

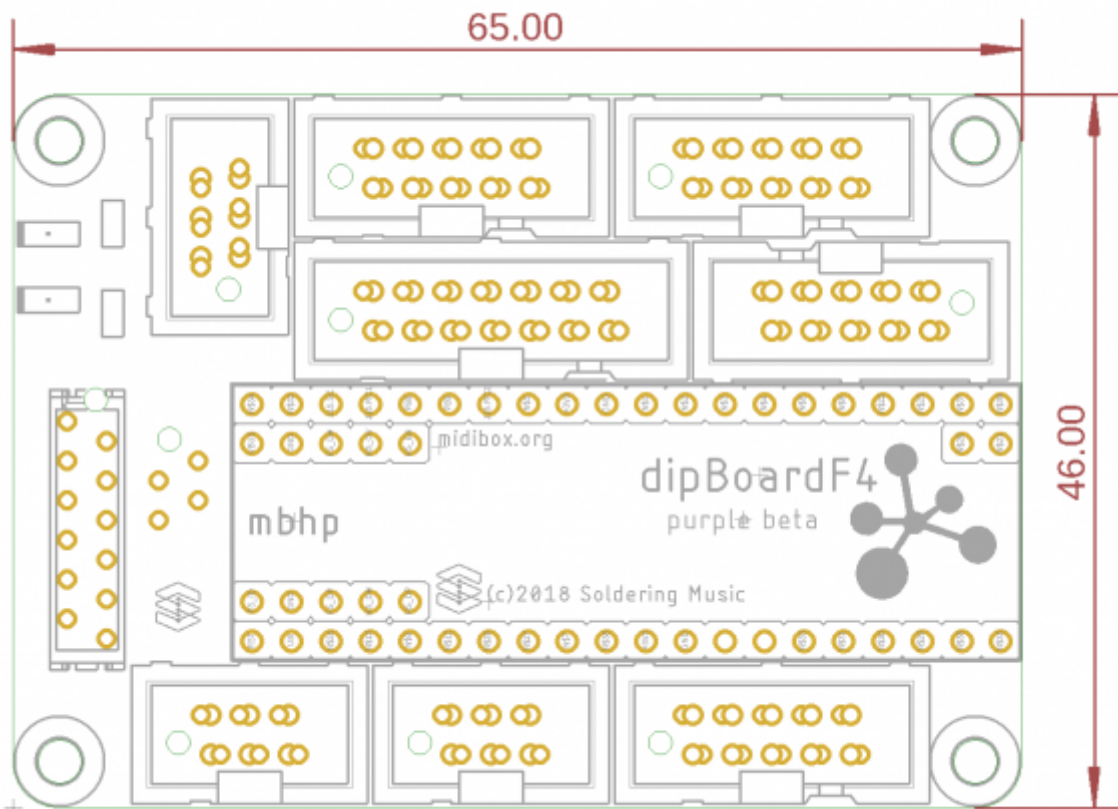
# dipBoardF4

MIDIbox Hardware Platform extension for [dipCoreF4](#).

## Features

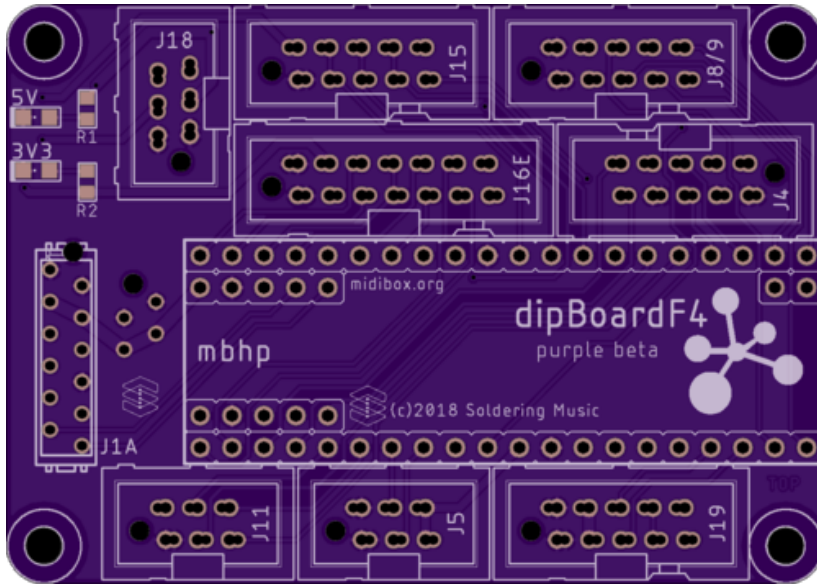
- Very small size 65x46mm(less than your credit card).
- Very low profile.
- Your application board can be stacked on bottom with 'Micro-match' connectors.
- The [dipCoreF4](#) can be installed on the two side.
- Provides all the most important features and ports for regular mbhp.

