Project Documentation

Commodore Port Breakout: User Port Output

Project number: 202

Revision: 0

Date: 12.11.2022

Commodore Port Breakout: User Port Output Rev. 0

Module Description

Introduction

This assembly provides the edge connector for a Commodore PET User Port. The purpose is connecting it to the 2x12 Breakout board via a ribbon cable.

Every pin of the edge connector is connected to a pin of the (2x13p) box connector/pin header. The "GND" pins of the User Port port are all connected on this board.

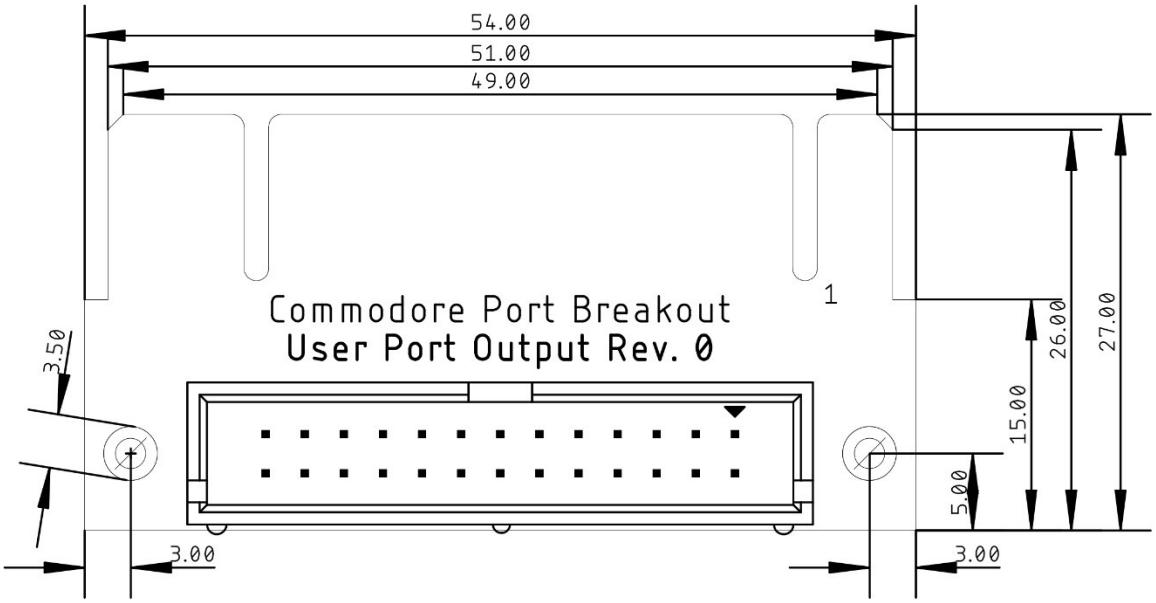


Figure 1: Dimensions of the PCB

Connector Pinout

J1: 2x13 box connector/pin header 2.54mm pitch.

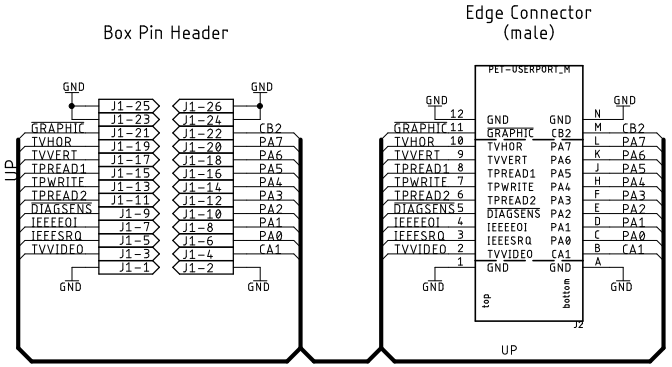
J2: board edge connector (a structure on the PCB).

