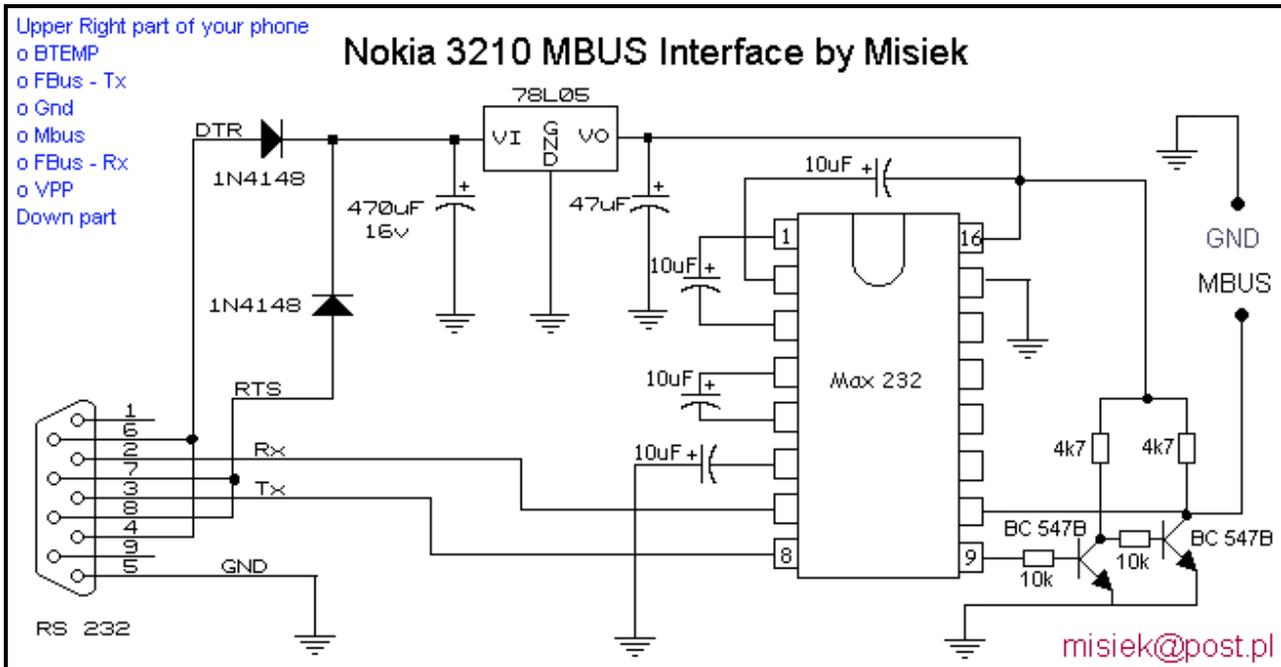


Homemade Serial to Nokia MBus Interface on a PCB, without using Zener diodes.

