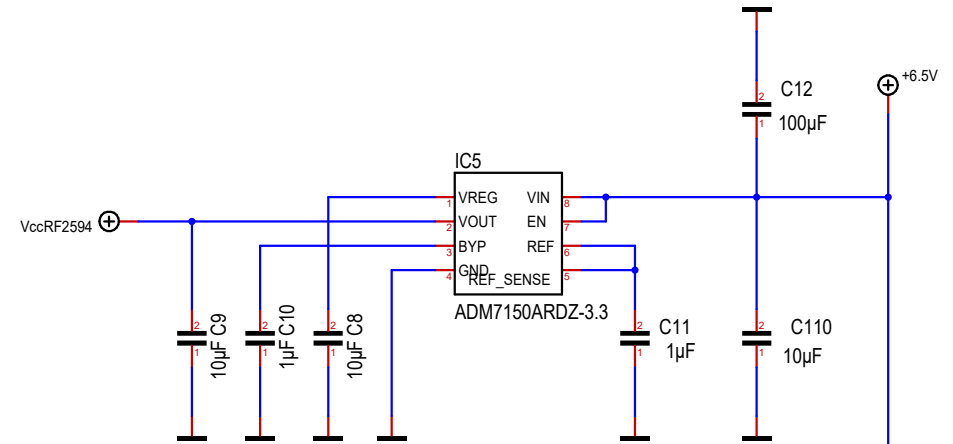
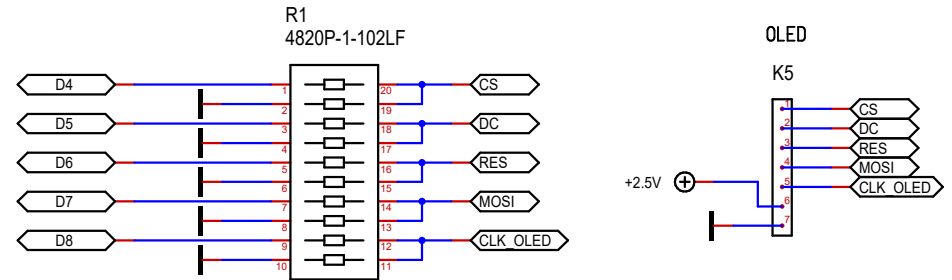
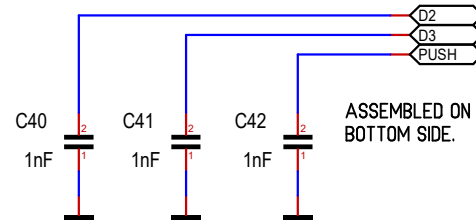
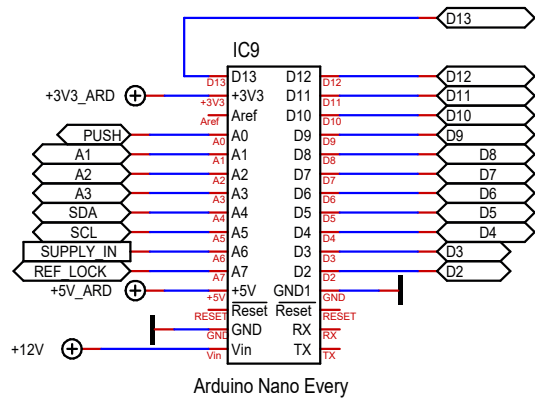
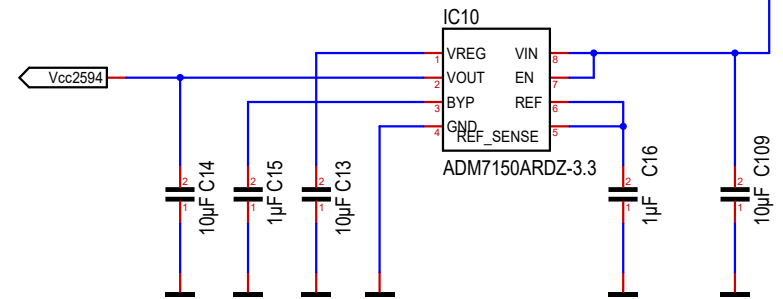
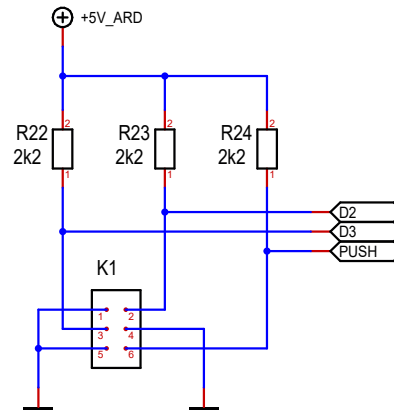
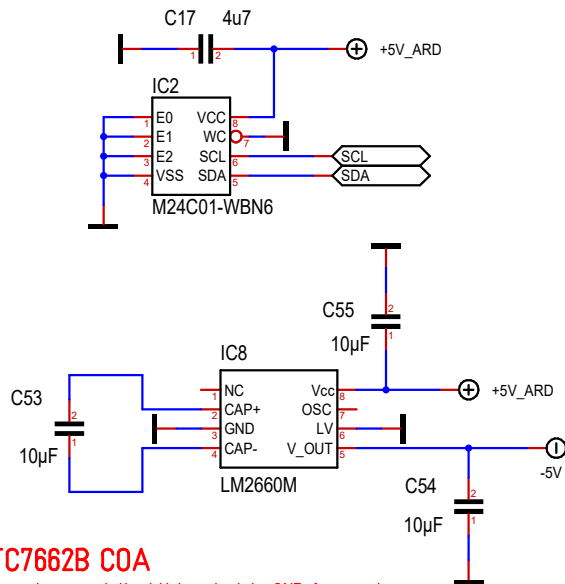