J1	PET User Port	C64 User Port	VIC-20 User Port	J2
1	GND	GND	GND	1
3	TVVIDEO	+5V	+5V	2
5	IEEESRQ	$\overline{\text{RESET}}$	$\overline{\text{RESET}}$	3
7	IEEEEOI	CNT1	JOY0/PA2	4
9	$\overline{\text{DIAGSENSE}}$	SP1	JOY1/PA3	5
11	TPREAD2	CNT2	JOY2/PA4	6
13	TPWRITE	SP2	LIGHT PEN/PA5	7
15	TPREAD1	$\overline{\text{PC2}}$	CASSETTE SWITCH/PA6	8
17	TVVERT	ATN IN	ATN IN	9
19	TVHOR	9VAC(1)	9VAC(1)	10
21	$\overline{\text{GRAPHIC}}$	9VAC(2)	9VAC(2)	11
23, 25	GND	GND	GND	12
2	GND	GND	GND	A
4	CA1	$\overline{\text{FLAG2}}$	CB1	B
6	PA0	PB0	PB0	C
8	PA1	PB1	PB1	D
10	PA2	PB2	PB2	E
12	PA3	PB3	PB3	F
14	PA4	PB4	PB4	H
16	PA5	PB5	PB5	J
18	PA6	PB6	PB6	K
20	PA7	PB7	PB7	L
22	CB2	PA2	CB2	M
24, 26	GND	GND	GND	N

Revision History

Rev. 0

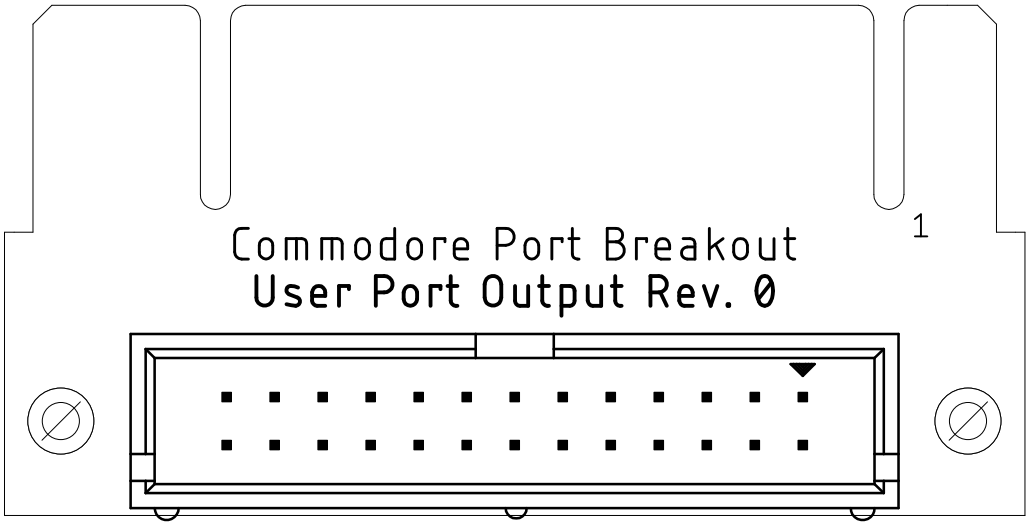
- Prototype



open source hardware

Title:	Commodore Port Breakout: User Port Output	Doc.-No.:	202-1-01-00
		Draft.:	Sven Petersen
Date:	12.11.2022 19:13	Rev.: 0	Page 1/1
File:	CPB_UP_out		
	http://github.com/svenpetersen1965		A3

Sven Petersen 2022	Doc.-No.: 202-2-01-00	
	Cu: 35µm	Cu-Layers:2
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
placement component side		



Sven Petersen 2022	Doc.-No.: 202-2-01-00	
	Cu: 35µm	Cu-Layers:2
CPB_UP_out		
12.11.2022 19:16	Rev.: 0	
placement solder side		

