Smart Tractor Enabler

Smart Tractor Enabler is a device which measures tractor speed over reed relay placed on cardan and send data over Bluetooth to a mobile device.

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VERSION

v2.01 - spring 2017

NOTE

BT_RST_PIN is added as big Via under BL footprint, see PCB layout. This BL module doesn't have reset pin exposed on pinout, but it is presened on PCB, like a pad, so I connect this pad with mine Via with short wire.

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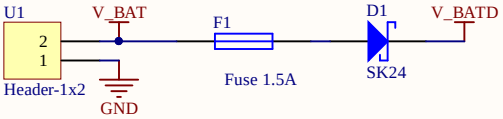
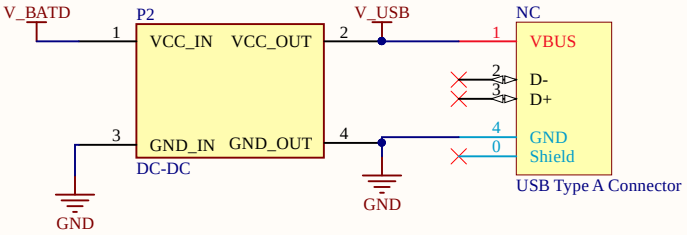
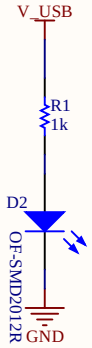
PAGE2-POWER SUPPLY

DC Input

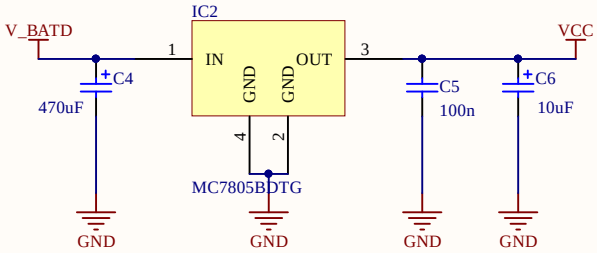


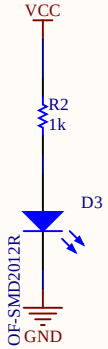
Power Supply for USB device





+5V DC Converter





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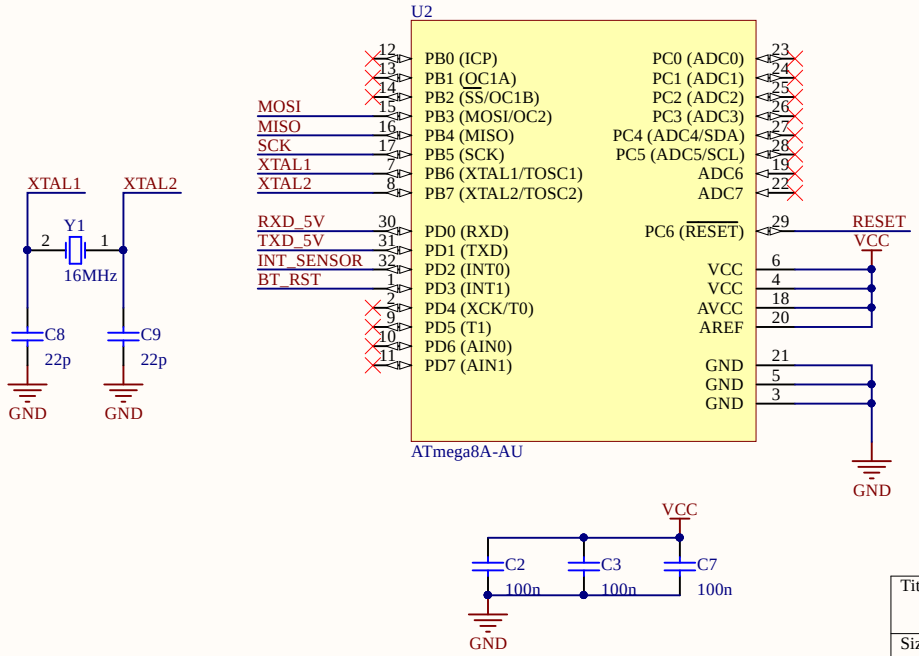
PAGE3-PROCESSING