# DISPLAY



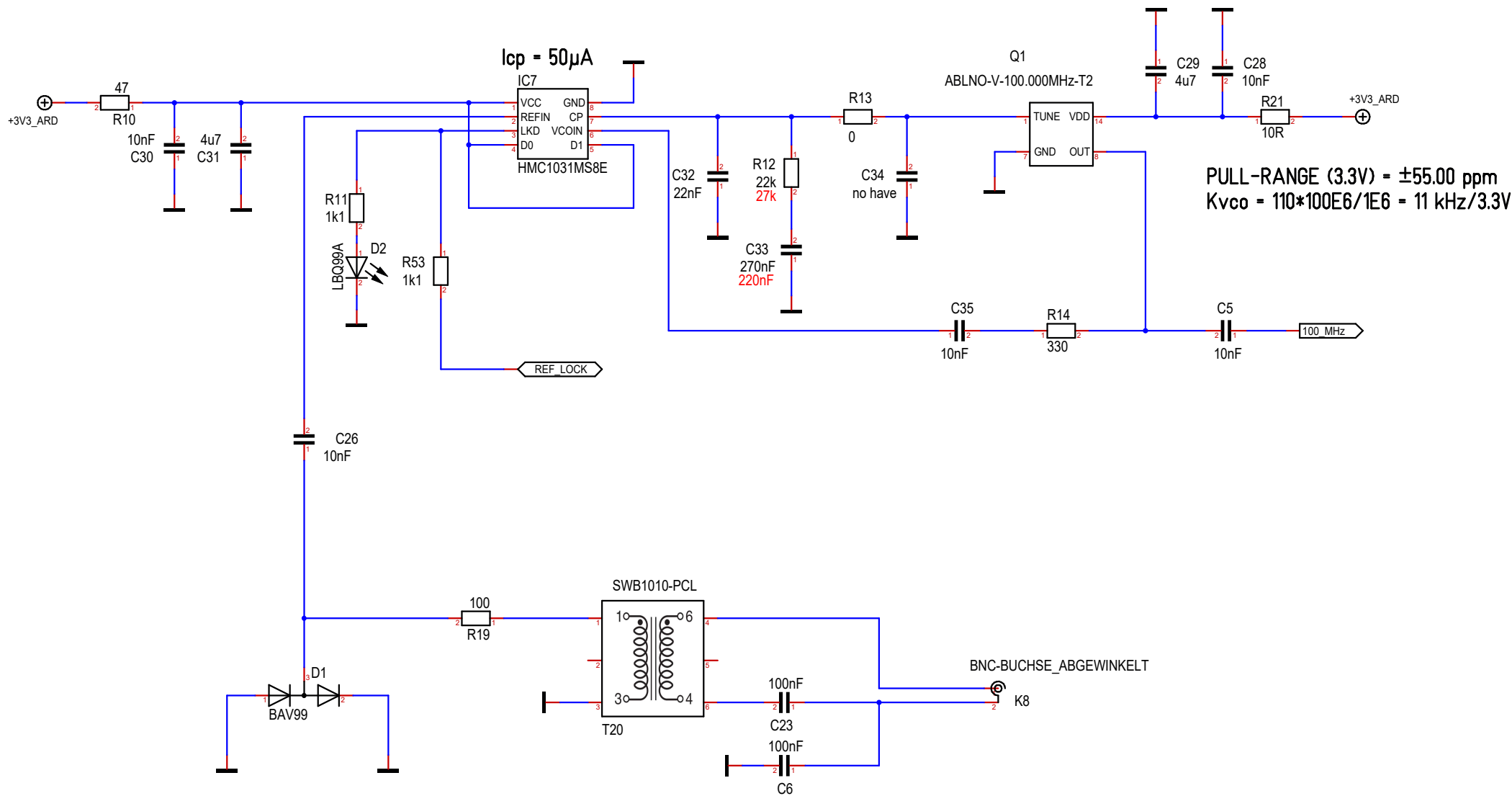
# KEYBOARD



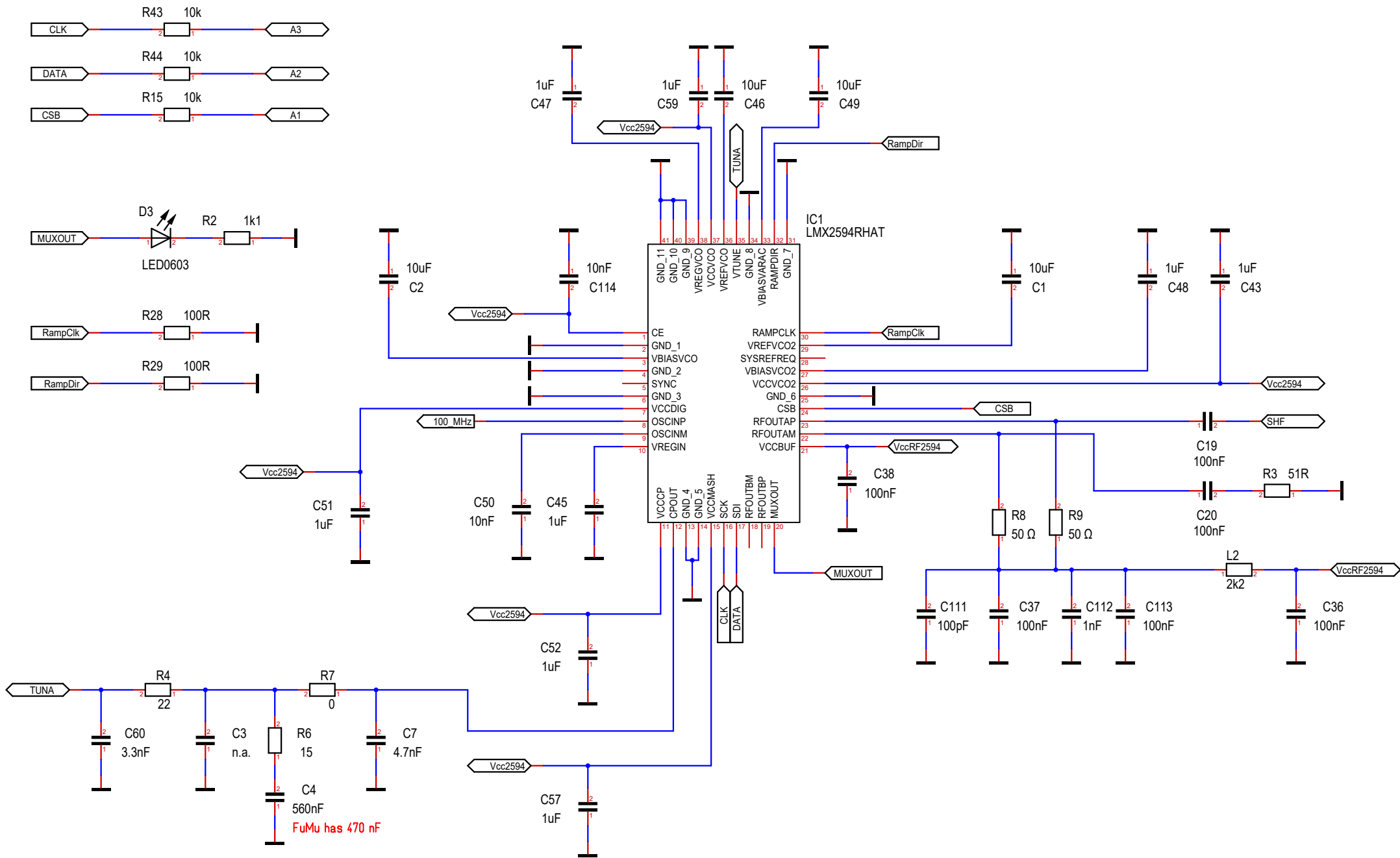
## TC7662B COA

Do not connect the LV terminal to GND for supply voltages greater than 3.5 volts.

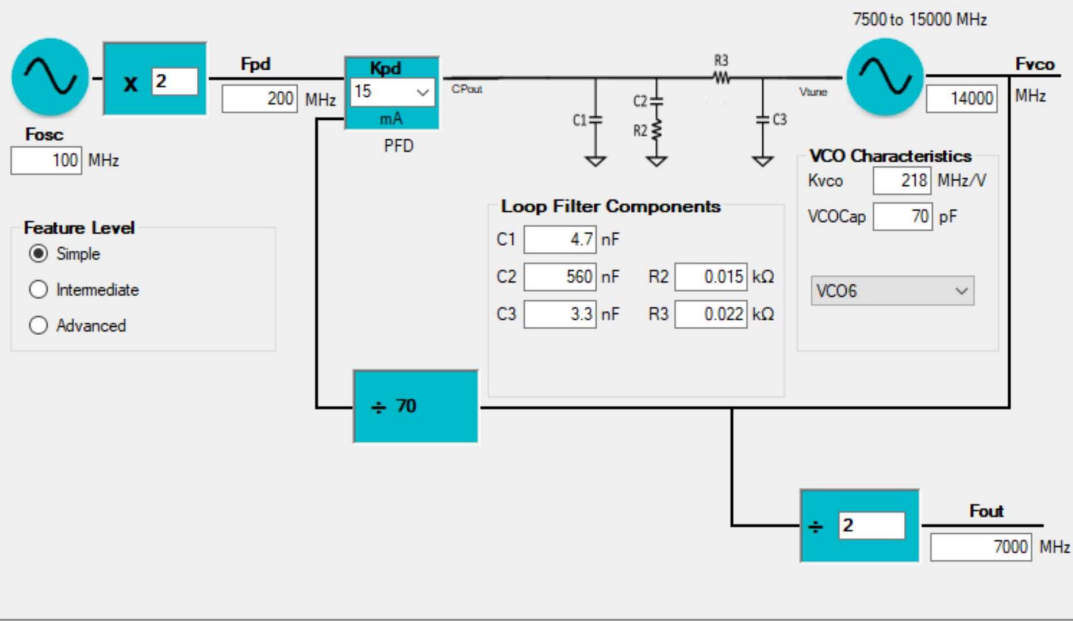