Sven Petersen 2022	Doc.-No.: 202-2-01-00	
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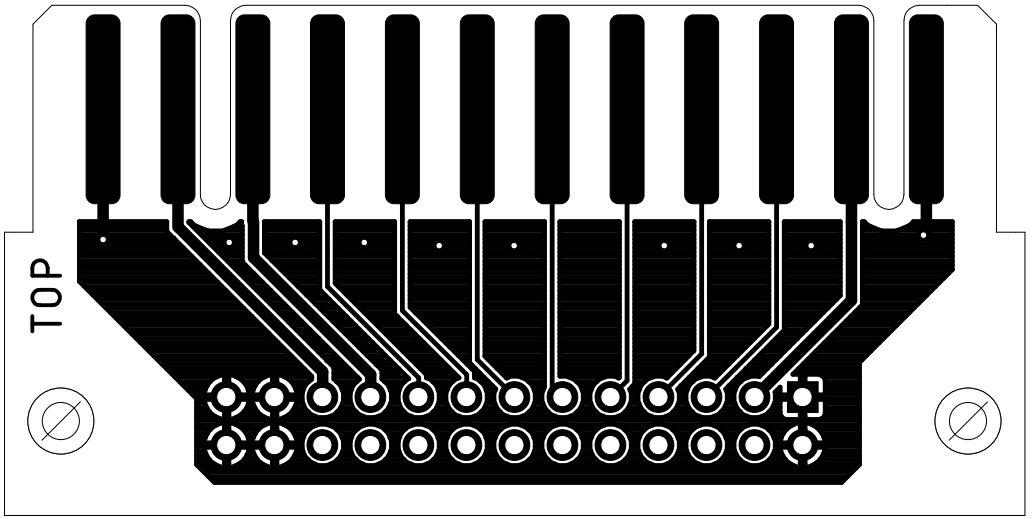
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
top	[redacted]	



Sven Petersen 2022	Doc.-No.: 202-2-01-00	
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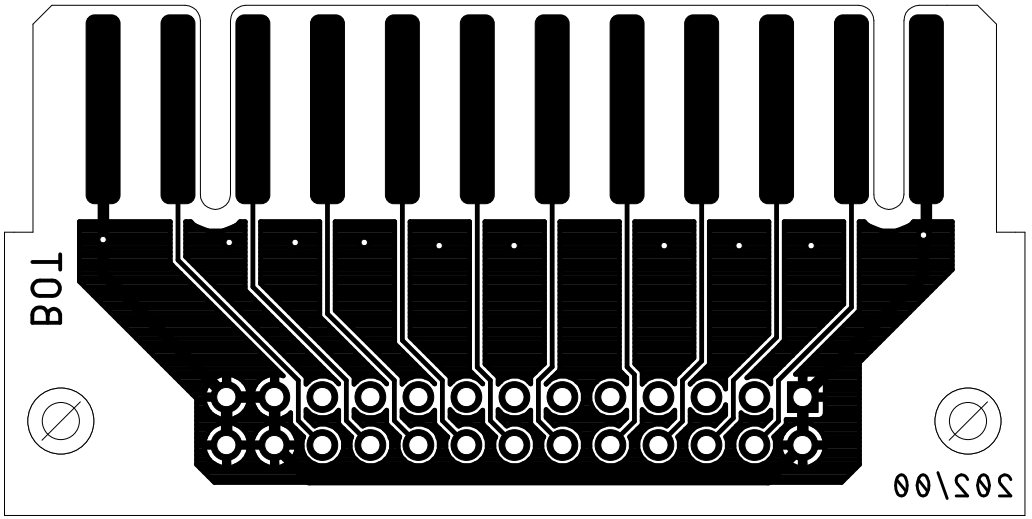
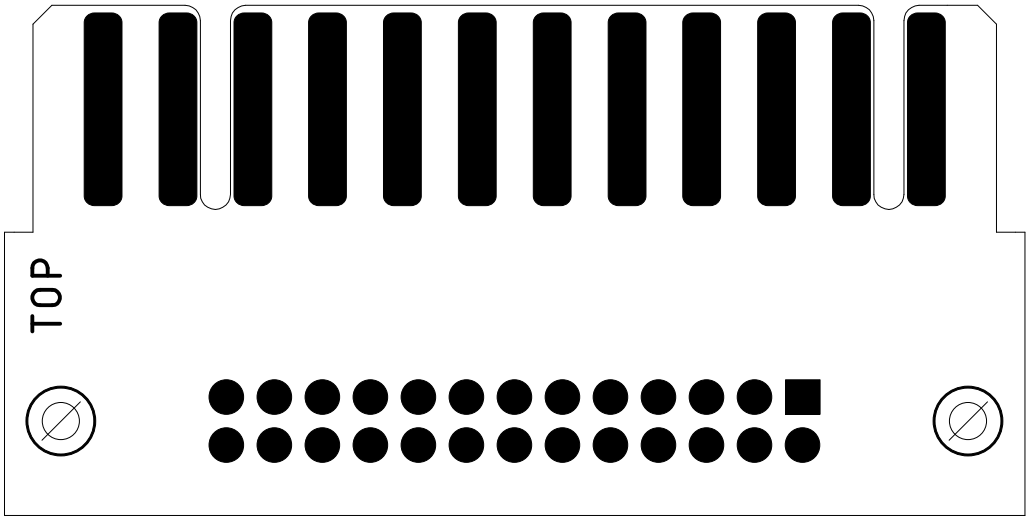
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
bottom	[redacted]	



