

JH. Son of Storm Tide Flanger Bill of Materials (V. 1.1)  
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Errors excepted

Quantity	Component	Remarks
<b>Semiconductors</b>		
2	TDA1022	BBD chip (not manufactured anymore. Make sure you get some before you buy the PCB.)
1	CD4049UB	15V CMOS Buffers
1	CD4013B	15V CMOS D-Flipflops
1	CD4007UB	15V CMOS Transistor Array
1	CA3086	or CA3046 Transistor Array
1	LM324	Quad Opamp
1	LM13700	or LM13600 Dual OTA
2	TL074	Quad BiFET OpAmp
1	LM301A	OpAmp with external compensation
1	OPA2134	Dual OpAmp low offset
4	RC4558	Dual OpAmp
3	LF412	Dual BiFET OpAmp low offset
1	MC1458	Dual OpAmp low bandwidth
1	LM358	Dual OpAmp
1	TL082	Dual BiFET OpAmp
1 *)	B80C1500	Bridge Rectifier (round)
1 *)	LM317	Voltage Regulator TO220
1 *)	LM337	Voltage Regulator TO220
2 *)	1N4002	1A Diode (the big ones)
13	1N4148	100mA Diode (the small ones, unmarked)
2	AA143	or similar Germanium Diode (marked "Ge")
1	ZF10	or similar 10V / 500mW Zener Diode
4	BC550C	NPN transistor cbe pinout
2	BC560B	PNP transistor cbe pinout
1	BF245A	JFET transistor
<b>Tempco Resistor</b>		
1	1k	3000ppm/K ... 3500ppm/K or just use an ordinary 1k resistor. V/Oct tracking isn't that good anyway.

<b><i>Trimpots</i></b>		
1	500 Ohm	10mm trimpot (see PCB layout for footprint and dimensions).
1	1k	10mm trimpot (see PCB layout for footprint and dimensions).
1	5k	10mm trimpot (see PCB layout for footprint and dimensions).
1	20k	Multiturn trimpot (see PCB layout for footprint and dimensions).
1	50k	10mm trimpot (see PCB layout for footprint and dimensions).
3	100k	10mm trimpot (see PCB layout for footprint and dimensions)
<b><i>Capacitors, ceramic, 2.5mm</i></b>		
1	10pF	10p
8	33pF	33p
2	100pF	100p
4	220p	"220p" or "n22"
<b><i>Capacitors, 5mm</i></b>		
1	33pF	for Clock Oscillator
1	100pF	n1 (don't mix up with 1n)
1	330pF	n33
3	1nF	1n
2	3.3nF	"3.3n" or "3n3"
7	10nF	10n
1	15nF	15n
1	22nF	22n
3	220nF	u22
3	470nF	u47
<b><i>Capacitors, 7.5mm</i></b>		
1	1uF	1u (non-polarized!)
<b><i>Capacitors, electrolytic (polarized!)</i></b>		
4	1uF	1u; 25V or higher voltage rating
1	4.7uF	4u7; 25V or higher voltage rating

6	10uF	10u; 35V or higher voltage rating
3	22uF	22u; 25V or higher voltage rating
1	47uF	47u; 25V or higher voltage rating
3	100uF	100u; 6V (near CD4007 IC)
1	100uF	100u; 25V or higher voltage rating (near TDA1022 ICs)
2 *)	470uF	470u; 35V or higher voltage rating
<b>Capacitors, SMT</b>		
22	100nF	0805 or 1206 (on solder side)
<b>Resistors Arrays</b>		
2	22k	4 independent resistors in SIL8 package (close to RC4558 ICs) - you can also use vertically mounted, ordinary resistors here.
2	100k	4 independent resistors in SIL8 package (close to CD4007 IC) - you can also use vertically mounted, ordinary resistors here.
<b>Resistors, 1%</b>		
2	10	10 Ohm
2	47	
1	51	
1	160	
2 *)	240	
1	470	
2	620	
1	820	
5	1k	1 kOhm
2	1k5	1.5 kOhm
1	2k	
1	2k2	
2 *)	2k7	
1	3k3	
1	5k1	
3	5k6	
2	6k8	
1	8k2	
14	10k	

5	15k	
1	20k	
1	22k	
4	30k	
9	33k	
2	39k	
1	43k	
4	47k	
8	51k	
3	62k	
2	68k	
2 *)	82k	
1	82k	
20	100k	
1	120k	
3	150k	
1	220k	
1	300k	
1	470k	
2	510k	
1	680k	
5	1M	1 MegOhm
<b>Resistors, 10% or better</b>		
1	2M2	2.2 MegOhm
1	3M3	3.3 MegOhm
3	10M	10 MegOhm
1	22M	22 MegOhm
<b>PCB Connectors (optional)</b>		
1 **)	MOTM Power Connector	or Synthesizers.com Power Connector
5	PSS254/2G	or similar 2 pin, 2.54mm spacing
8	PSS254/3G	or similar 3 pin, 2.54mm spacing
4	PSS254/5G	or similar 5 pin, 2.54mm spacing
1 *)	PSS254/5G	or similar 5 pin, 2.54mm spacing (AC input)
1	2-pin header for Jumper	"BPol" - optional, for experimenting with Bounce direction

*) AC Power Supply only		
**) +/-15V Power Supply only (MOTM, Synthesizers.com, etc.)		