Massstab	101.39%	Alexander C. Frank	Blatt : Arduino Nano Every
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		



Massstab	101.39%	Alexander C. Frank	Blatt :Reference 100 MHz
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		



Massstab	101.39%	Alexander C. Frank	Blatt :LMX2594
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		



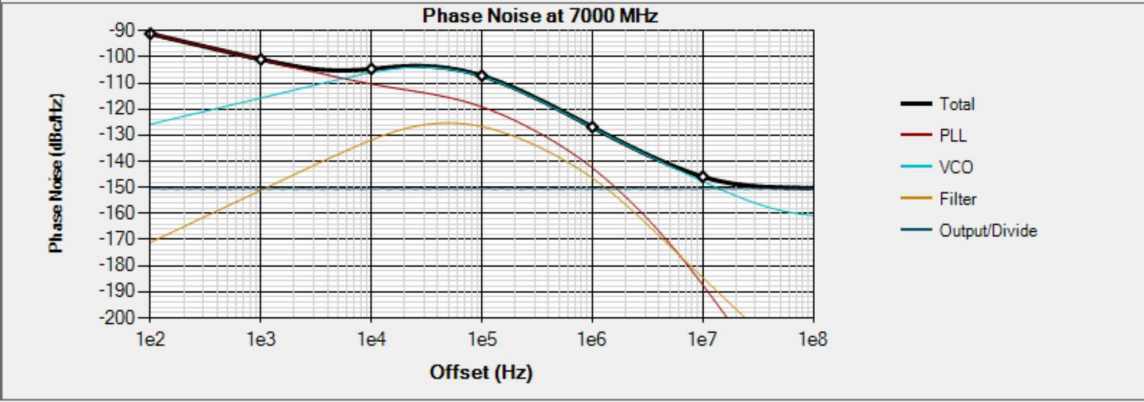
Select Device Filter Designer Phase Noise Spurs Lock Time Bode Plot

