9, C501_10, C601, C602, C701, C801, C802	CL21B105KPFNNNE	21	Samsung	1 uF 10% 10V	0.061 USD	Visit Site...
3	D301_1, D301_2, D301_3, D301_4, D301_5, D301_6, D301_7, D301_8, D301_9, D301_10	IN-PI55TATPRPGPB	10	Inolux	IN-PI55TATPRPGPB	0.379 USD	Visit Site...
4	D601	DRTR5V0U2SR-7	1	Diodes Inc	TVS DIODE	0.4 USD	Visit Site...
5	J601	UE27BC54130	1	Amphenol	USB2 B	1.23 USD	Visit Site...
6	R401_1, R401_2, R901	RMCF0805JT150R	3	Stackpole	150 5%	0.1 USD	Visit Site...
7	R402_1, R402_2, R403_1, R403_2, R501_1, R501_2, R501_3, R501_4, R501_5, R501_6, R501_7, R501_8, R501_9, R501_10	RMCF0805FT47K0	14	Stackpole	47k 5%		
8	R404_1, R404_2, R405_1, R405_2	RMCF0805JT68R0	4	Stackpole	68 5%	0.1 USD	Visit Site...
9	R406_1, R406_2, R407_1, R407_2, R409_1, R409_2, R502_1, R502_2, R502_3, R502_4, R502_5, R502_6, R502_7, R502_8, R502_9, R502_10, R601, R602, R603, R604, R705	RMCF0805FT4K70	21	Stackpole	4.7k 5%	0.027 USD	Visit Site...
10	R408_1, R408_2, R902	RMCF0805FT2K70	3	Stackpole	2.7k 5%	0.1 USD	Visit Site...
11	R701, R702, R703, R704, R801	RMCF0805FT1K00	5	Stackpole	1k 5%	0.1 USD	Visit Site...
12	RE401_1, RE401_2	PEL12T-4226F-S1024	2	BOURNES	TRIPLE LED ROTARY ENCODER		
13	S501_1, S501_2, S501_3, S501_4, S501_5, S501_6, S501_7, S501_8, S501_9, S501_10	CPG1511F01S04-1	10	ADAFRUIT	4952 RED		
14	S601, S602	B3F-1052	2	Omron	SPST-NO 0.05A 24V	0.36 USD	Visit Site...
15	U201	VEML7700-TR	1	Vishay Semiconductor Opto Division	VEML7700	2.13 USD	Visit Site...
16	U601	SC0915 REVC	1	Raspberry Pi	SC0915 SMA		
17	U701	NLSF595DTR2G	1	ONSEMI	LED Lighting Driver TRI-COLOR	1.22 USD	Visit Site...
18	U801	PI4ULS5V201TAEX	1	Pericom	1 Bit Level Shifter	0.46 USD	Visit Site...
			112			13.52889 USD	



TMPCB Pico Macrokeypad

Variation	Hierarchical Sheet	Page	Rev
B:10-Key	BOM_Switch_10	11 of 11	1.0.1
Date 2021-11-15 11:00		Drawn by MJH	
PicoKeypad_202111151100_VAR_A_VER_1_0_1.dch			

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