Sven Petersen 2022	Doc.-No.: 202-2-01-00	
	Cu: 35µm	Cu-Layers:2
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
stopmask component side		



Sven Petersen 2022	Doc.-No.: 202-2-01-00	
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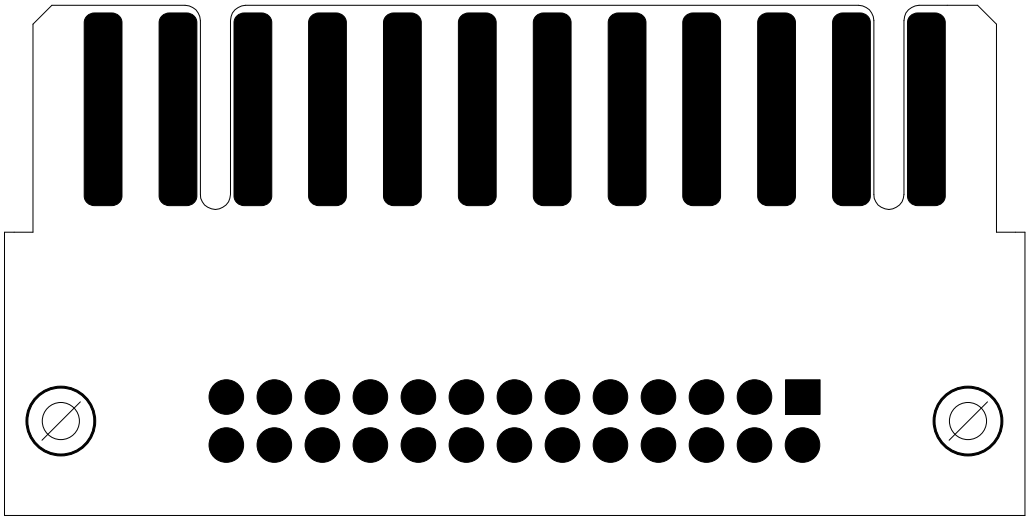
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
stopmask solder side		