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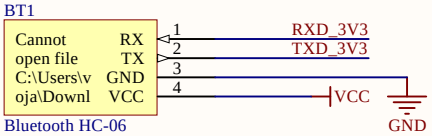
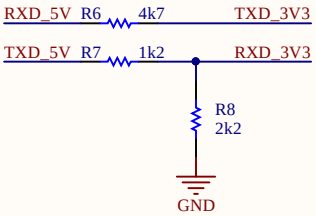
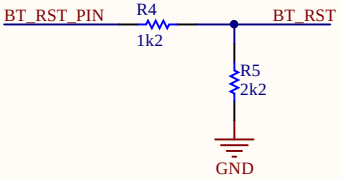
PAGE4-COMMUNICATION INTERFACES

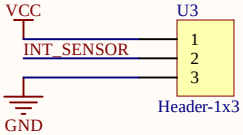
Bluetooth







Sensor Input Connector



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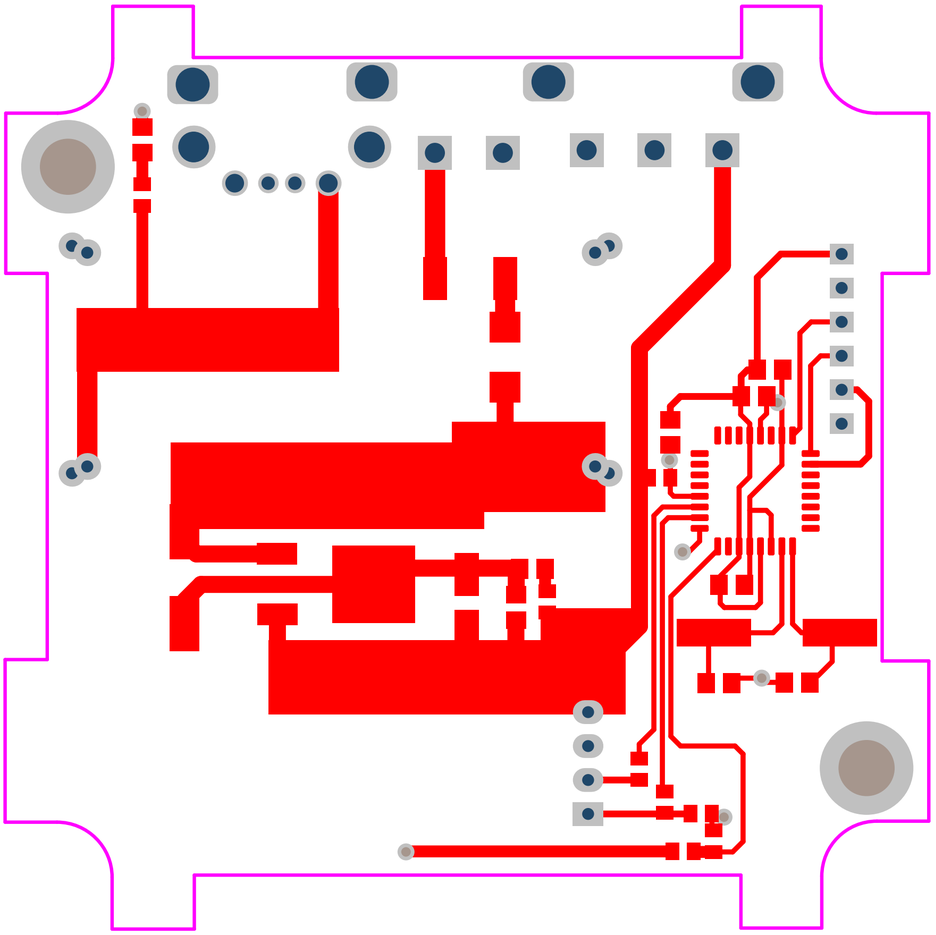
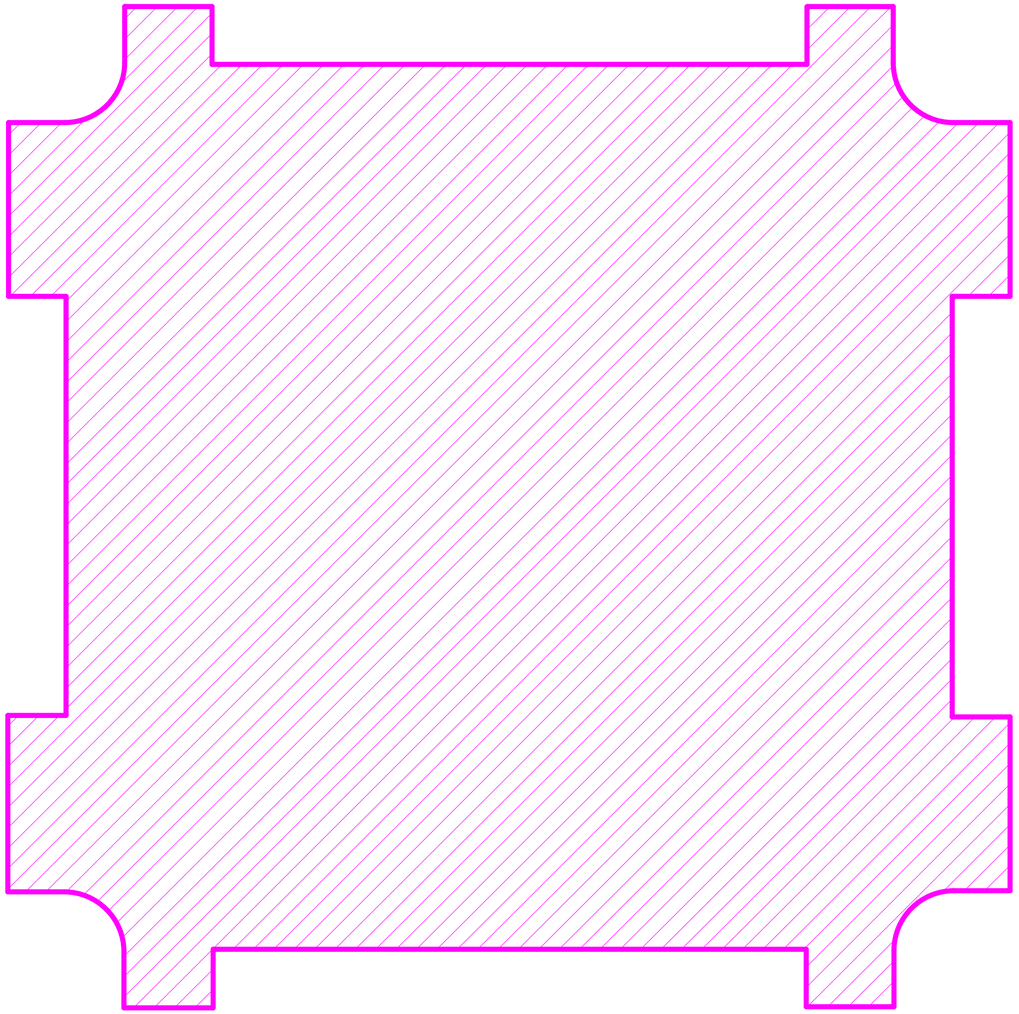
Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric1	FR-4	12.60mil	4.8	
5	Bottom Layer	Copper	1.40mil		
6	Bottom Solder	Solder Resist	0.40mil	3.5	
7	Bottom Overlay				