**Filter Architecture** ?  
Filter Order: 3rd Order

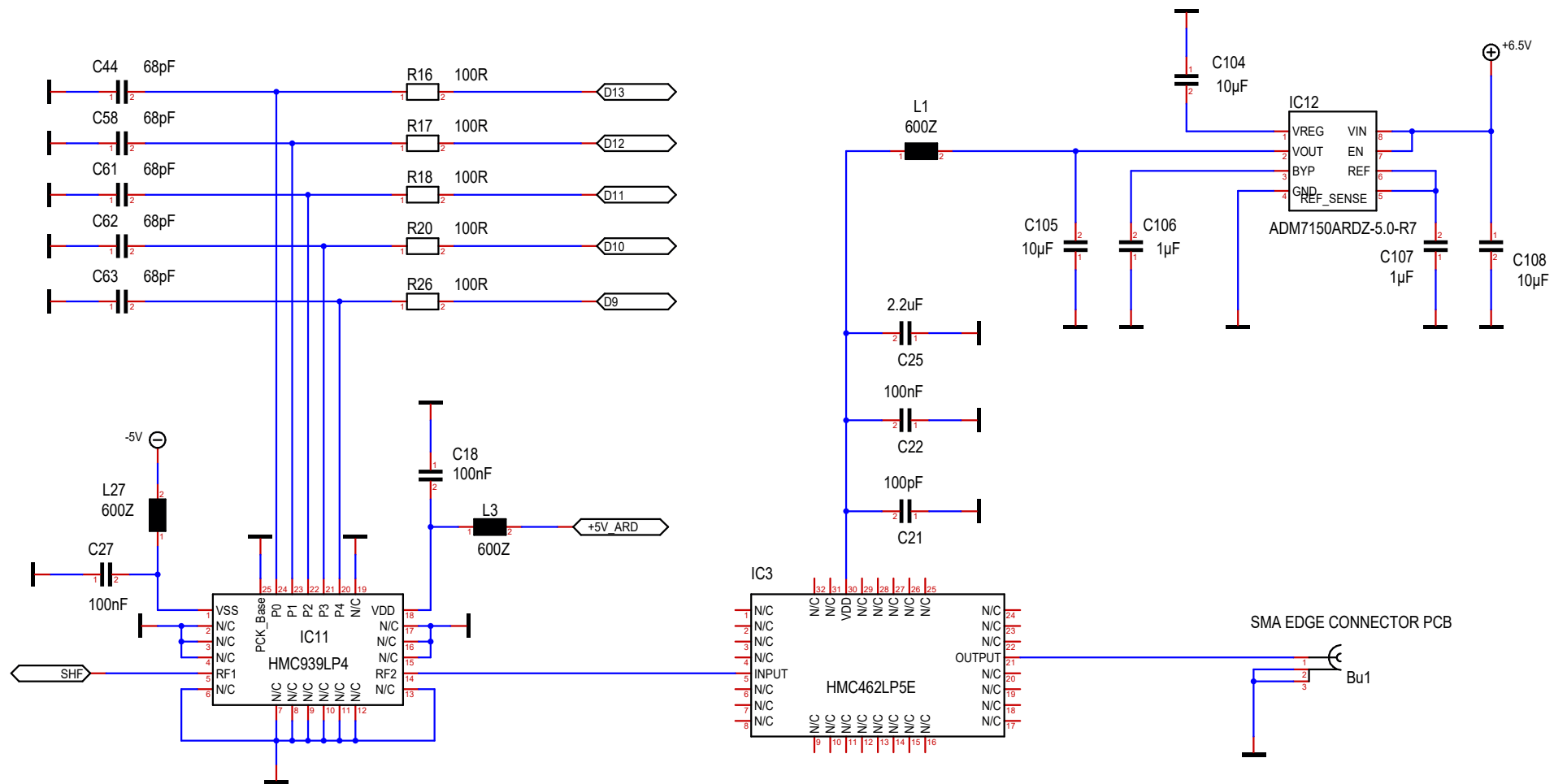
**Filter Parameters** ?