Sven Petersen 2022	Doc.-No.: 202-2-01-00	
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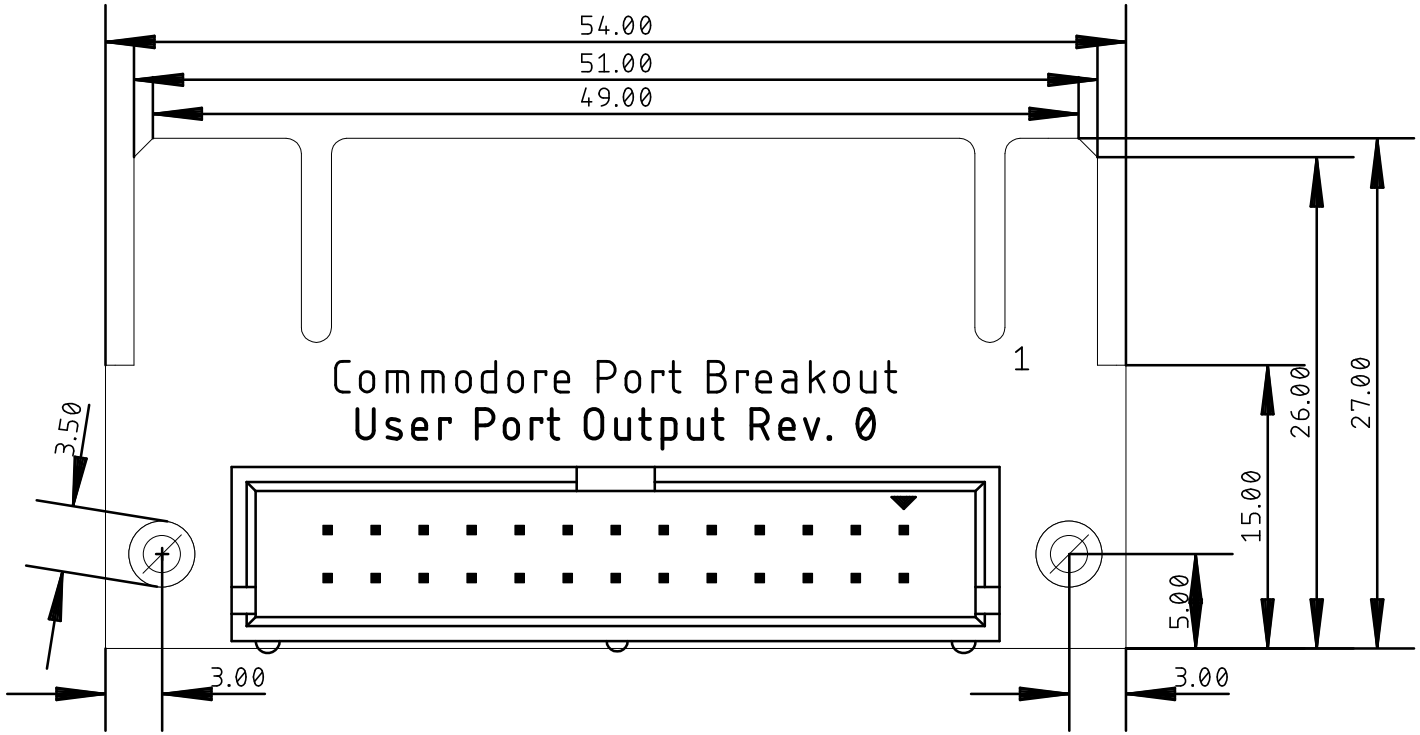
CPB_UP_out		
12.11.2022 19:16		Rev.: 0
placement component side measures		



Commodore Port Breakout: User Port Output Rev. 0
Bill of Material Rev. 0.0

Pos.	Qty	Value	Footprint	Ref.-No.	Comment
1	1	202-2-01-00	2 Layer	PCB Rev. 0	2 layer, Cu 35μ, HASL, 54.0mm x 27.0mm, 1.6mm FR4
2	1	2x13 box connector	2X13WV	J1	e.g. Reichelt WSL 26G