## Dimension

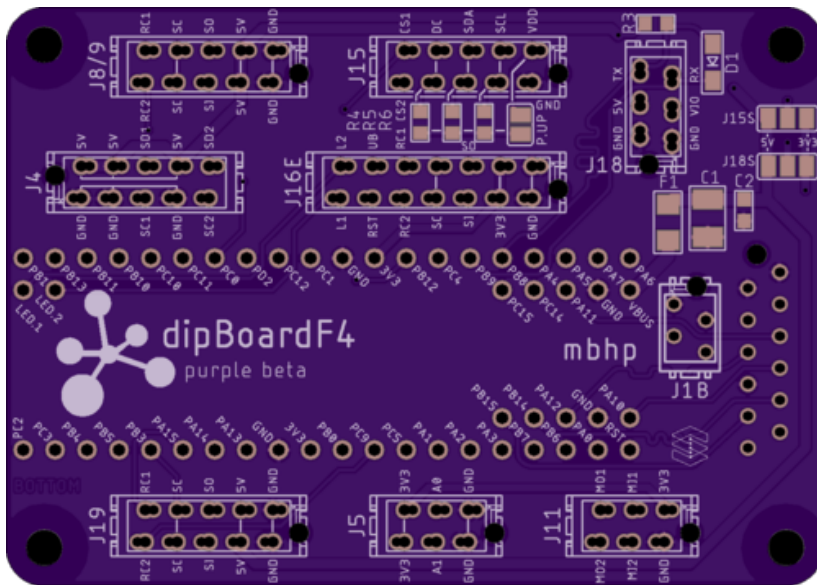


## PCB

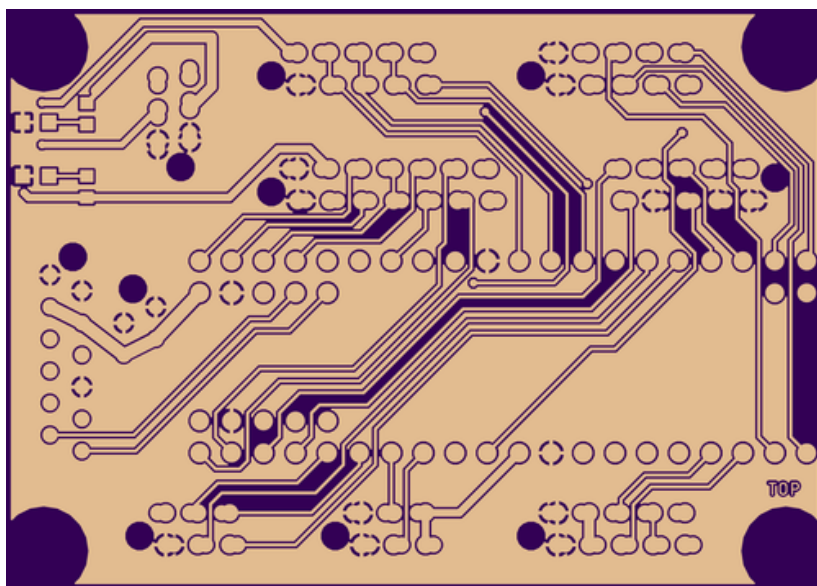
2 layers PCB design.  
Fits 2 layer mostly common design rules.



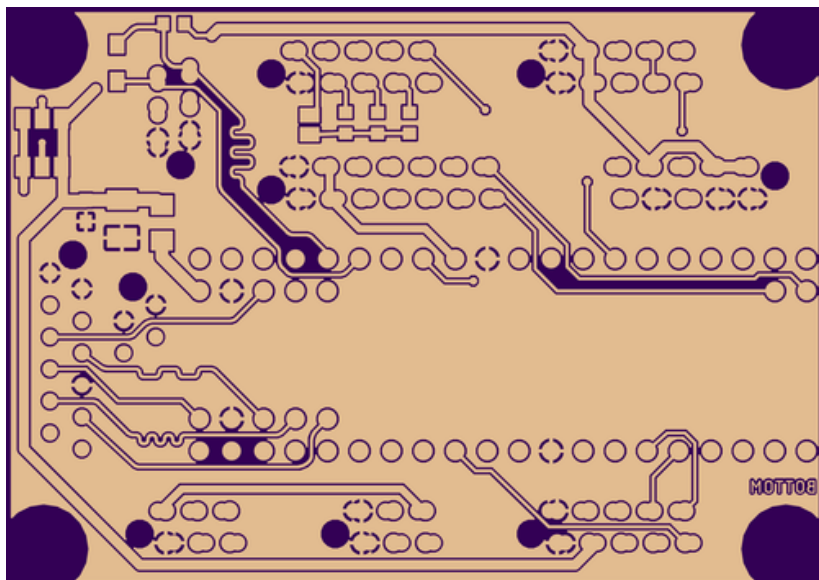
- min. drill 10mil
- min. width 6mil



Top copper



Bottom



## BOM

version 1. Mouser BOM: [ToDo](#)

