Jim's changes made to DSO5072P input stage	NOTE! Changes in the document are just a list of what I have done. And what could be done. The changes would need to be tested and measured before anyone uses them.		List rev 0.1
Component	Original value	Modified	Note
R01_25 R02_25	100 Ω	49,9 Ω	ArnoR tweak + 50R base resistor. /Jim: I think that 0 ohm would be more stable for the constant current.
R01_27 R02_27	249 Ω	249 || 249 = 124,5 Ω	ArnoR tweak + 50R base resistor /Jim: I think that a lower resistor value will discharge any capacitance faster in the j-fet.
R01_29 R02_29	249 Ω (removed this resistor and soldered it in parallel with R01_27 and R02_27)	0 Ω Shorted this with solder.	ArnoR tweak + 50R base resistor /Jim: I think that a lower resistor value will discharge any capacitance faster in the transistor.
RX1, RX2, RX3, RX4	499 Ω	270 Ω (If LMH6552 is used)	/Jim: I believe that lower value has higher bandwidth in LMH6552 datasheet. Resistors need to be matched. 499 Ω means that the circuit used is THS4504. Resistors are matched and selected from several components.
Q01_1 Q02_1 Q03_1	MMBF4392 (6K marking, fairchild)	MMBFJ309 Fairchild Farnell:2453381	Faster and lower capacitance.
Q01_3, Q01_4	BC846B	MMBTH10 Fairchild Farnell: 2454030	BC846B Hfe=435 (Hfe was matched) BC846B is a bit slow so it could be changed to a faster transistor. MMBTH10 Hfe =80 (separately selected and

			matched from several components) **MMBTH10 is faster but has too low Hfe. Another transistor is recommended.**
U01_3 U02_3	THS4504 (Probably determined by the resistor value)	AD8370 (270 Ω resistors) THS4500 (499Ω resistors)	THS4504 (260MHz) THS4500 (370MHz) LMH6552 (750MHz)
D01_2 D02_2	BBY65-02V 2.294V when filter off witch gives about 7.5pF. That makes a lowpass filter at 212MHz with the 100Ω output impedance of AD8370.	Modified OP2 to be a comparator. Threshold voltage set to 3.25V with a 20kΩ trimmer + 1uF capacitor.	This varcap has under 2.7pF@4.7V capacitance. That + the amplifiers 100 Ω output impedance becomes a LP filter at 589MHz. Estimated 2pF@10V would give 795MHz cutout.
R01_7	12 Ω	10 Ω	
R03_33	100Ω	82Ω	Faster trigging
C03_59	unpopulated	100nF	Less ripple on 1KHz
C04_2, C04_4, C04_5, C04_7		Added a 100nF in parallel.	
C01_13 C02_13		Added a 100nF in parallel.	Hopefully less noise
C01_12 C02_12		Added a 2*100nF in parallel. Capacitors added to the 100Ω resistors -5V legs and GND.	Hopefully less noise
Made a file /tst in root containing [filter] 35			Value can be higher but a higher value gave distorted shapes and therefore I chose to leave it at 350MHz.
Normal 200MHz hack			