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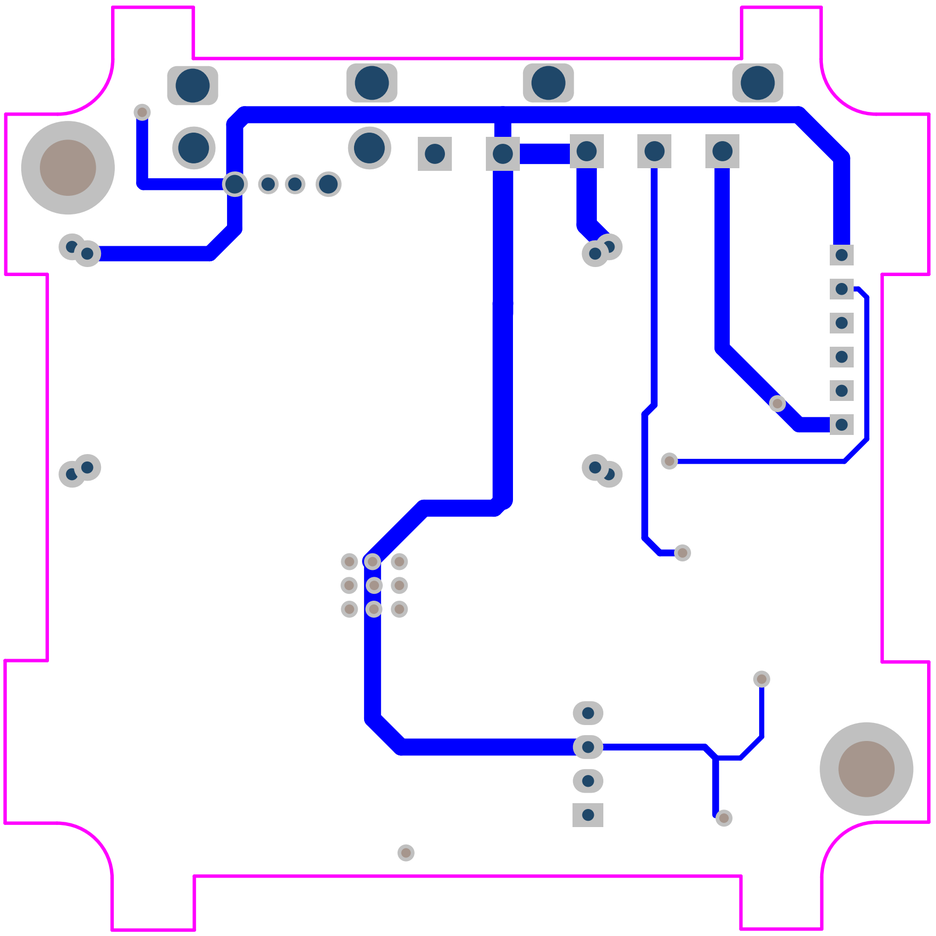