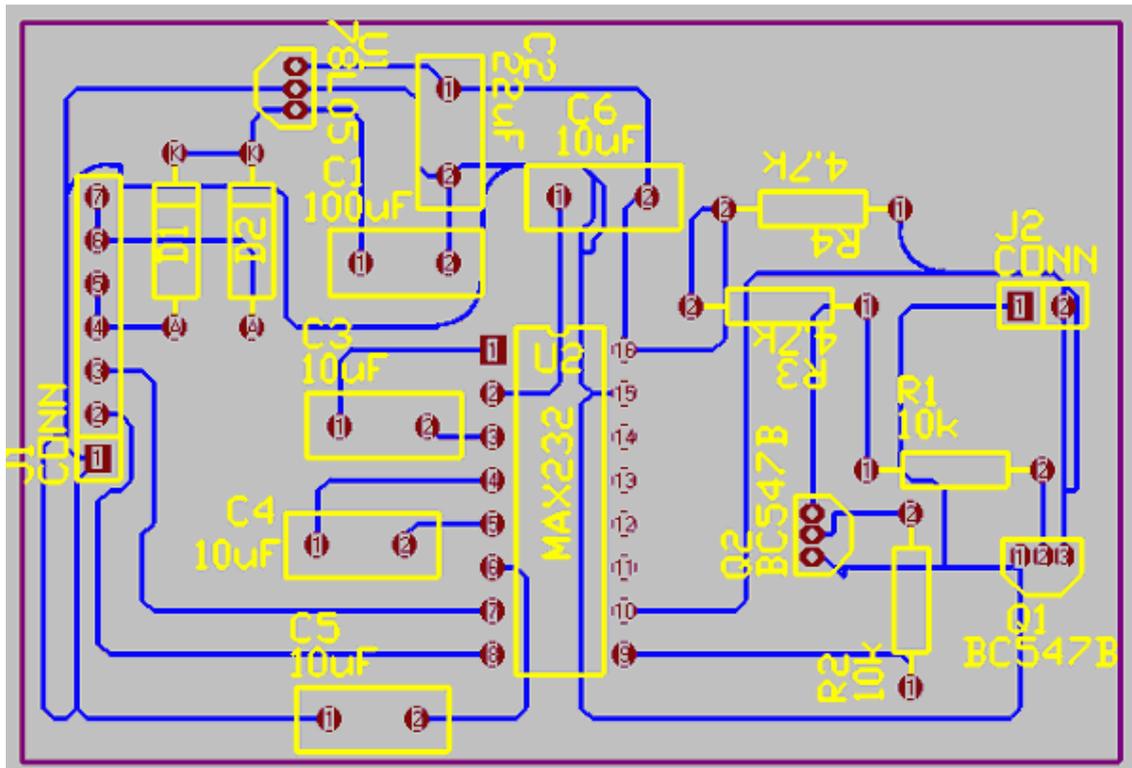


My humble 6110 and its pinout. Soldering wires directly onto the phone does not hurt it if you were wondering. Since people have asked I have put more connection pinouts at the bottom of this page, 8810,3310,3210, 8210, 8250

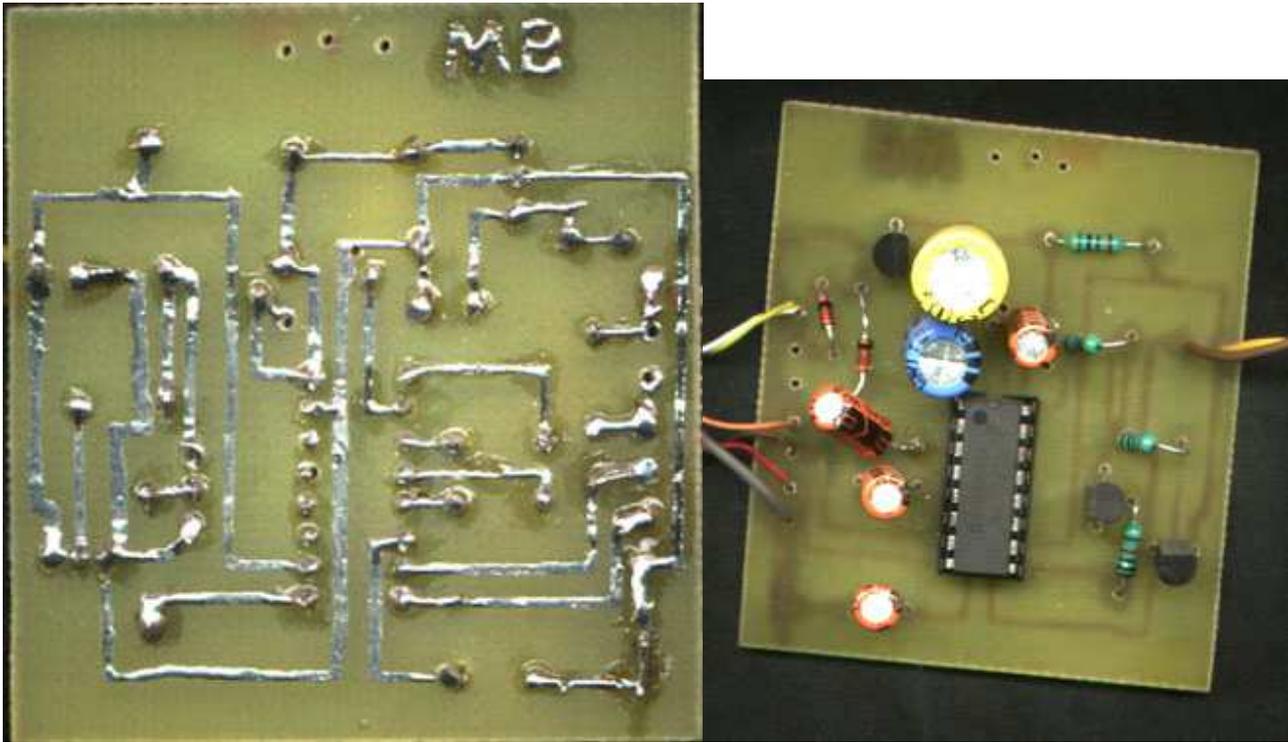


You have probably seen this schematic before, even though it said it is for a 3210 it doesn't matter what model nokia you have. I have tested it and found it works on a 3210, 6110, 5110 and 8210.