Qty	Value	Package	Parts	Mouser	Reichelt	Conrad	LCSC	Notes
<b>Resistors</b>								
2	680R 5%	0603	R1, R2	<a href="#">667-ERJ-PA3J681V</a>			<a href="#">C103784</a>	Depends on Leds
4	1K 5%	0603	R3, R4, R5, R6	<a href="#">755-ESR03EZPJ102</a>			<a href="#">C253329</a>	R3 if you use CAN without transceiver
<b>PTC fuses, resettable thermistors</b>								
1	1206L150THWR	1206	F1	<a href="#">576-1206L150THWR</a>			<a href="#">C261956</a>	
<b>Capacitors</b>								
1	100n	0603	C2	<a href="#">80-C0603C104Z3V</a>			<a href="#">C1688</a>	
1	47u Tantalum	SMC_B(1210)	C1	<a href="#">74-TMCMB1C476MTRF</a>			<a href="#">C112105</a>	
<b>Diode</b>								
1	1N4148WS	SOD323-W	D1	<a href="#">512-1N4148WS</a>			<a href="#">C108805</a>	Only if you use CAN without transceiver
<b>LEDs</b>								
2	-	0805	5V, 3V3	<a href="#">755-SML-H12U8TT86C</a>			<a href="#">C72037</a>	
<b>dipCoreF4 socket</b>								
2	1x20	low profile female		<a href="#">517-929870-01-20-RA</a>			<a href="#">C9811</a>	for pads 1 to 40
2	1x5	low profile female		<a href="#">517-929870-01-05-RA</a>			no need break it down from below	for pads 41 to 50

Qty	Value	Package	Parts	Mouser	Reichelt	Conrad	LCSC	Notes
<b>Resistors</b>								
1	1×2	low profile female		<a href="#">517-929870-01-02-RA</a>			<a href="#">C9811</a>	for pads 51 to 52
<b>Connector</b>								
1	micro-match 2×6	Female	J1A	<a href="#">571-8-215079-2</a> or <a href="#">571-1-2178710-2</a> (value line)			no!	Place on top
<b>3 options available for PORTs connectors(depends on you app.)</b>								
<b>Option 1 - Regular Shrouded Headers</b>								
3	2×3	Male	J5, J11, J18	<a href="#">710-61200621621</a>			<a href="#">C132438</a>	Place on top
4	2×5	Male	J4, J8/9, J15, J19	<a href="#">710-61201021621</a>			<a href="#">C132435</a>	Place on top
1	2×7	Male	J16E	<a href="#">710-61201421621</a>			<a href="#">C132432</a>	Place on top
<b>Option 2 - Stacking Micro-Match Connector</b>								
1	2×2	Female	J1B	<a href="#">571-7-215079-4</a> or <a href="#">571-2178710-4</a> (value line)				Place on bottom
3	2×3	Female	J5, J11, J18	<a href="#">571-215079-6</a> or <a href="#">571-2178710-6</a> (value line)				Place on bottom
4	2×5	Female	J4, J8/9, J15, J19	<a href="#">571-12150790</a> or <a href="#">571-1-2178710-0</a> (value line)				Place on bottom
1	2×7	Female	J16E	<a href="#">571-8-215079-4</a> or <a href="#">571-1-2178710-4</a> (value line)				Place on bottom
<b>Option 3 - Micro-Match Paddle Board for low profile connector</b>								
3	2×3	IDC	J5, J11, J18	<a href="#">571-7-215570-6</a>				Place on top
4	2×5	IDC	J4, J8/9, J15, J19	<a href="#">571-1-215570-0</a>				Place on top
1	2×7	IDC	J16E	<a href="#">571-8-215570-4</a>				Place on top

## Ports and features.

ToDo

## Compatible/stack-able boards options

- All [uCapps](#) mbhp modules are compatibles.
- [USB](#), [SD-Card](#), [External Power](#) and [MCAN modules](#) are available.
- [M16 Interface](#), stack-able, to connect on a SPI port, provides 16 MIDI IO and 48 GPIO 😊

For any questions, informations or observations do not hesitate to contact me (Forum).  
[Antichambre](#).

From:

<http://wiki.midibox.org/> - **MIDIbox**

Permanent link:

<http://wiki.midibox.org/doku.php?id=dipboardf4>

Last update: **2018/11/03 02:36**