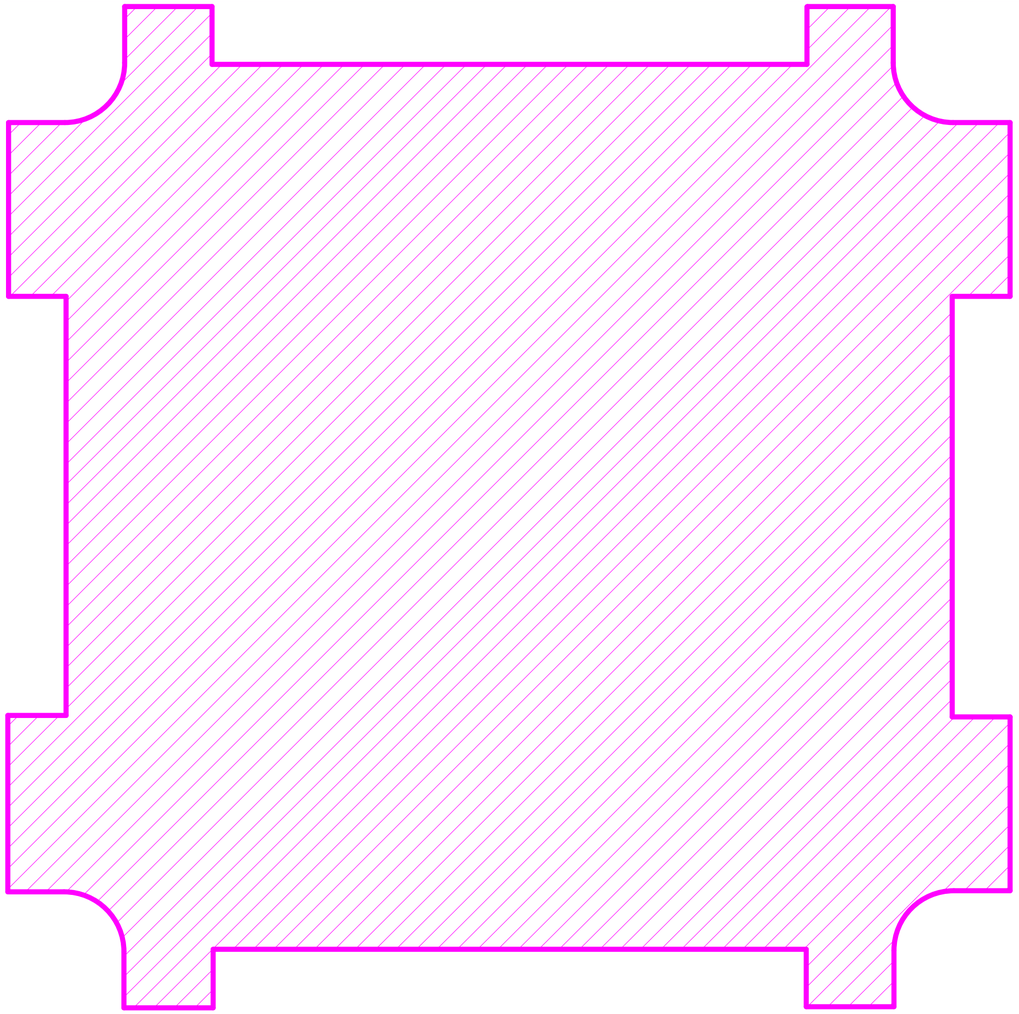

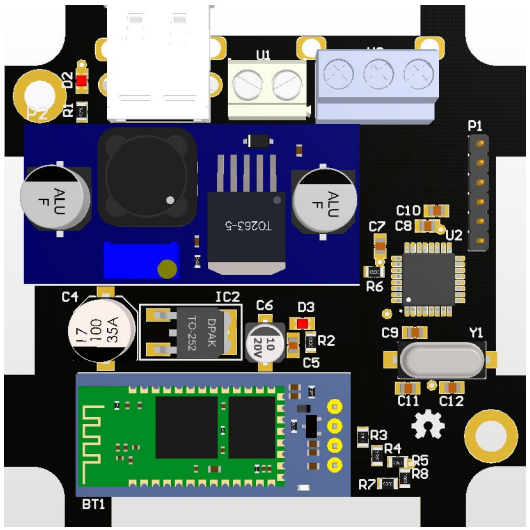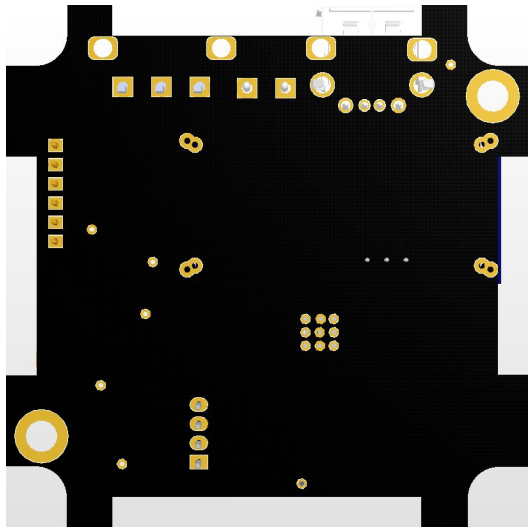
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D2
R1
P1
ALU
F
ALU
F
TO263-5
C10
C8
C7
U2
R6
C4
IC2
C6
D3
R2
C5
17
100
35A
TO-252
DPAK
10
20V
C9
Y1
C11
C12
R3
R4
R5
R8
R7
BT1