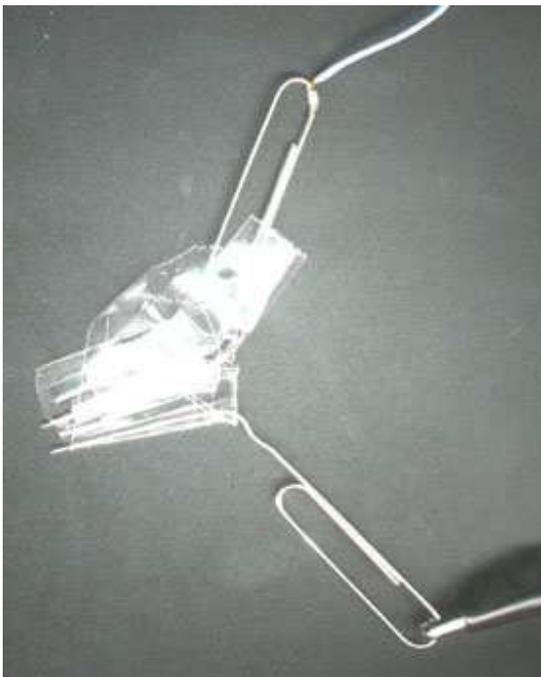
The above schematic is not much use till we run it though a PCB program, ignore the bad tracks in the image below, I have made a better one further down the page.



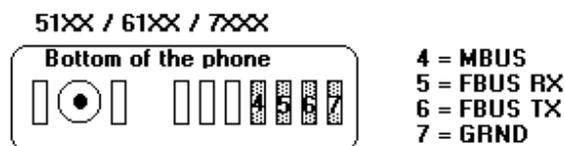
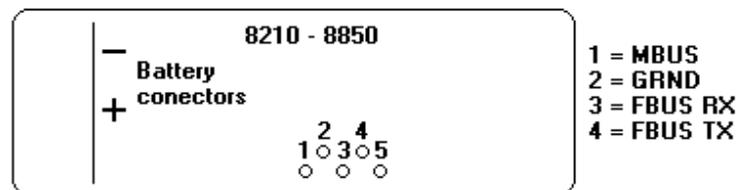
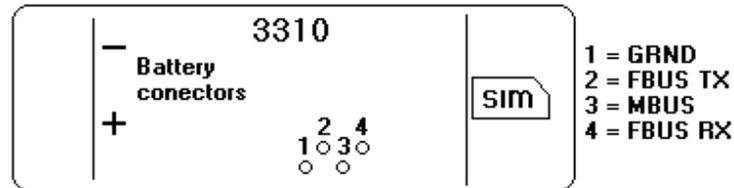
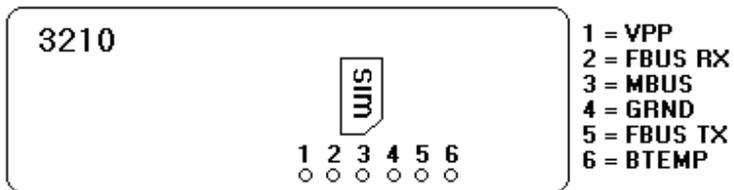
Part no	Description																		
U1	78L05, 5 voltage regulator. Not the 7805, that will be too big for this project.																		
U3	MAX232 IC, available in Australia from Jaycar or Dick Smith . Easy to get, every proper electronics shop in the world should carry this IC.																		
D1,D2	Just your standard 1N4148 signal diodes.																		
C1	Can be anything near 100uf.																		
C2	Just use anything between 1uf to 50uf, the voltage regulator won't care.																		
C3 to C6	10uf, can be 4.7uf or 6.8uf as long as these 4 capacitors, are the same value.																		
R1, R2	10 KOhm resistors																		
R3, R4	4.7 KOhm resistors																		
Q1, Q2	BC547 transistors, BC548, BC549 will also work.																		
J1	Just holes in the PCB for attaching the wires. Connections are as follows: <table border="1" data-bbox="300 1563 1200 2011"> <thead> <tr> <th>Pin on J1 in above image.</th> <th>What it does.</th> <th>Connects to Pin No X. on a 9 pin serial cable connector.</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Ground</td> <td>5</td> </tr> <tr> <td>2</td> <td>Transmit Line</td> <td>3</td> </tr> <tr> <td>3</td> <td>Receive Line</td> <td>2</td> </tr> <tr> <td>4 and 5</td> <td>Draws power from serial ports lines</td> <td>7 and 8</td> </tr> <tr> <td>6 and 7</td> <td>Draws power from serial port lines.</td> <td>6 and 4</td> </tr> </tbody> </table>	Pin on J1 in above image.	What it does.	Connects to Pin No X. on a 9 pin serial cable connector.	1.	Ground	5	2	Transmit Line	3	3	Receive Line	2	4 and 5	Draws power from serial ports lines	7 and 8	6 and 7	Draws power from serial port lines.	6 and 4
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6 and 7	Draws power from serial port lines.	6 and 4																	
	PS: for those wanting a cheap serial cable, don't cut the cord off a old																		



Ah! but one final thing. How do you attach the wires onto the phone?
Simple! just get some paperclips and tape.



Tape them together about 5mm apart leaving only a small amount of metal uncovered. This is the cheapest way other than buying a hands free kit and pulling it to bits.



This interface works with any of these phones above.
Below: another 3210 connection pinout.



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