**Calculate Loop Filter**

Loop Bandwidth: Design Target 60 kHz  Auto  Actual 110.81135 kHz



Massstab	101.39%	Alexander C. Frank	Blatt :Loop Filter
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		



### Truth Table

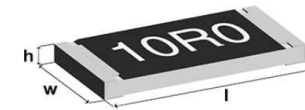
Control Voltage Input					Attenuation State RF1 - RF2
P4 16 dB	P3 8 dB	P2 4 dB	P1 2 dB	P0 1 dB	
High	High	High	High	High	Reference I.L.
High	High	High	High	Low	1 dB
High	High	High	Low	High	2 dB
High	High	Low	High	High	4 dB
High	Low	High	High	High	8 dB
Low	High	High	High	High	16 dB
Low	Low	Low	Low	Low	31 dB

Any Combination of the above states will provide an attenuation approximately equal to the sum of the bits selected.

Noise Figure: 2.5 dB @ 10 GHz  
 Gain: 13 dB  
 P1dB Output Power: +14.5 dBm @ 10 GHz  
 Self-Biased: +5V @ 66mA  
 50 Ohm Matched Input/Output

Massstab	101.39%	Alexander C. Frank	Blatt : Amplitude
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		

# JLC PCB Material JLC 7628

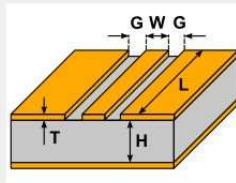
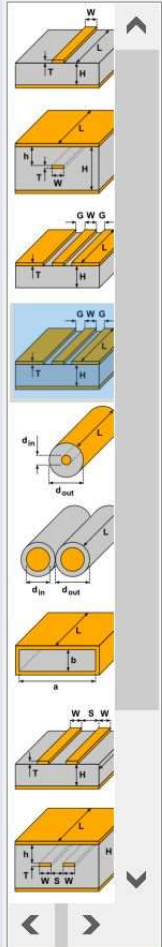


Code		Length (l)		Width (w)		Height (h)		Power
Imperial	Metric	inch	mm	inch	mm	inch	mm	Watt
0201	0603	0.024	0.6	0.012	0.3	0.01	0.25	1/20 (0.05)
0402	1005	0.04	1.0	0.02	0.5	0.014	0.35	1/16 (0.062)
0603	1608	0.06	1.55	0.03	0.85	0.018	0.45	1/10 (0.10)
0805	2012	0.08	2.0	0.05	1.2	0.018	0.45	1/8 (0.125)
1206	3216	0.12	3.2	0.06	1.6	0.022	0.55	1/4 (0.25)
1210	3225	0.12	3.2	0.10	2.5	0.022	0.55	1/2 (0.50)
1218	3246	0.12	3.2	0.18	4.6	0.022	0.55	1
2010	5025	0.20	5.0	0.10	2.5	0.024	0.6	3/4 (0.75)
2512	6332	0.25	6.3	0.12	3.2	0.024	0.6	1

QucsStudio HF-Leitungsberechnung 4.2.2

Datei Hilfe

Auswahl Koplanar-Leitung mit Rückseite



Parameter

Frequenz  GHz

Abmessungen

W  mm  ändern

G  mm  fest

L  mm

HF-Eigenschaften

Z0  Ohm

Winkel  Grad

Ergebnisse

Eindringtiefe: 0.53894  $\mu\text{m}$

$\epsilon_{r,\text{eff}}$ : 2.96765

ohmsche Verluste: 1.02178 dB

dielektrische Verluste: 0.039853 dB

Einmodigkeitsbereich: 0 Hz ... 48 GHz

Kopiere Komponente in Zwischenablage

Kopiere in Zwischenablage inklusiv Schaltung

Eigenschaften

$\epsilon_r$

$\tan \delta$

spez. Widerstand

$\mu_{r,c}$

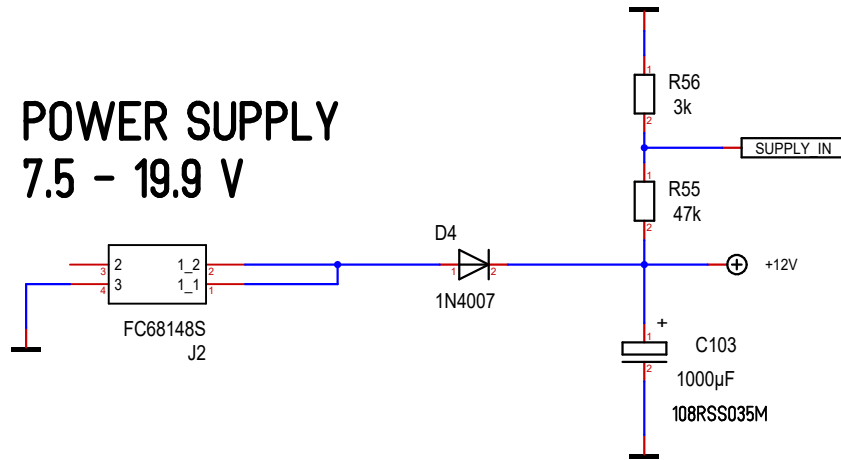
Rauigkeit   $\mu\text{m}$

T   $\mu\text{m}$

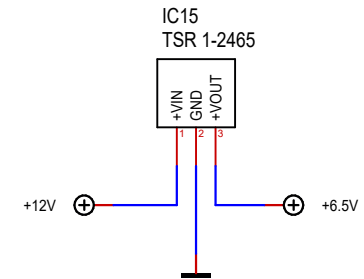
H  mm

Massstab	101.39%	Alexander C. Frank	Blatt :FR4
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
Datei	Teramod_LMX2594_V51.T3001		

# POWER SUPPLY 7.5 - 19.9 V

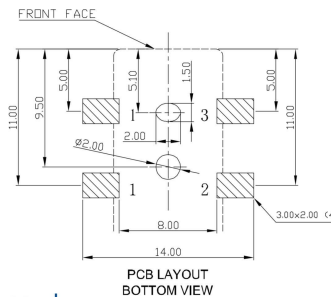
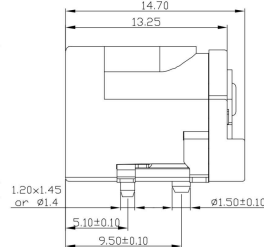
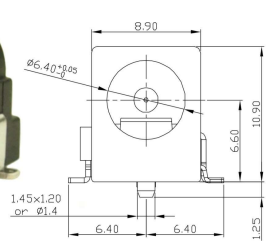
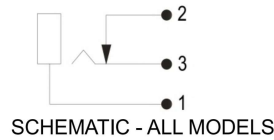


Chip	ATMEGA4809		
Clock	20 MHz		
Memory	48 KB FLASH	6 KB SRAM	
Interfaces	USB	SPI	I2C UART
Voltages	5V INPUT-USB	6-21V INPUT-VIN	5V OPERATING
Pinout	14 DIGITAL	6 PWM	8 ANALOG
Dimensions	18 x 45 mm		

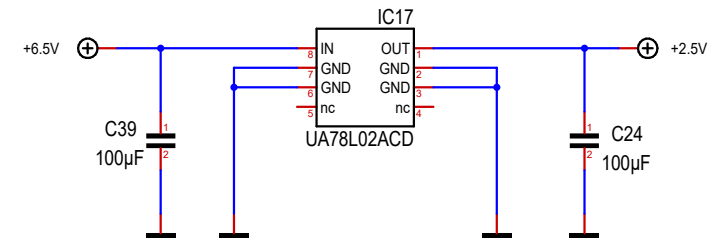


DC-10AS 2.1mm Pin  
DC-10BS 2.5mm Pin

Part No. FC68148S  
Part No. FC68149S  
Add Suffix 'T' for taped.



For further information, contact [sales@cliffuk.co.uk](mailto:sales@cliffuk.co.uk)



Massstab	101.39%	Alexander C. Frank	Blatt : Power Inlet
Änderung	19.08.2021	14:59	<b>ETH</b> QUANTUMOPTICS
Ausgabe	15.09.2021	18:31	
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